Developing Deaf Children's Higher Order Language and Thinking Skills.

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Why focus on higher order skills?

 Many deaf children achieve basic competence in their home language but are held back by a lack of fluency or understanding of the more subtle aspects such as idiomatic language or when more complex language is used

 Too many approaches to supporting deaf children focus on sounds, words and grammar rather than focusing on the meanings and ideas they express or whether they can access the meanings of others



Why thinking skills

- Bigger question is how do we effectively promote higher order language and thinking skills in deaf children and
- why do significant numbers of deaf children who have early aiding and good access to sound because of cochlear implants and digital hearing aids struggle to achieve at age equivalent levels to their peers



All learning involves thinking

- Learning to listen
- Learning to talk involves thinking

- The challenge in learning is to help children to notice more what's happening around them and..... to think about it
- This includes noticing more about how people express their ideas in language Mary

Supporting higher order language and thinking skills is about supporting planning, enquiry and reflection

- When we talk about active listening or learning we really mean that children are thinking about what they see/ hear/ observe
- We also know that for hearing children the ways in which their families use language to them and encourage them to think about their experiences and predict from them in the first three years of life still influences their verbal reasoning skills at secondary school entry



Research summarised in Gallaway and Richards 1994

- Adults talking/communicating with hearing children use more varied questions, ask for more opinions and suggestions
- Adults talking to/communicating with deaf children more directive, focus on concrete objects and events/ideas within the immediate environment
- Deaf children's contributions treated as labelling not conversational openers
- Adults were more controlling and inflexible, tending to narrow focus providing fewer opportunities for experimentation; offer fewer explanations and predictions i.e. model thinking and more complex with a state of the Art

What do we know from the research Deaf Children

- are more vocal in less controlling situations
- speculate with partners who themselves speculate
- may arrive at school with delayed language usage as well as delayed language form
- need partners who help build their learning not dictate and restrict it
- need conversational experiences that enable them to be more mature conversationalists



Providing a thinking curriculum that will drive children's language forward

Huntington and Watton, David Wood et al, Vicky Hopwood and Clare Gallaway in the 1980s and 1990 showed us

- deaf children were asked much more simplistic questions than hearing children in mainstream lessons
- the language used to them was much less rich than that used with hearing children.
- even more problematic is that tasks were sometimes simplified so much for them that there was limited thinking left to do and a restricted vocabulary was often used



Is this still the danger today?

 Our observations of student teachers of the deaf and of teaching assistants and others in mainstream demonstrated the danger that this either continued
i.e. the curriculum and language was oversimplified and the room for learning was too little

or

 Because the children could technically hear well with their implants too little attention was being paid to their strengths and weaknesses in thinking and listening and whether their language is moving on to more complex levels.

In addition

- Patterns of support for deaf children in mainstream school mean that for some the opportunities for independent learning and thinking are curtailed
- This is the phenomenon of learned helplessness that we see as children become dependent on support to access lessons rather than the support enabling them to increasingly access curriculum and the ideas of others for themselves



What do you need to be able to do to learn for yourself?

Listen – and reflect

Relate to other things that you know

Check what you think you have learned

Accommodate to/ learn from the feedback of others

What we are asking our teachers to think about is

- What opportunities have the children I work with had to develop their thinking skills further today?
- What sort of questions have I asked them? Questions that expected them to think or simply describe, was there anything left to work out?
- Have I provided opportunities for hearing or listening? How do I know the child was listening? How have I supported the child's listening to others, listening in groups, listening in whole class situations?
- This is not about the technology let us assume that this was in place; this about the skills and strategies children have to help them to work out meanings, access of have 10/2 ideas and express their own have a sum assume that this was in place; this about the skills and strategies children have to help them to work out meanings, access of have a sum assume that this was in place; this about the skills and strategies children have to help them to work out meanings, access of have a sum as a sum as

What have we particularly tried to improve or trigger?

- Deaf children's narrative and discourse skills
- Their inferencing skills; how they link events and draw conclusions
- How they think about things that are said to them in groups and whole class lessons
- How they contribute to problem solving in teams with hearing children.



So what aids thinking and higher order language skills?

- Memory development- changes in strategies allow children to allocate attention more systematically and in focussed ways – not simply rehearsal, and organisation;
- improved metacognition; being able to talk about thinking, having the vocabulary that describes it;
- These are all areas of learning identified as being potentially weak in deaf children and that we tried to be proactive in supporting



Programmes put into place

- Story re-tell to trigger both 'laying down' the story and remembering/recall skills
- Inferencing problem solving tasks with pupils in pairs and groups
- Collaborative memory and reconstruction tasks in groups with other children – not adults
- Pretutoring and focused questions to 'narrow down the listening tasks



Story retell

- Children are asked to retell stories at least twice a week to someone who has not heard the story before
- At least once a fortnight they retell to camera and this retell is written down with them
- Progress checked from baseline on The Assessment of Comprehension and Expression (ACE) or against narrative propositions and STASS if younger child



Idiomatic language

- Idioms of the week
- Words with multiple meanings
- Puns and jokes
- Words in popular use



Group learning

- No point in having group lessons if each individual is expected to work it out for themselves
- An adult and a child working on a problem together is not as effective as pupils thinking together
- Why?



Examples of Collaborative thinking

- Reconstruct a picture in groups of 2-4 when only one at a time can see it and children see it sequentially(no adults involved)
- Shared reconstruction of a story and negotiation of an appropriate ending
- Shared reconstruction of a poem or text not heard or seen before

Together they achieve something that neither could achieve independently and soon learn to work to each others strengths



Reconstructing a story/picture task we must

- Process and decode visual information
- Look carefully at component parts
- Devise memory strategies
- Connect with existing knowledge
- Develop an understanding of image as a whole
- Collaborative planning- thinking skills of reasoning, enquiry and information processing
 - Information processing –locating and collecting relevant info/analysing part/whole relationships
 - Evaluation of own/other's work in order to improve strategies
 - Planning, testing and improving ideas
 - Give reasons for actions, make informed judgements

SCHOOL

Class and group listening

- A huge amount of effort goes into measuring deaf children's hearing and checking on their hearing for speech or on rather superficial listening tasks
- The challenge in classrooms is how effectively can the child extract meaning when the teacher talks not just in single words or sentences but in paragraphs or even chapters!

.... And if they are not very effective how do we improve this? (The answer is not simply to provide more individual support or withdraw the child more)



Support for Focused listening

- What sort of a listen is this? Gist? Detail? What am I meant to be working out? – otherwise the task is impossible
- For example:

we might provide the child with three questions to work out the answer to whilst the teacher is talking- in listening out for the answers he listens to it all;

questions differ in abstraction according to the child's current listening level

Example

- I want you to listen to what I am reading and think about the sort of person Harry Potter is
- I want you to listen to what I read and think about why some people did not like Harry Potter
- I want you to listen to what I read and think about what Harry Potter's room was like at Hogwarts

Results to date

- 22/24 severely and profoundly deaf children improved their percentile score on the ACE narrative retell score – mean 7 percentile improvement; range 2- 21 percentile improvement over a two term period (September to early April);
- 23/24 improve their grammatical level move forward at least one level at both clause and phrase level; particular impact on phrase level and on verb phrase and in expansion of elements
- 22/24 increase their percentile score on the ACE inferencing subtest or on the Reynell developmental language scales

Listening in class

- All reported to be listening more effectively in small group lessons and class lessons
- Class teachers report 19 to be more involved in lessons, putting hands up more to answer questions, writing ideas more independently; offering more in group sessions
- No pupil felt not to have benefitted from sessions and in three schools hearing children have been put onto similar programmes with accelerated progress in their English skills



There is a danger that in these days of technological advance we forget that first and foremost the child is a learner

- Too many deaf children are still not approaching secondary school with age appropriate language and communication skills.
- Too many plateau or start to lose ground as they get older
- I believe that for many this could have been avoided if we had focused on children's priority learning needs
- we have tended over the years to treat 'symptoms rather than deal with the underlying need – to be proactive in securing deaf children's thinking skills as a basis for their learning including their language learning at every stage of their educational journey