An Introduction to Syntax Development in Students with Hearing Impairment

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Essential Conditions for Language Development

It is essential that all receptive language for infants, toddlers and children must be **clear and unambiguous** if they are to receive an appropriate input and model for the language they are developing.

While this holds true for all children, it has particular and specialised implications for children with various degrees of hearing loss.

To develop spoken language children need:

- Early and precise identification of the nature and degree of their hearing loss.

- Optimisation of their reception of spoken language through the fitting and maintenance of appropriate hearing devices.

- Utilisation of appropriate sense methodologies of reception for clear and unambiguous input, reflective of the degree of hearing loss and the level of amplification.

To develop spoken language children need:

- Effective management of the child's environment to ensure the most favourable acoustic conditions to ensure the reduction of competing noise especially for young children, an appropriate signal to noise ratio (+ 15dB) as well as the minimisation of reverberation.

To develop spoken language children need:

- Essential pre-verbal competencies for spoken language development.

- Parents/Caregivers as the primary developers of their child's language.

- Good age/stage appropriate language modeling from parents and/or significant others.

To develop spoken language children need:

- Sufficient meaningful, conversational interaction that facilitates the development of spoken language.

- A focused, well-researched, outcomes-oriented, efficient, effective and well-monitored process for the development of their spoken language.

To develop spoken language children need:

- Communicative competence that utilises cultural and interpersonal knowledge to make pragmatic, semantic, syntactic, and phonologic choices that result in their utterances being linguistically and contextually developmentally appropriate.

- The maximum development of audition including the *auditory feedback mechanism* for the self-monitoring of intelligible spoken language.

Rate of Language Acquisition

Even though children with a significant hearing loss may be delayed in their spoken language development because of late diagnosis, chronic Otitis Media etc., they still need to master the same developmental milestones in language as all other children, albeit in a shortened, concentrated time frame.

Rate of Language Acquisition

Indeed, **time is the enemy** of a child with a significant hearing loss who also experiences a delay in the development of language.

There is an imperative for a:

- focused,

- well-researched,

- efficient,

- effective and

- well-monitored process

for the development of their spoken language.

Rate of Language Acquisition

All other things being equal, and if the diagnosis is not too delayed, the aim would be for a child to develop age-appropriate spoken language by the time they go to school. This may mean for some children that they do not begin school till they are aged six years.

Language Sensitive Period

- For the majority of children, language can be *learned* during the 'language sensitive years' (I believe up until about seven/nine years of age) by appropriate interactive communication with a variety of other people who are competent users of the target language given the conditions indicated above.

- Emphasis is placed on normal everyday interactive events as the context within which the child will learn language.

Language Sensitive Period

- After this time has passed, while children can acquire some language structures and vocabulary through conversational interaction, they will need to *be taught* the complex essential structures and systems that are foundational to English with an emphasis on adult directed teaching activities.

Language Sensitive Period

- They need not only to achieve mastery of the language but also to be successful participants of the schooling process and later to be able to successfully move from concrete to abstract thinking.

Implications for School-Aged Service Delivery

- **What is the effect on the teaching/learning process when a student has not developed age-appropriate mastery of language by the end of the language development sensitive period?**

- **What is the process of language development for the older student in order to close the language gap as quickly as possible?**

- **What staff knowledge and skills are required to meet the challenge?**

Acknowledgement

- George Pittman, Althea Purdy and Gloria Tate generated many of the following insights in this presentation.

- The scaffold of English syntax development used in this program is mainly based on that developed by Gloria Tate in her series *Oral English* published in 1966 by the **South Pacific Commission** in association with the New Zealand Department of Education.

(the series is out of production)

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Scaffolds

Programs for the development and/or remediation of:

- language,

- listening,

- speech

- literacy

for children with a significant hearing impairment, particularly school-aged children, are based on a conscious or unconscious scaffold of development.

Major Syntax Systems in English

- The Tenses – the verbs and word order

- Connectives and Clauses

- Pronouns

- Determiners with Countable Nouns and Uncountable Nouns

- Adverbials and

- Prepositions

During their Primary School Years

During their Primary School experience, some students with hearing impairment:

- Know a great many words but cannot 'string them together' – they have little control of the 'structure of English;

- Do not understand tense usage;

- Cannot use prepositions correctly; and

- Cannot distinguish between Countable (Unit) and Uncountable (Mass) nouns or the use of the articles (*a* and *the*) and other determiners

During their Primary School Years

- Such students need an insightful and organised language learning system that addresses these and other areas of syntax in a developmental order of teaching/learning from six to twelve years of age.

- This same scaffold of development can also be used with older students utilising an age/ stage appropriate pedogical methodology.

- The teacher must become aware of the overall structural framework of English syntax so as to better understand the form and place of each individual session and to see behind it the major thought process of which it is part.

Language and thinking are intertwined

- All language concerns meanings (Fries)

- Language is the tool of thought (Pittman)

Teaching Language

- Teaching vocabulary is NOT teaching language.

- Teaching vocabulary is the easiest part of teaching language.

Teaching Language

- Let us examine some of the complexities of the syntax of English so as to appreciate the need for a 'controlled' approach by the teacher and the need for the cumulative outcome for the student of a progressive and structurally systematic teaching methodology.

Abstract ideas defined and manipulated by structure words

- Drastic changes in relationship between words are operated by the means of the shortest of unstressed words in English.

"Subtleties" of English

- O'Keefe's a show-off
- The O'Keefe show's off.
- The O'Keefes show off.
- O'Keefe, the show-off.
- O'Keefe, the show's off.

They are not 'subtleties' – Elements such as these proliferate in every sentence in English.

The differences in 's'

- Let's run away.

- The tree's blowing in the wind.

- The tree's blown down.

- What's he to do?

- The boy's feet were cut.

- I saw some boys.

- She walks.

Secondary Examples

- Steel's unsuitable

- The steel's unsuitable

- Steels are unsuitable

- The steels are unsuitable

- A steel is unsuitable

"Subtleties" of English

- It has be demonstrated that massive misunderstandings of secondary texts by children whose command of structure (not vocabulary) is insecure.

- Half the meaning of the English sentence lies in the structure words and statistically these structure words dominate any word count of any type of written or spoken English.

We need to see primary English teaching in relationship to its final objective, the capacity to read technical and secondary texts to get information for a society developing technologically.

(Pitman, *SPC/Tate English Syllabus and abstract vocabulary*)

A controlled approach

- The effectiveness of appropriate intervention depends upon a teacher's willingness to accept the discipline of controlled language teaching.

- Insights into the linguistic challenges that hearing impaired children with delayed language face daily only come through the cumulative effect of progressive and structurally systematic teaching/learning.

Purdy

Structure – words and meaning

- In any kind of normal English, half of all words used in coherent English are 'little' words which we pass over without giving them much notice or stress.

- There are approximately 600 of these words and each of them has different meanings.

- These are the words we never learned in a formal way.

Structure – words and meaning

- They include five parts of speech: adjectives, pronouns, auxiliary verbs, prepositions, adverbs and conjunctions with such deceitfully easy words as: the, a, of, in, this, is, are, has, and, do, did, does.

- Often in conversation when the context is understood and in the school playground or headline English, they are left out.

- But these little words cannot be neglected when the ideas have to be precise and when the context under discussion is not visible; when, for example, the child is reading.

Structure – words and meaning

- One of the 600 little words – 'the'

- Its use or omission can change the meaning of common sentence forms in school subjects.

- Approximately 7% of the words in a newspaper consists of the word 'the'.

- The smallest words in English may carry the greatest burden of meaning. These little words cannot be taught in isolation and therefore **the sentence** is the unit of instruction.

Structure: – words and meaning 'the' - Maths

Identification

Two boys went to the station.

Two boys went to the shop.

Two boys went to the library.

How many boys? Six Boys

Two boys went to the station.

The two boys went to the shop.

The two boys went to the library.

How many boys? Two boys

A Fraction

One out of **the** five children was hurt.

Two out of **the** five children were hurt.

(2/5)

A Proportion

One out of five children was hurt.

Two out of five children were hurt.

(2:5)

Structure: – words and meaning 'the' - Maths

'The' - indicating a total

In fifteen scenes of Othello, all three principal characters appear.

In **the** fifteen scenes of Othello, all three principal characters appear.

The second sentence tells the reader there are only fifteen scenes in Othello.

Structure: – words and meaning 'the' - Maths

'The' - indicating a total

He took a marble. He took another marble. He took another marble.

He took a marble. He took the other marble.

The first group provides no total.

The second sentence conveys a total i.e. two

Structure: – words and meaning 'the' - Maths

Indicating the answer required

What sum?   What's the sum?   What's a sum?

What total?   What's the total?   What's a total?

The first request directions/locations, the second additions, the third definitions.

Structure – words and meaning 'the' - English

- Narrative – a / the

- Language or Nationality ('Take French for example'. 'Take the French for example.')

- Prepositional Usage

Under fire   Under the fire

In question   In the question

In flower   In the flower

- Proportion   *"The more the merrier"*

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Structure – words and meaning 'the' - Science

- Oxygen is yellow   The oxygen is yellow
- If ice is heated it melts   If the ice is heated it melts.
- The substance was on fire.   The substance was on the fire
- Hydrogen is on tap   Hydrogen is on the tap.
- Gas supports combustion.   The gas supports combustion.

- What is salt?   What is the salt?
- What is a salt?   What are the salts?

Teaching order of determiners with countable nouns

e.g., ***a cup, a glass, a job, cups, glasses, jobs, clothes***

- a/an
- this / that
- a lot of
- the
- How many?
- these/those
- no
- more
- all the
- some
- another
- not many
- every
- one, two, etc.

- not any
- the most
- each
- both
- a few
- enough
- several
- a good many
- a great many
- a (great) number of
- fewer
- the fewest
- plenty of

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Teaching order of determiners with uncountable nouns

e.g., *water, glass, work*

- this / that

- a lot of

- the

- How much?

- no

- more

- all the

- some

- another

- not much

- not any

- a little

- the most

- enough

- less

- a good deal of

- a great deal of

- a (great) amount of

- the least

- plenty of

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Tense - A Major Structural Feature

Tense and Time in English

An English speaker places an action at at least one of **eight** points in time:

1. I'll write my name on the blackboard.

2. I'm going to write my name here.

3. I'm writing my name on the blackboard.

4. I have written my name on the blackboard.

5. I wrote my first name before my surname.

6. After I'd written my first name, I wrote my surname.

7. I was writing for several seconds.

8. Whenever I write my name, I start with a capital letter.

Information Signalled by Tense

In complex sentences, the importance of the correct verb tense is vital, as there are strict rules governing sequences of verbs, and incorrect verbal sequence could cause incorrect messages to be communicated e.g.

- *If you come to my place tonight, we'll listen to CDs.* (positive expectation)

- *If you came to my place tonight, we'd have listened to CDs*. (doubtful, unreal)

Information Signalled by Tense

In English, the Present Perfect Tense is used when talking about an action in the past, but thinking of it in terms of its effect upon the present. e.g.

*   *I haven't fed* the *dog.*

    (The dog is hungry now.)

*   *I've lived with old people.*

    (I know the problems. The experience affects me today.)

Information Signalled by Tense

- Thus, the teaching of the forms and tenses of verbs is a principal part of the teaching of English. It should form part of every lesson, as a short revision activity, as the main item itself, or as an ancillary feature incorporated into the main item.

- The teaching of any one tense will probably be spread over a considerable period of time – the uses of the tense increasing in difficulty of concept, until it use becomes automatic.

We can shuffle time through tense and order:

Chronological order of events:

- 1. I received a letter this morning.

- 2. In the letter was a dollar note.

- 3. 1 forgot about the money.

- 4. I threw the letter and envelope away with the money.

- 5. I remembered the dollar note.

- 6. Now I am searching for it in the wastepaper basket!

We can shuffle time through tense and order:

Below are four normal ways of reporting this sequence of events in which the figures following the sentences show chronological compared with reported order:

1. *I'm looking for a letter I got this morning. which I have just remembered contained a $1 note. I had thrown it away forgetting that money was in it.* (Reporting order 6, 1, 5, 2, 4, 3.)

2. *After I had thrown away the letter I received this morning containing a $1 note which I had forgotten about, I remembered the note and have been looking for it.*

   (4, 1, 2, 3, 5, 6.)

We can shuffle time through tense and order:

3. *Having thrown away a $1 note which was contained in a letter I received this morning and having realised my loss I'm now looking for that letter.*

   (4, 2, 1, 5, 6.)

4. *When I threw away the letter I got this morning and which I'm now looking for, I had of course forgotten about the $1 note it contained - which I've only just remembered.*

   (4,1,6,3,2,5) (more typical of speech).

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Our familiarity with this type of time manipulation prevents us from seeing what miracles of rapid slotting we accept from the English speaker without conscious thought.

The complexity represented by the figures after each sentence indicate in the barest way the dovetailing of time and action that goes on in the English speaker's mind.

Children who disregard tense markers are liable to make the mistake of believing that events they read about occurred in the order of the verbs in the sentence as they read it.

Teaching order of verb tenses

- **Present Continuous**
  - I'm ing
  - 's ing
  - 're ing
  - am ing
  - is jng
  - are ing

- **Imperative**

  Sit down

- **Simple Past Irregular**

  I saw

- **Simple Past Regular**

  I hopped

- **Present- Verb 'to be'**
  - Iam
  - he/she/it is
  - there's
  - there is
  - you/we/they are
  - there are
  - you (plural) are

- **Future & Future with intention**
  - Will/shall
  - I'll walk
  - I'm going to walk

- **Infinitive**
  - to put

Teaching order of verb tenses

- **Simple/Habitual Present**
  - without S
  - do/have/walk/like
  - I like
  - I walk to school
  - Every day I wash
  - with S
  - He walks to school

- **Past Continuous** (only in reported speech)
  - X said I was writing

- **Present Perfect**
  - I've finished
  - I've just written

- **Future in the Past/Conditional Mood** (only in reported speech)
  - I said I would do it

- **Past Perfect** (only in reported speech)
  - I said I had written
  - You had already done it

- **Future Continuous**
  - I'll be leaving soon

- **Conditional if +Past + Future**

  If I had .... I'd ..

Teaching order of verb tenses

- **Conditional if + present + present**
  - If I have a pen I can write a letter

- **Conditional Perfect**
  - If I had had $1.00, I'd have given it to X

- **Present Perfect Continuous**
  - I've been writing for . .

- **Modal**

- **Passive voice**
  - The cup was put on the table

- **Reported Speech**

Contractions in Speech

- Because of the rhythm of English, many tense markers are unstressed, and therefore are often unheard by the child with hearing impairment.

- This leads to an important aspect of teaching practice. It is essential that children be taught to speak English as it is spoken, not as it is written. Children must learn to speak in the rhythmic contracted form, *but* they must understand the full form at the same time .e.g.

- *He's working.*   *He is working.*

- *He's worked.*   *He has worked.*

- *That one's mine.*   *That one is mine.*

- *I'd like one.*   *I would like one.*

- *I'd been there.*   *I had been there.*

Summary

The fact that a sound basis for the mastery and manipulation of abstract ideas lies in the manipulation and mastery of concrete operations has long been recognised by thoughtful teachers.

Mastery of both types of operations is largely dependent on the correct and precise use of structural features and structure words assisted, of course, by the tenses of the verbs.

(Pitman, *SPC/Tate English Syllabus and abstract vocabulary)*