A Level English Language

Child Language Development SIL Booklet

The focus of the Child Language Development unit is to explore how children use language and how they acquire the skills needed to communicate in the first place.

Language is a skill that truly makes us human. Whereas other species do communicate with an innate ability to produce a limited number of meaningful vocalisations (e.g. apes), or even with partially learned systems (e.g. bird songs), and bees even communicate by wiggling their bums, there is no other species known to date that can express infinite ideas (sentences) with a limited set of symbols (speech sounds and words).

Nature Vs Nurture

The first debate to consider is whether children learn language as a result of nature or nurture. This poses the question: to what extent do genetics (i.e. the child's DNA) or external influences, such as nutrition and comfort, influence a child's growth and development?

As an example, the nature argument might suggest that the ability to understand language is innate (something children are born with) regardless of the environment a child grows up in; whereas, the nurture argument would suggest that language ability is fully determined by the environment and all children could develop the same language abilities given the same circumstances.

However, because of the complexity of the human brain, it is impossible to know which, if any, of the above arguments truly explains language development. To that end, a contemporary view of child language development now encompasses both aspects of this debate. It's widely recognised that the complex and unique genetic makeup that each child has will influence their development, abilities, health and behaviour in all areas of their life, but that this only provides a framework and is heavily modified by the physical and social environment of the child. So some children will be genetically predisposed to have better language abilities than others, but how these abilities develop and which children actually end up with better language abilities is largely down to the environment that a child grows up in.

Explaining Child Language Development

Over the past century, many researchers have tried to explain just how children acquire their language skills (to speak, and later to read and write). There are five key theories that you need to understand:

- 1. Behaviourism (Skinner, 1957)
- 2. Nativism (Chomsky, 1959)
- 3. Social Interactionism (Bruner, 1966)
- 4. The Cognitive Theory (Piaget, 1970)
- 5. Social Constructivism (Tomasello, 2003)

Behaviourism

Skinner was a behaviourist psychologist, so when his theory is applied to linguistics, he considers language to be acquired in a similar way to other behaviours people have. One of the key principles behind Behaviourism is Operant Conditioning.

Operant conditioning is the idea that behaviour is determined by its consequences. The consequences can either make a behavioural habit more likely to reoccur or disappear. This is achieved by positive or negative reinforcement.

- Positive reinforcement is, for example, praise, positive attention, presents, and so on.
- Negative reinforcement, on the other hand, consists of a direct negative consequence, like a telling off, or a
 more neutrally discouraging action, such as simply a lack of praise.

He proposed that babies are born with a "tabula rasa" (or simply a "blank slate"). This means they know absolutely nothing at birth and then, when exposed to a stimulus such as a parent speaking English, start to imitate adult language. As the baby then acquires the physical capabilities in order to speak (e.g. the strengthening of the voice box), the parents use positive and negative reinforcement to shape the child's language.

Challenges of Behaviourism:

- All children, despite location or input, go through a similar pattern of linguistic development at a similar rate.
- Skinner's research was conducted on rats and pigeons, so it's difficult to relate his findings to humans.
- The idea of a "poverty of stimulus" was a challenge proposed by Chomsky, suggesting that children often hear fragmented and grammatically incoherent standards of English. As a result, children and babies cannot in any way be expected to have copied this and to still produce what is considered "correct", standard English.
- A linguist called Katherine Nelson (1970) argued that children are certainly not like rats in that they resist correction and negative reinforcement.

Nativism

Chomsky believed that children do not learn through imitation (as suggested by Skinner) and that even if they did, caregivers do not provide a good enough example of English to be copied: this is the "poverty of stimulus" argument. He argues that children are born with a Language Acquisition Device (LAD) which is like a little computer in a person's head which helps them to learn language. Chomsky suggested that the LAD contained a set of rules about how to use grammar and that as children become more exposed to the language use of others, different parts of their LAD start to activate and thus learning happens! Chomsky called this Universal Grammar: the view that we are all born with the same potential for language.

This theory is furthered by the fact that children often make mistakes. Chomsky suggests this shows that children are not simply copying the speech of adults. If a child makes a mistake because they have learned a 'rule' about language but applied it in the wrong context, Chomsky called this a virtuous error, for example: "Rita throwed a ball". In this example the child has aimed to conjugate the material verb 'throw' by placing it in the past tense, using the suffix '-ed'; however, because the verb 'throw' is irregular, it doesn't follow the pattern of regular verbs. Instead it should be "threw".

Challenges of Nativism:

- Because the brain is so complex, there is no scientific proof of the existence of any of the concepts suggested by Chomsky.
- Chomsky based his theory on personal observations only.
- After suffering years of neglect, a girl named Genie was rescued from her home at the age of 13. She was
 unable to speak properly and worked with linguists, but her speech never progressed past that of a threeyear-old. This suggests that input before a certain age is important for development.

Social Interactionism

Bruner argued that children learn language from their environment, especially from the input of caregivers. He developed the idea of a Language Acquisition Support System (LASS – a deliberate pun on Chomsky's theory of the LAD). The LASS describes anything that helps a child to learn language: caregivers, books, games, etc. Another key aspect of this theory is Child Directed Speech (CDS). This is a speech style adapted for children that includes a raised pitch and 'singsong' intonation, simple constructions, repeated forms and lots of gestures.

The case study of Jim – a boy born to deaf parents – shows the importance of interaction. As his parents were unable to speak to him, they exposed him to television and radio; however, this did not help him to develop his speech. It wasn't until he began to interact with speech therapists, that his speech actually started to develop.

Challenges of Social Interactionism:

- Some cultures around the world (such as Papua New Guinea and Samoa) don't use the features of CDS; however, the children in these cultures still develop at rates similar to other children.
- Myszor suggested that CDS helps social development, but not linguistic development.
- The existence of a Universal Grammar completely contradicts research into the importance of social interaction Ibbotson and Tomasello (2016).

The Cognitive Theory

Piaget argued that learning occurs in stages and that learning cannot occur if a child's brain is not yet at a stage that will allow it. Moreover, Piaget suggested that children are not able to express what they do not understand. He argues that until children learn the rule of object permanence (knowing that things still exist even when you can't see them), they find it hard to name things.

Transitions (meaning, ages when rapid rates of progress usually occur) happen at about 18 months, 7 years and 11 or 12 years. Satterly suggests that the Cognitive Approach has been taken to mean that before these ages of transition children are not capable (no matter how bright) of understanding things in certain ways, and has been used as the basis for scheduling the school curriculum.

Stages of development suggested by Piaget:

Sensori-motor Age 0-2	Respond to world through senses and movement Object permanence develops
Pre-operational Age 2-7	Language becomes more fundamental Usually egocentric* to end of this stage
Concrete operational Age 7-11	Rational and logical thinking develops These can be expressed through language
Formal operational Age 11-16	Abstract thinking develops Children can engage in moral and ethical debate

^{*}Egocentricity describes how a child uses language to focus on themselves (most obviously seen through the use of the first-person pronouns 'I' and 'me'', because the child hasn't fully grasped the importance of other people yet. Ultimately, we all start out believing that we are the centre of the universe! Thankfully, most of us grow out of this!)

Challenges of The Cognitive Theory:

- Children with learning difficulties (i.e. a brain that functions differently to others) is still able to fully acquire language and progress through the stages of development at a similar rate to other children.
- Piaget's research was based on limited personal observations
- Repacholi and Gopnik (1997) conducted an experiment on 18 month olds who were able to recognise food preferences in others, showing language isn't always as egocentric as Piaget suggests.

Social Constructivism

Tomasello argues that children are central to their own development: they are active learners. He suggests that children learn the rules of language and then learn how to construct it. They learn by listening to other people speak, find patterns and develop plans on how language is used. Tomasello calls these plans 'schemas'. He uses the terms 'intention-reading' to describe how children attempt to interpret the meaning of utterances they hear and 'pattern-finding' to describe how children analyse utterances and look for similarities and differences.

According to Tomasello, early communication is dyadic i.e. it involves the child and one other, often a caregiver. Towards the end of a child's first year of age, communication becomes more triadic i.e. it involves the child and a caregiver and a focus on a third entity. Social Constructivism contrasts with Nativism; it doesn't assume we have an innate grammatical knowledge, suggesting instead that grammar is learned.

Challenges of Social Constructivism:

As with the rest of the theories, Social Constructivism is impossible to definitively prove.

Questions

1.	What are the five main theories that explain Child Language Development and which theorist is associated with each one?		
2.	What does Skinner believe language is acquired in a similar way to?		
3.	Operant conditioning describes positive and negative reinforcement. What do these terms mean?		
4.	What does the term "tabula rasa" mean?		
5.	Skinner didn't conduct his research on humans. What did he conduct it on?		
6.	What is meant by the "poverty of stimulus" argument?		
7.	According to Chomsky, what is the Language Acquisition Device?		
8.	According to Chomsky, what is Universal Grammar?		

9.	Explain what a virtuous error is and give an example.		
10.	What is suggested by the study of the girl known as Genie?		
11.	According to Bruner, what is the Language Acquisition Support System?		
12.	Describe some of the features of Child Directed Speech.		
13.	Explain what the case study of Jim shows.		
14.	What was Myszor's critique of Child Directed Speech?		
15.	What is meant by the term 'object permanence'?		
16.	What does Satterly note that children's transition points have been used to schedule?		

17. Complete the table outlining the four stages of children's development according to Piaget.

Sensori-motor	Respond to world through senses and movement				
Age:	Object permanence develops				
Pre-operational					
Age 2-7	Usually egocentric to end of this stage				
Concrete operational Age					
Age 11-16					
18. Why do children with le	Why do children with learning difficulties challenge The Cognitive Theory?				
19. According to Tomasello	. According to Tomasello, what is a 'schema'?				
20. Explain what the terms 'intention-reading' and 'pattern-finding' mean.					
21. How is triadic communi	cation different to dyadic communication?				

Of the debate	five main theories of Child Language Development which ones most closely support the land which ones most closely support the nurture debate? Explain your thinking.	nature