Main issues of this unit

• The source of language learning theories.
• Principles of Behaviourism.
• Principles of Mentalism (Chomsky).
• Principles of Cognitivism.
• Principles of Constructivism.
• Principles of Humanism.
• Principles of Social Interactionism.
• Comprehensible input and comprehensible output.
Scientific fields related to learning and language learning (1/2)

- **Psychology:** a diverse area of study which involves, amongst other things, the study of how humans learn and how they make sense of the world.

- **Psycholinguistics:** involves the study of a) the mental processes that a person uses in producing and understanding language and b) how humans learn language (the study of speech perception, the role of memory, concepts and other processes of language use).
Scientific fields related to learning and language learning (2/2)

• **First language acquisition** is an area of psycholinguistics which focuses on how children learn their mother tongue.

• **Second language acquisition** is an area of applied linguistics and studies the processes by which people develop proficiency in a second or foreign language. These processes are investigated with the expectation that this information may be of use to language teaching.
Behaviourism: Main Principles (1/3)

• Main protagonists: Ivan Pavlov, John Watson, Edward Thorndike, B.F. Skinner.

• Learning happens when a correct response is demonstrated following the presentation of a specific environmental stimulus.

• Learning is changed behaviour.
Behaviourism: Main Principles (2/3)

• **Conditioning**: Learning is seen as a process of developing connections between a stimulus and a response. This process is called conditioning.

• **Habit formation**: An individual responds to a stimulus by behaving in a particular way. If the behaviour is reinforced (i.e. rewards or punishment) then the likelihood of that behaviour occurring on a subsequent occasion will be increased or decreased. As the behaviour is reinforced, habits are formed.
Behaviourism: Main Principles (3/3)

• **Importance of environment**: Learning is a result of environmental rather than genetic factors. The child is born as a clean slate and the environment writes its messages on this clean slate.
Behavourism and foreign language teaching (1/4)

- It had a powerful influence on second and foreign language teaching between the 1940s and the 1970s.
- Influenced the development of the audiolingual method.
- Instruction is to elicit the desired response from the learner who is presented with a target stimulus.
- Student as passive receiver of information memorized dialogues and sentence patterns by heart.
Views of Language Acquisition and Learning in Foreign Language Didactics

Behaviourism and foreign language teaching (2/4)

• Based on rewards and punishments.
• Responsibility for student learning rests squarely with the teacher.
• Lecture-based, highly structured.
• **Primacy of speech**: considers speech as primary partly because it is the first medium that the child masters. Skills are taught in a specific order: Listening and speaking then reading/writing.
Behaviourism and foreign language teaching (3/4)

- **Stimulus-response-reinforcement**: Learners are taught the language in small, sequential steps (structures and then sentence patterns). A small part of the language is presented as a stimulus, to which the learner responds by repeating or by substituting. This is followed by reinforcement by the teacher. By repeating the learner develops habits. Learning a language is seen as acquiring a set of appropriate mechanical habits and errors are frowned upon because they lead to the development of “bad” habits. The role of the teacher is to develop in learners good language habits.
Behaviourism and foreign language teaching (4/4)

• **Inductive learning**: Because learning is a question of habit formation rather than problem solving, any type of explanation is consistently avoided. It is a last resort and always occurs in the final stage, when the language item has been well practiced and the appropriate habit acquired.
Mentalism and Chomsky (1/3)

• Mentalism is the belief that the mind is important for determining human behaviour.

• Chomsky argued that what was missing from the behaviourist concept of learning was a theory of mind - a mentalist perspective, in other words. The mind was seen to possess a set of deep-seated ways of processing language data that lead to the unconscious discovery of the grammar of the language - learning as a rule-governed activity.
Mentalism and Chomsky (2/3)

• He argued that behaviourists failed to recognise the logical problem of language acquisition: children learn more about the language than they could reasonably be expected to learn on the basis of the language samples they hear. They can produce language that they have never heard of.
Mentalism and Chomsky (3/3)

• Children’s minds are not blank slates to be filled in by imitating the language they hear from the environment. Children are born with an innate capacity for language learning which allows them to discover for themselves the rules underlying the language.

• This innate ability is called language acquisition device (LAD) or black box; later on Chomsky referred to this as innate knowledge of the principles of Universal Grammar (UG).
How does the language acquisition device work?

• The language acquisition device contains all the principles which are universal to all languages.

• For language acquisition device to work the child needs samples of natural language which activate the device.

• Once activated, the child is able to discover the structure of the language by matching the innate knowledge of grammatical principles with the structures of the particular language.

Language Acquisition Device = Universal Grammar
Cognitivism (1/2)

• Cognitive psychology in contrast to behaviourism is interested in the way the human mind thinks and learns. It is interested in the cognitive processes that are involved in learning and how the learner is involved in the process of learning.

• The learner is seen as an active participant in the learning process using various kind of mental strategies in order to sort out the system of the language being learnt.
Cognitivism (2/2)

• Cognitive theories look beyond behavior to explain brain-based learning.

• Information processing model:
  – Learning happens as a result of brain processes where knowledge is transferred from short to long term memory.
  – In order for this to happen, new information must be linked to old information and information and concepts must be logically organised.

• The role of the teacher is to help learners organize new information for later recall.
Cognitivism and implications for learning

• Learning is an active process in which learners construct new ideas or concepts based upon their current/past knowledge.

• The learner selects and transforms information, constructs hypotheses, and makes decisions, relying on a cognitive structure to do so.

• Cognitive structure (i.e., schema, mental models) provides meaning and organization to experiences and allows the individual to "go beyond the information given".
Cognitivism and implications for teaching (1/2)

• As far as instruction is concerned, the instructor should try and encourage students to discover principles by themselves.

• The instructor and student should engage in an active dialog (i.e., Socratic learning).

• The task of the instructor is to translate information to be learned into a format appropriate to the learner's current state of understanding.
Cognitivism and implications for teaching (2/2)

• Curriculum should be organized in a spiral manner so that the student continually builds upon what they have already learned.

• Inquiry-oriented projects.

• Opportunities for the testing of hypotheses.
Constructivism (1/2)

• Based on the work of Jean Piaget and Jerome Bruner, Lev Vygotsky.

• Constructivism views learning as a process in which the learner actively constructs or builds new ideas or concepts.
We can distinguish between:

• **cognitive constructivism** which is about how the individual learner understands things, in terms of developmental stages and learning styles,

• **social constructivism**, which emphasises how meanings and understandings grow out of social encounters.
Cognitive Constructivism - Piaget

• From the moment we are born we are actively involved in the process of learning.

• We learn things as a direct result of our experiences but we make sense of those experiences at different stages of our lives.

• Piaget believed that cognitive development occurs through a sequence of successive qualitative changes in cognitive structures.
Piaget’s Four Stages of Cognitive Development (1/2)

• **Sensorimotor Stage (birth - 2 years):**
  – actions become more intentional and integrated into patterns, there is an increased awareness of self and surroundings.

• **Preoperational Thought Stage (2 - 7 years):**
  – development of language and conceptual thought occurs.
Piaget’s Four Stages of Cognitive Development (2/2)

• **Concrete Operations Stage (7 - 11 years):**
  – increased ability to apply logical thought to concrete problems, thinking is still primarily related to immediate experience.

• **Formal Operations Stage (11 years on):**
  – ability to apply logic to a variety of problems; higher order thinking occurs.
Implications for teaching (1/2)

• **Learning should be whole, authentic, and "real":** Piaget helps us to understand that meaning is constructed as children interact in meaningful ways with the world around them. Thus, That means less emphasis on isolated "skill" exercises that try to teach something like long division or end of sentence punctuation. Students still learn these things in cognitive classrooms, but they are more likely to learn them if they are engaged in meaningful activities (such as operating a class "store" or "bank" or writing and editing a class newspaper).
Implications for teaching (2/2)

• The richer the experience, the more elaborate the cognitive structure development.

• Materials and activities should be geared for the appropriate level of cognitive development.
Social constructivism - Vygostky

• Contemporary notions of social constructivism derive from the work of Vygotsky and Bruner.

• Vygotsky’s theory states that knowledge is co-constructed and that individuals learn from one another. It is called a social constructivist theory because in Vygotsky’s opinion the learner must be engaged in the learning process. Learning happens with the assistance of other people, thus contributing the social aspect of the theory.
Interactionist theory

• Language develops as a result of the interplay between the child and the environment in which the child develops.

• Caretaker speech is modified to suit the capability of the child. This modified language is a crucial element in the language acquisition process.
In summary

<table>
<thead>
<tr>
<th>Learning Theory</th>
<th>Learning Process</th>
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<tr>
<td><strong>Behaviourism</strong></td>
<td>Through stimulus-response positive/negative reinforcement and punishment.</td>
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<tr>
<td><strong>Cognitivism</strong></td>
<td>Rehearsing/organising information and then storing it for long term use.</td>
</tr>
<tr>
<td><strong>Constructivism</strong></td>
<td>Constructing one’s own knowledge through past experiences and group collaboration.</td>
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Comprehensible input: Krashen (1/3)

• It is one of the models that adopt the innatist perspective.

• It was quite influential in the 1970s.

• It emphasizes the role of exposure to comprehensible input in second language acquisition.
Comprehensible input: Krashen (2/3)

• **Acquisition**: acquiring a second language by taking part in meaningful interaction (just like children pick up their mother tongue).

• **Learning**: learning a second language in classrooms by consciously studying it, paying attention to grammar and being corrected.

• Only when you acquire language can you use in real communication. We acquire language only by one way: through comprehensible input.
Comprehensible input: Krashen (3/3)

• **Input**: the language which the learner is exposed to in the environment.

• **Comprehensible input**: language which a learner can understand. Language which is just above the learners’ level of competence.
Krashen’s model (1/2)

It is based on 5 hypotheses:

1. **Acquisition/learning hypothesis**: Learning and acquisition are two separate processes.

2. **Monitor hypothesis**: Acquisition is more important than learning since the role of the latter is merely to monitor what one says and writes in the second language.

3. **The natural order hypothesis**: There is a natural order of morpheme acquisition that applies to second language acquisition.
Krashen’s model (2/2)

4. The input hypothesis: The most important point in the instructional process is to provide acquirers with comprehensible input.

5. The affective filter hypothesis: The so-called ‘affective filter’ of the acquirer must be clean so that language passes easily through it; in other words, the acquirer must be positively predisposed or motivated so that s/he is open to input.
Comprehensible output: Swain (1/2)

• Language acquisition occurs not only when learners are exposed to comprehensible input but also when they are pushed to produce language precisely and appropriately (comprehensible output).

• Learners learn to speak by speaking.

• They need to be pushed to use alternative means of expression when communication breaks down.
Comprehensible output: Swain (2/2)

• Using the foreign language offers learners the chance to try out new forms and expressions.
• Being pushed in performance shifts learners’ attention from meaning to form.
Humanism and Carl Rogers

• Humanism emphasises the importance of the inner world of the individual - learner’s thoughts, feelings and emotions. These are aspects of the learning process that are important if we are to understand human learning in its totality.

• Significant learning will take place when the subject matter is of personal relevance to the learner and when it involves active participation of the learner.

• Learning which involves feelings and cognition is more likely to be lasting and pervasive.
Schumann’s Acculturation Theory (1978)

Social distance
• If they feel that the target language and culture is more/less prestigious, or dominant/subordinate over their own.
• If their living conditions allow them to be integrated in a society or they live in a type of ghetto.
• If they are living or intend to live in the target culture for a long time.
• If there is social congruence between the source and target language and culture.

Psychological distance
• If they feel that they have or haven’t control over the new environment and a say in their process of integration.
• If their initial experience was to undergo a ‘culture shock’.
• If they feel that no matter what type of attempts they make they are unable to understand or convey their meanings in the target language.
• If they feel that the meanings that they convey are undervalued.
Multiple Intelligence Theory

- Proposed by Howard Gardner.
- The theory states that there are seven distinct forms of intelligence (recently an 8th was introduced) that each individual possesses to a different degree.
Multiple Intelligence Theory: Eight Intelligences

1. Verbal/Linguistic.
2. Logical/Mathematical.
3. Spatial.
4. Bodily/Kinesthetic.
5. Interpersonal.
6. Intrapersonal.
7. Musical.
8. Naturalistic.
Multiple Intelligence Theory: Instructional Implications

- Teaching/learning should focus on the strength (particular intelligences) of each person and assessment of learning should measure all forms, not just specific ones.
- Individuals should be encouraged to use their preferred intelligences in learning.
- Instructional activities should appeal to different forms of intelligence.
- Assessment of learning should measure multiple forms of intelligence.
End of Unit
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