Cognitive Development

Cognitive Development: Piaget's Theory and Vygotsky's Sociocultural Viewpoint (Schaefer et al.)

Warm-up

- Study word list for 1 minute
- Do not write down the words, study in your head
- At some point on **Thursday** and **Saturday** return to this list of words and study it for 1 minute
- Use the same method that you used to study just now. I will know if you don't do it…

Word List

- Think
- Exist
- Home
- Grasp
- Butter
- Drink
- Beat
- Cloth
- Swift
- Lady
- Blade
- Ground

- Head
- Bath
- Cheese
- Stomach
- Sun
- Pretty
- Cave
- Whistle
- Noise
- Glue
- Command
- Fruit

Overview

- Kids don't just "know less" than adults — they think differently
- Cognitive Development = how children's thinking changes across childhood.
- Two Big Theories:
  - Jean Piaget: Children actively construct knowledge in stages; cognitive growth = moving through universal, invariant stages.
  - Lev Vygotsky: Children's thinking is deeply shaped by culture, language, and social interaction. Development is not universal but socially situated.

Piaget's Key Ideas

- Constructivist view: Children build knowledge by acting on the world.
- Schemes: Mental patterns for interpreting experience.
- Processes:
  - Assimilation = fit new info into existing schemes.
  - Accommodation = adjust schemes to new info.
  - Equilibration = balance between the two; cognitive growth.
- Stages:
  - Sensorimotor (0–2 yrs): Learn through action; object permanence emerges.
  - Preoperational (2–7 yrs): Symbolic play, language, but egocentric and illogical.
  - Concrete Operations (7–11 yrs): Logical about concrete problems, but struggle with hypotheticals.
  - Formal Operations (11+ yrs): Abstract, hypothetical reasoning.

Vygotsky's Key Ideas

- Sociocultural theory: Development happens through interaction with more knowledgeable others.
- Zone of Proximal Development (ZPD): The gap between what a learner can do alone vs. with guidance.
- Scaffolding: Adults/peers provide temporary support to help learners progress.
- Language & thought: Private speech ➜ inner speech ➜ higher-order thinking.
- Emphasizes cultural tools (language, symbols, counting systems) shaping thought.

Why This Matters for Learning

- Piaget ➜ readiness: match teaching to developmental stage
- Vygotsky ➜ support: scaffold, use peers & culture
- Think of something you struggled to learn — was it more about growing into it (Piaget) or having the right support (Vygotsky)?
  - Modern classrooms blend both

Group Work

- Step 1 – Overview of Theory
  - Briefly explain the key ideas of your assigned theorist (Piaget or Vygotsky).
- Step 2 – Apply to Scenario
  - Read the scenario given to your group.
  - Discuss: How would your theorist explain the child's learning/behavior in this situation?
- Step 3 – Suggest a Classroom Strategy
  - Propose one practical teaching strategy based on your theorist's ideas.
  - Be specific

Be ready to share your group's answers with the class (10 mins per group)

Groups 1 and 2:

- Theorist: Piaget's concepts (schemes, assimilation, accommodation)
- Scenario: A 5-year-old using blocks to "build a city."

Groups 3 and 4:

- Theorist: Piaget's stages of development (sensorimotor ➜ formal)
- Scenario: A 7-year-old learning multiplication tables.

Groups 5 and 6:

- Theorist: Vygotsky's ideas (ZPD, scaffolding, culture)
- Scenario: A 12-year-old struggling with hypothetical science problems.

Group 1
1. Itbaan Safwam
2. Shifa Akhtar
3. Omer Ibrahim
4. Leena Fatima
5. Ali Sherazi
6. Ahmed Abdul Rahim
7. Muhammad Usman

Group 2
1. Haseeb Adnan
2. Nashra Pervez
3. Muhammad Mustafa
4. Zeeshan Hussain
5. Eman Shakeel
6. Noor e Haleema

Group 3
1. Mehak Lohana
2. Laibah Basham
3. Kamall Uddin
4. Sheherzar Hamza
5. Fatima Arif
6. Meerab Fatima

Group 4
1. Sara Sharif
2. Miraal Aftab
3. Ali Hamza
4. Mustafa Wajeeh
5. Mustabshirah Taqdees
6. Ahmed Nehyan

Group 5
1. Saad Shaikh
2. Hoor Anam
3. Aliza Amir
4. Syed Kazim
5. Ayesha Ghulam Nabi
6. Muhammad Samee

Group 6
1. Huzaifa Iqbal
2. Aftab Ahmed
3. Hadia Sohail
4. Abdullah Siraj Khan
5. Abdul Rehamn
6. Soha Ali