

Learning Theories

Jean Piaget — “*construction is superior to instruction*”

Looked at the cognitive development of children, formulated 4 key stages of development proposing that children went through these chronologically and a child’s capacity and their readiness to learn was based on these.

sensorimotor stage (0-2); learning through reflexes leading to ‘object permanence’ ie an object is still there, even though it is ‘out of sight’, attachment is important.

pre-operational (2-6); learners; are ego-centric (ie only relate things to themselves) learn through manipulation of the environment, are prone to incomplete logic eg plants aren’t alive cuz they don’t move ie focus on one attribute at a time (take words at their exact meaning), learn more from personal experience rather than what they are told.

concrete operations (7-11); learners; can reverse the direction of their thought, display logical thought through classification and categorisation, can start to think abstractly.

formal operations (12 –adulthood); learners start thinking abstractly and work through the implications of their thinking, they wrestle with ‘the meaning of life’.

Piaget identified mental representations in early learners minds and referred to these as ‘schemas’.

Chris Athey, in the 1970’s, proposed a pattern of schema development – physical action, using schema to symbolise meaning, functional relationships between two things, schema supports thought application and use of language. She proposed that learners try to ‘fit’ their experiences into schemas. Athey identified 7 schema, from rotational or circular through to back and forth or side to side.

Lev Vygotsky – “*learning and development are interrelated*”

Vygotsky believed personal and social experiences cannot be separated. He believed that children learn from each other and the values and beliefs of adults and children help shape their understanding of the world.

One of Vygotsky’s most important contributions to the theories of child development is the *zone of proximal development (ZPD)* – the gap between the most difficult task a child can do and the most difficult task a child can do with help from an adult or another child. He maintained that a child’s ability to learn with help was a key ‘intelligence’. The assistance from a peer or adult is referred to as ‘scaffolding’. Observation of child, assessing their understandings and where they are in a learning process, are important to planning a curriculum that challenges their current abilities ie their own ZPD. This theory encourages teachers to plan a curriculum that extends children’s knowledge and scaffold their learning where they are put in situations to stretch their competencies with the help of others.

Vygotsky showed that children are affected by their social and cultural surroundings and their interactions with other people – family, peers, teachers. He maintained that **language** is essential to child development and their language interactions are essential to ‘cementing’ concepts. Body language and facial expressions as well as the spoken language are important for development. Often children, and even adults, set up an internal dialogue to regulate and guide actions and learning. When children play they constantly use language – they determine conditions of make-believe, discuss roles, correct each other, try new ideas out. Vygotsky believed this contributes to their construction of knowledge.

John Dewey – *“education is life itself”*

John Dewey is arguably one of the most influential theorists on the western education system. Dewey stated that children learn best when faced with real life situations and their ‘powers’ are stimulated through ‘social’ situations they find themselves in.

He believed in learning by doing, and that learning is a process of living not a preparation for future living. Learning should address what a learner needs to know at the time and grow out of a child’s own home life – extending the child’s sense of values bound up in home life.

Teachers do not teach just subject matter, but also how to live in society – indeed they ‘shape’ society. Dewey believed children need assistance from teachers in making sense of their world. He thought that the educator has a serious responsibility to determine the curriculum based on knowledge of the children and their abilities. Quality education should be based on - knowing the children well, building experiences on past learning, good organisation and planning. Observation, documentation and evaluation of learners and classroom events is therefore essential.

Dewey believed that an activity is not a learning activity if it lacks purpose and organization. He said “all learning should be fun but not all fun is learning” i.e. if a child is enjoying an activity it doesn’t automatically follow that they are learning. His criteria for learning are; based on children’s interests, knowledge and experience, supports their development, helps develop new skills, adds to their understanding of the world, prepares them to live more fully.

Erik Erikson – “*the most deadly of all possible sins is the mutilation of a child’s spirit.*”

Erikson’s theory, ***the eight ages of man***, gives an insight into social and emotional development (see below for children and young people stages). In each ‘age’ or stage he proposes that people have to resolve a ‘struggle’ in order to progress on to the next stage. He believed it was possible to go back and renegotiate issues from a previous stage of development.

Age	Stage	Strength developed
0 -1	Trust vs mistrust. External trust that adults will be there to meet their needs. Internal trust that she/he has the power to effect change e.g. power to engage adults through tears, smiles etc, whenever she needs their help. Attachment is essential	Hope
2.-.3	Autonomy vs shame and doubt. The task here is to gain independence, acquiring a strong sense of self without loss of self-esteem through inappropriate use of shame by significant adults. Children in this stage need reasonable opportunities for simple, realistic choices and control with consistent, firm, reassuring limits. Teachers need to accept strong swings between need for independence and dependence.	Willpower
4.-.5	Initiative vs guilt. Having established autonomy children act less for self control than to get the task done and won’t feel guilty if things don’t go as planned. Adults should not do things that children can do for themselves, e.g. tying shoelaces, or focus on their mistakes as their sense of initiative can turn to guilt. Erikson said that teachers should encourage autonomy, set expectations inline with children’s abilities, focus on gains and on real-life doing.	Purpose
6.-12	Industry vs Inferiority. Here an industrious child learns to master the more formal skills of life: relating with peers according to rules, progressing from free play to play that may be structured by rules and demand formal teamwork, such as football and mastering social studies, reading, and numeracy. A mistrusting child will doubt the future and a shame/guilt-filled child will experience defeat and inferiority	Competence
Adolescence	Identity vs role confusion.. The big question at this stage is ‘who am I’? If a young person actually anticipates achievement, and <u>achieves</u> , rather than being "paralyzed" by feelings of inferiority or by an inadequate time perspective they become clearer about their identity and ‘positive role in life’. Teachers can often act as role models and leaders in this stage.	Fidelity

Howard Gardner – “*what really counts is how are you smart?*”

Gardner identified three categories of intelligence, which differ from the ‘narrow’ IQ tests, with different types in each category –

➤ ‘personal-

- ❖ *Interpersonal* intelligence, work well with other people and like working in groups. Developed through role play, group work, team games
- ❖ *Intrapersonal* intelligence, can work and solve problems on own, good at planning and getting on with own work, self aware. Developed through making tasks have personal meaning

➤ ‘language-

- ❖ *linguistic* intelligence, good with language, read and write easily. Developed through storytelling, writing, discussion and debate
- ❖ *Musical* intelligence, can work and solve problems on own, good at personal goal setting, self aware. Developed through using music as a background for learning and for motivation using rhythm

➤ ‘object-related’

- ❖ *kinesthetic* intelligence, enjoy physical movement. Developed through working with objects, drama or roleplay, brain gym, sports
- ❖ *mathematical and logical* intelligence, good with numbers and recognising patterns. Developed through problem solving, sequencing, puzzles
- ❖ *visual and spatial* intelligence, good at thinking in pictures, design, charts and maps. Developed through mind mapping, colour, drawing and design, mathematical formula.
- ❖ *Naturalistic* intelligence, interested in anything to do with the natural world. Developed by relating life to the natural world, classification.

Gardner identified four stages that can develop these intelligences – called SALUTE

1. **S**timulation – activation of the senses to turn on the brain – listing, sorting, observing, describing, showing
2. **A**mplification – deepening and nurturing the intelligence(s), utilising learning tools and practising with them
3. **L**earning & **U**nderstanding – teaching for and with the intelligence(s)
4. **T**ransferring & **E**ffecting – integrating the intelligence(s) into the world beyond the formal learning situation and becomes part of the learners cognitive, affective and sensory life