



LEARNING INTELLIGENCE: Kolb's Learning Styles and Gardner's Multiple Intelligence

▲ THE LEARNING STYLES OF DAVID KOLB¹

David Kolb is one of the proponents of the **theory of Experiential Learning**, according to which learning is a process in which knowledge is gained through observation and the transformation of experience and not through passive acquisition of knowledge, concepts and relationships. Learning is a circular process which is divided into four sequential phases:

- concrete (real world) experience
- reflective observation
- abstract conceptualisation
- active experimentation

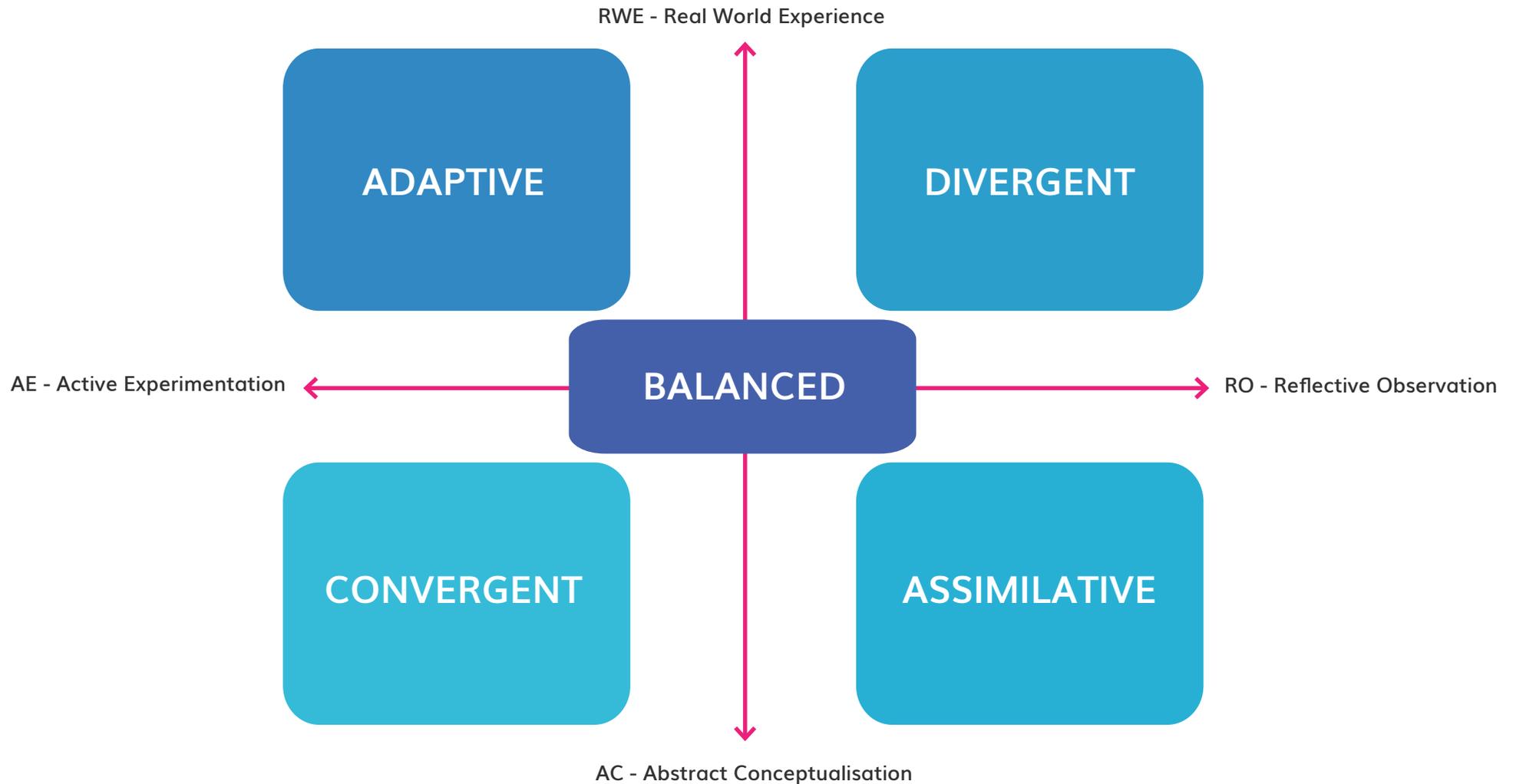
Each of these four phases identifies a different style of learning:

- **adaptive**
- **diverging**
- **convergent**
- **assimilative**

None of these learning styles are better than the others: the effective key to learning is rather to know how to use each of the four approaches in specific situations.

¹ A.D. Kolb *Experiential Learning: experience as the source of learning and development* Englewood Cliffs, NJ, Prentice Hall, 1984)

IN WHICH CATEGORY DO YOU PLACE YOURSELF?



- ▲ **ADAPTIVE STYLE:** Those in whom this learning style is prevalent rely primarily on **concrete experience** (they tend to get involved personally in experiences, relying more on feelings rather than reasoning) and **active experimentation** (they prefer doing to observing and action rather than reflection). They have good abilities with regard to realisation, planning and involvement in new experiences. They look for opportunities, are willing to take risks and love action.

The style is called adaptive because it characterises people capable of adapting to changing situations and environments. If a certain idea or theory is contradicted by the facts, these individuals definitely abandon the theory. Individuals with an adaptive style tend to solve problems intuitively, or by trial and error, by collecting information they need from others rather than conducting independent analyses.

They are at ease with others but are often considered impatient and pressing.

- ▲ **DIVERGENT STYLE:** Those in whom this learning style is prevalent rely primarily on **concrete experience** (they tend to get involved personally in the experiences, relying more on feelings rather than reasoning) and **reflective observation** (trying to understand the meaning of things and situations, relying on careful observation and impartial descriptions). They have a good imagination and are able to grasp meanings and values.

They are also able to consider situations from different points of view and to organise various observed elements in a consistent "overall" element. They prefer observation rather than action. This style is known as divergent since it characterises individuals capable of producing ideas and alternative solutions to problems. Individuals who possess this learning style are interested in interpersonal relationships and are sensitive to the emotional aspects of situations.

- ▲ **CONVERGENT STYLE:** Those in whom this learning style is prevalent rely primarily on **abstract conceptualisation** (processing ideas and concepts in a logical way, using thought rather than intuition) and **active experimentation** (they prefer doing to observing and action rather than reflection). They are able to solve problems, make decisions and concretely implement the ideas. This style known as convergent characterises people who can get better results when addressing problems that only allow a single solution or right answer. Individuals characterised by this learning style prefer deductive reasoning, through which they can focus on particular aspects starting from general ideas. They generally control the expression of their emotions and prefer facing technical problems rather than those of a social or interpersonal nature.

▲ **ASSIMILATIVE STYLE:** Those in whom this learning style is prevalent primarily on **abstract conceptualisation** (processing ideas and concepts in a logical way, using thought rather than intuition) and **reflective observation** (trying to understand the meaning of things and situations, relying on careful observation and impartial descriptions). They are able to reason inductively, thus obtaining general principles starting from the details, and creating theoretical models as well as understanding individual observations contained within a general explanation. People characterised by this learning style tend to focus mostly on ideas and concepts rather than on relationships with others. These ideas and concepts are appreciated more for their theoretical merits and accuracy than their practical usability.

▲ **BALANCED STYLE:** Those in whom this **learning style** is prevalent do not generally rely on any specific one of the learning phases (concrete experience, reflective observation, abstract conceptualisation, active experimentation) more than any other. These learners therefore do not lean towards any of the four contrasting learning styles (assimilative, adaptive, divergent, convergent), but instead tend to have a balanced learning style. They are **versatile people** who adapt their orientation according to the situation, applying action or reflection or a combination of both depending on the context.

▲ THE MULTIPLE INTELLIGENCES THEORY OF HOWARD GARDNER²

Intelligence is not a single and homogeneous element like a result.
It is a set, an aggregate, a complex system like a whole forest.

Like a forest dominated by pines and oaks, a mind can mainly use, for example, verbal, visual or movement intelligence. The preponderance of one type of intelligence rather than another is the basis of the predispositions, talent and personality of each of us.

When he studied intelligence tests and teaching methods, the American psychologist **Howard Gardner** realised that only intelligence based on language and calculations was considered, neglecting art and music entirely. Therefore, he developed a theory according to which the mind and body work through the activities of **different types of intelligence** that consider listening and recognition of sounds and musical structures, movement from dance to sports, vision and space, the relationship with others and with the environment, the ability to observe oneself. He defined **eight types of intelligence**, that everyone has, even if in a more or less developed manner.

² Howard Gardner, *Formae mentis. Saggio sulla pluralità dell'intelligenza* (Essay on the plurality of intelligence), Feltrinelli, Milan, 2002

LOGICAL - MATHEMATICAL INTELLIGENCE

This is ability to detect patterns, to reason deductively and inductively, and to think logically. This intelligence enables people to solve mathematical-logical problems, to analyse and use abstract models to identify patterns or errors, or find solutions using logic.

LINGUISTIC - VERBAL INTELLIGENCE

This is the ability to hear and speak, read, write, understand and use words correctly, with precision and with expressive range. People in whom this intelligence predominates have a good vocabulary, communicate effectively, write clearly, are able to tailor writing style to context and tend to think with words.

VISUAL - SPATIAL INTELLIGENCE

This is the ability to understand what you see, from an image to a building, from a room to an urban fabric. It is also the ability to express yourself through inter-related images, colours and shapes, to produce and use maps and diagrams, to see objects in spaces that may even be imaginary.

RHYTHMIC - MUSICAL INTELLIGENCE

This is the sensitivity to the beating of your heart, life, the steps you walk and dance. It is the ability to listen, recognise tones and voices, perceive intervals between one sound and another, to hum, play an instrument, and to give musicality and harmony to words, sounds, colours and emotions.

CORPOREAL - KINESTHETIC INTELLIGENCE

This intelligence enables a range and control of movement, playing games requiring manual and physical dexterity, dance, mime, using and understanding facial and postural expressions, ergonomics etc. Those in whom it predominates have confidence in their own bodies, and in related emotions and sensations.

NATURALISTIC INTELLIGENCE

This is sensitivity to nature, the landscape and the ecosystem. It is a love for the sea, mountains, countryside, plants, animals and respect for all. It is the ability to analyse, synthesise, predict the consequences of thoughts and actions and understand ecosystems, using a systemic view of complexity.

INTERPERSONAL INTELLIGENCE

This is the ability to understand others which enables us to interact, develop relationships and collaborate with them. It is the ability to acknowledge and empathise with others' motivations, emotions and intentions, applied through effective communication.

INTRAPERSONAL INTELLIGENCE

This the ability to observe and understand oneself, enabling self-assessment, self-critique and self-knowledge, modulating one's thoughts and behaviours to enable a working model of oneself in society.