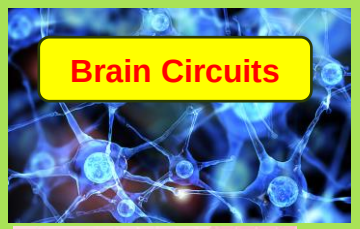



# Achieving Greater Career Heights









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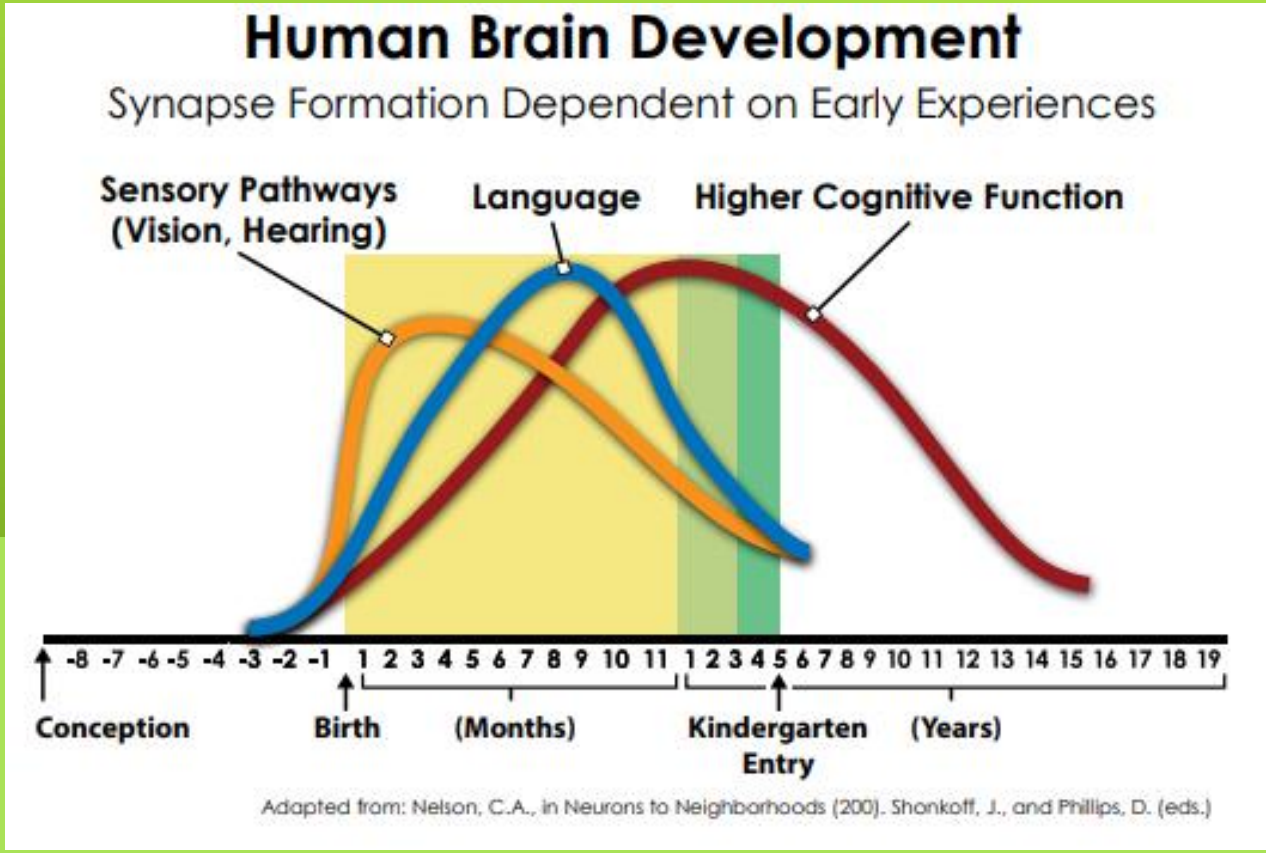
# Principles of Early Neural Development




- Rapid brain development and Building happens at early ages (specially with in first 3 years)
- The timing of high-quality early experiences matters
- Early experiences affect and matters neural architecture and health
- Educate parents' and caregivers' about brain development during the earliest years
- Developmental Milestones
- Showing warmth and sensitivity
- Using appropriate discipline without harshness

The Science of Early Childhood Development

Experiences Build Brain Architecture

PBS The Secret Life of the Brain

Developmental Milestones

Early brain development overview

How Does Child's Brain Develop ?

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# Skills for a Successful Journey

- ❑ **Cognition and Learning Skills**
- ❑ **Emotional/Pro-Social Skills and Behaviors**
- ❑ **Language and Communications Skills**
- ❑ **Character Strengths**

Server & Return Interactions Shapes Brain Circuitry

How Early Childhood Experiences Affect Lifelong Health and Learning

Toxic Stress Derails Healthy Development

Social Emotional Learning Begins at Home

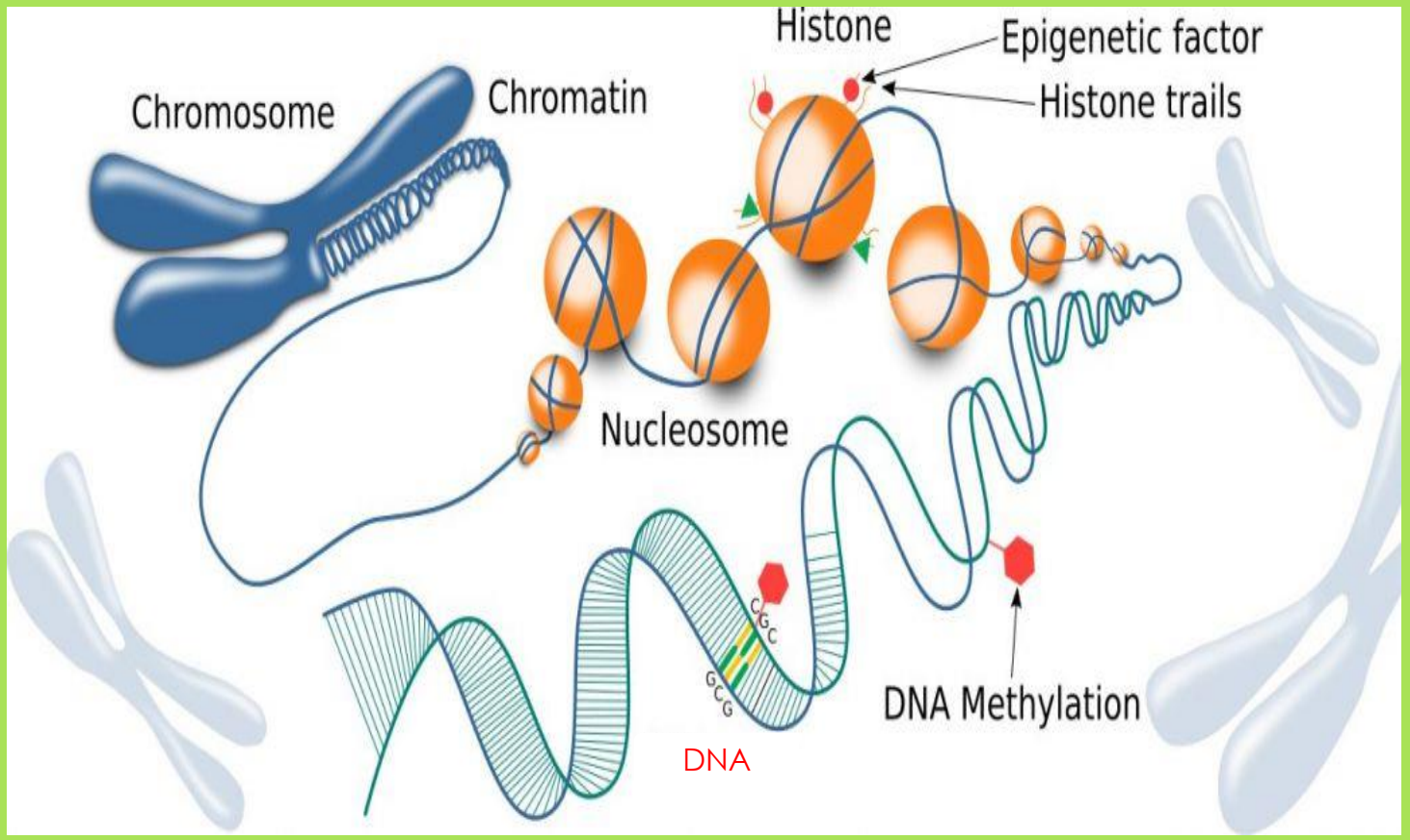
## Key Features of early brain development

| Key Features | Brain Development Period |
|---|---|
| Ante-natal / Pre-natal | ❑ All five senses begin to function before birth.<br>❑ Prenatal sensory experiences actually help the brain and nervous system.<br>❑ Prenatal experiences prime the attachment behaviors of the infant. |
| 0 - 3 Years | ❑ A rapid period of brain development which can be:<br>  ❑ fostered by relationships with caregivers<br>  ❑ supported by optimal community environments for families and children.<br>❑ Brain development is vulnerable to toxic stress (depending on length and number of stressors for the child). |
| School Age | ❑ Children build on the solid foundation for the first five years.<br>❑ It is more difficult for children to take advantage of the learning environment in schools if:<br>  ❑ they have not had optimal home environment<br>  ❑ there is restricted access to quality early childhood services<br>  ❑ they have experienced a poor quality community environment. |
| Adolescence (Age 10 – 24) | ❑ Brain development prioritizes the connections used most often, resulting in the 'pruning' of the brain networks or circuits.<br>❑ As children enter this period, more intensive resources are required if children have missed the opportunities for optimal caregiving and environments in the preceding years. |

# The Influence of Genes

Terminology

- A gene is the basic physical and functional unit of passing on of physical or mental characteristics genetically from one generation to another(heredity). Genes are made up of DNA.
- A genome is the complete set of genetic information in an organism. It provides all of the information the organism requires to function. In living organisms, the genome is stored in long molecules of DNA called chromosomes.. There are 23 pairs of chromosomes in the human genome.
- The epigenome is a multitude of chemical compounds that can tell the genome what to do. The epigenome is made up of chemical compounds and proteins that can attach to DNA and direct such actions as turning genes on or off, controlling the production of proteins in particular cells.
- Epigenomics is a field in which researchers chart the locations and understand the functions of all the chemical tags that mark the genome.
- Epigenetics is the study of how your behaviors and environment can cause changes that affect the way your genes work. Unlike genetic changes, epigenetic changes are reversible and do not change your DNA sequence, but they can change how your body reads a DNA sequence




The Epigenome at a glance

National Human Genome Research Institute

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# The Influence of Genes

DNA Fundamentals

How Epigenetics Relate to Child Development

Genes and the Environment

The Genetic Brain

## The Takeaway

- The genetic codes of mice, chimpanzees and humans all share remarkable similarities. Ninety-nine percent of mouse genes match a sequence in the human genome.
- Epigenetics is the study of how a set of reversible heritable changes in the functioning of a gene can occur without any alterations to the DNA sequence. These changes may be induced spontaneously, in response to environmental factors, or in response to the presence of a particular gene
- Studies of animal behaviour have shown that the offspring of a mother with good nurturing skills are more likely to be good parents themselves
- Since most human brain development occurs postnatally, the brain more than any other organ is under strong social and environmental influences that can have long-lasting effects on brain function and wellbeing.

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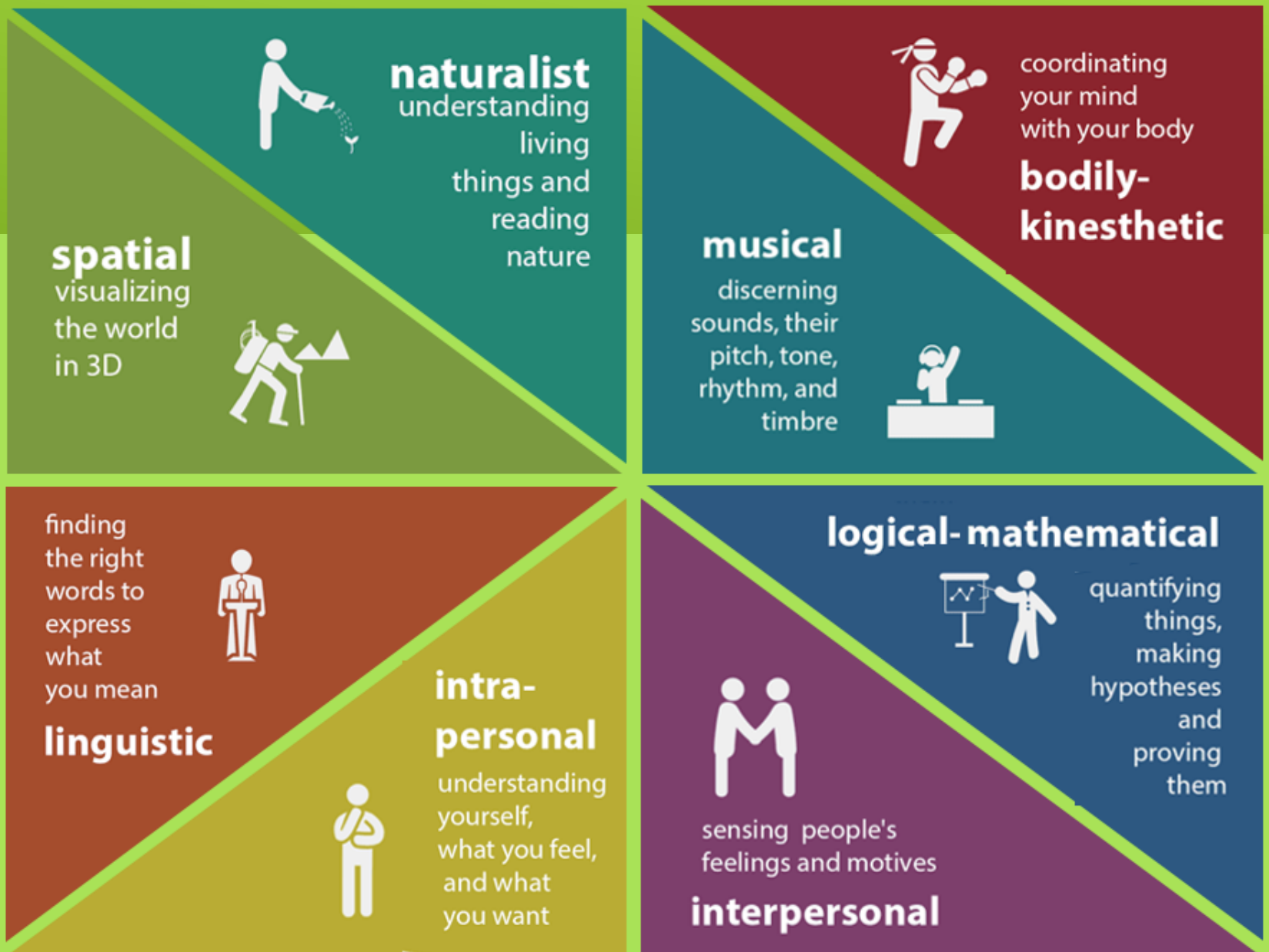
# Theory of Multiple Intelligence – Howard Gardner

**How Do We Learn – Style 1**

In order to capture the full range of abilities and talents that people possess, Gardner theorizes that people do not have just an intellectual capacity, but have many kinds of intelligence, including musical, interpersonal, spatial-visual, and linguistic intelligences.

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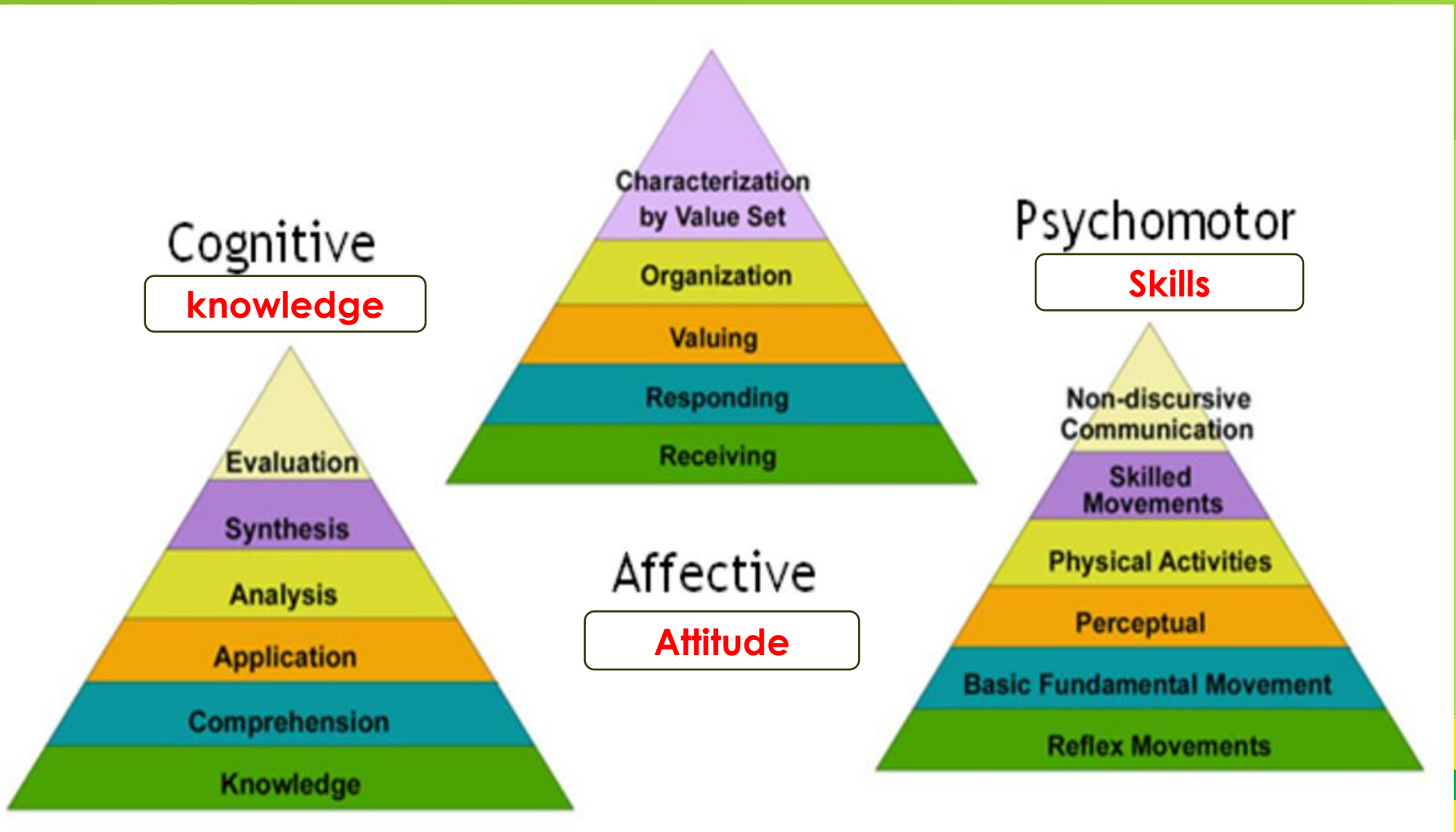
# Bloom's Taxonomy – K . S . A



*Bloom's taxonomy is a hierarchical system that categorizes the thinking skills of intellects, ranging from recalling information which is the most basic skill to evaluation, which involves judging , Decision making and stating an opinion about information.* The taxonomy was proposed in 1956 by Benjamin Bloom, an educational psychologist at the University of Chicago..

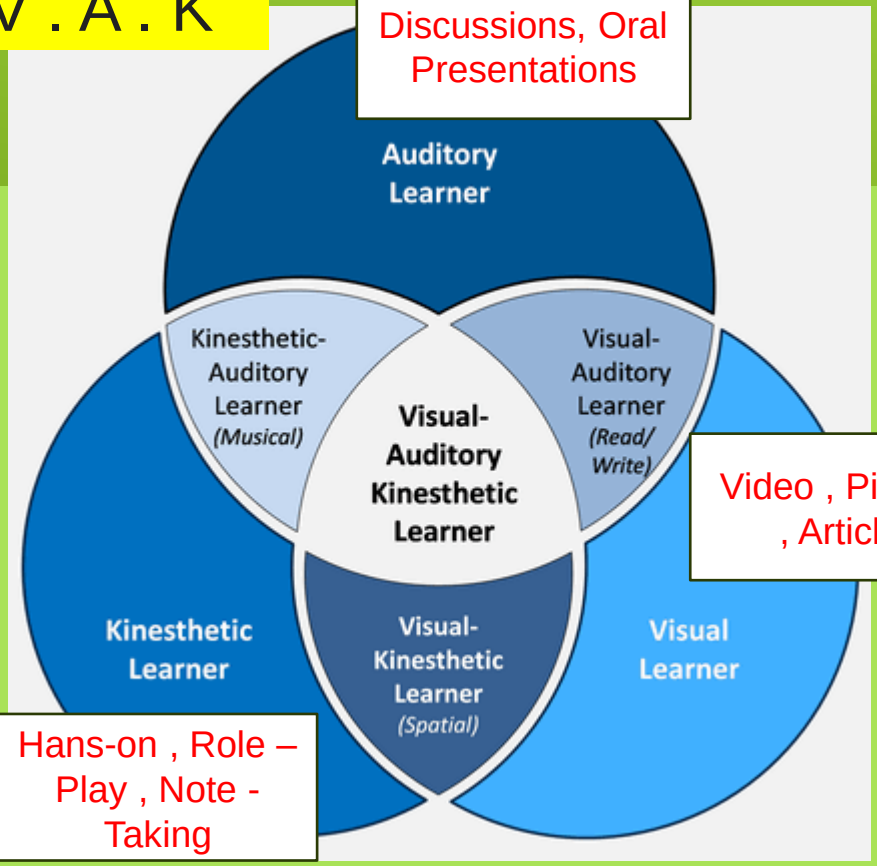


# V . A . R . K



The acronym “VARK” is used to describe four modalities of student learning that were described in a 1992 study by Neil D. Fleming and Coleen E. Mills.[1] These different learning styles—visual, auditory, reading/writing and kinesthetic—were identified after thousands of hours of classroom observation..

## V . A . K

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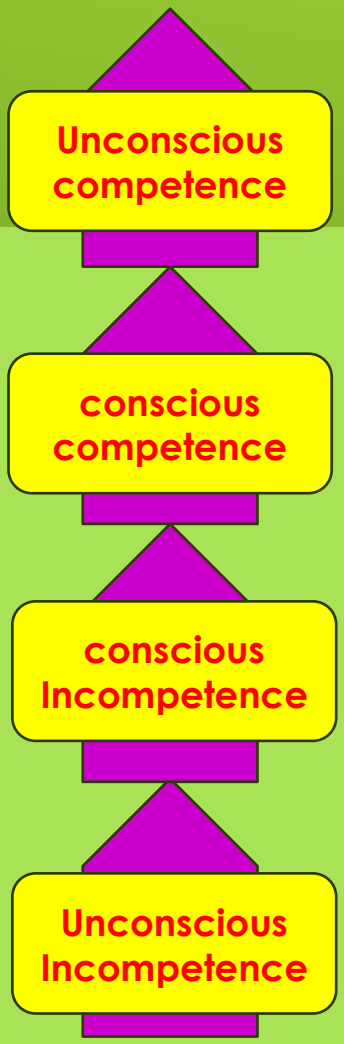
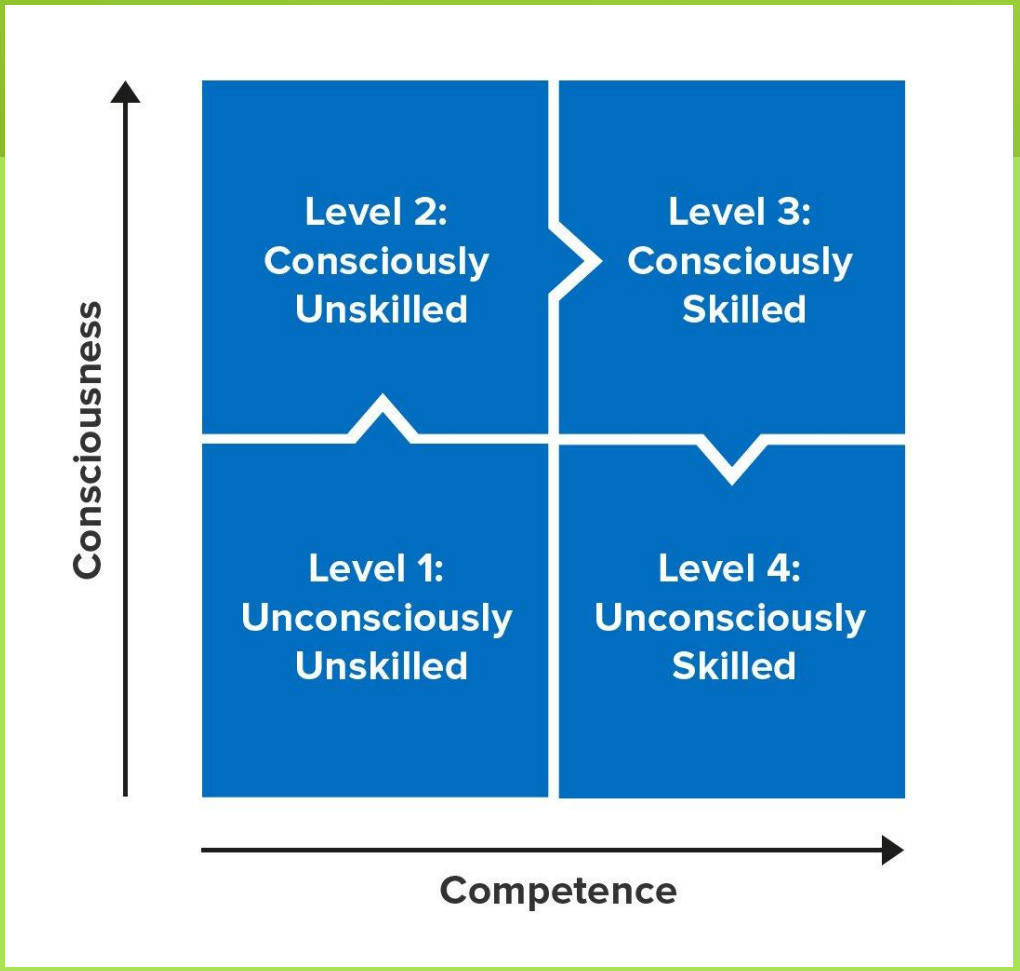
# Competency Building

**Competency :**

1. A set of individual performance behaviors which are observable, measurable and critical to successful individual and company performance
2. Individual characteristics of a person which result in an effective and superior performance in a job

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# Best Education Systems in the World – 2021 Ranking

**Academic Career -** Undergraduate Academic Degree

Top Universities – World Ranking

QS (quacquarelli symonds) Ranking

Times Higher Education Magazine

University Rankings.ch

**Undergraduate Degrees – General Search**

bachelorstudies.com

bestcolleges.com

bachelorsportal.com

If Registering online make sure to use complex passwords

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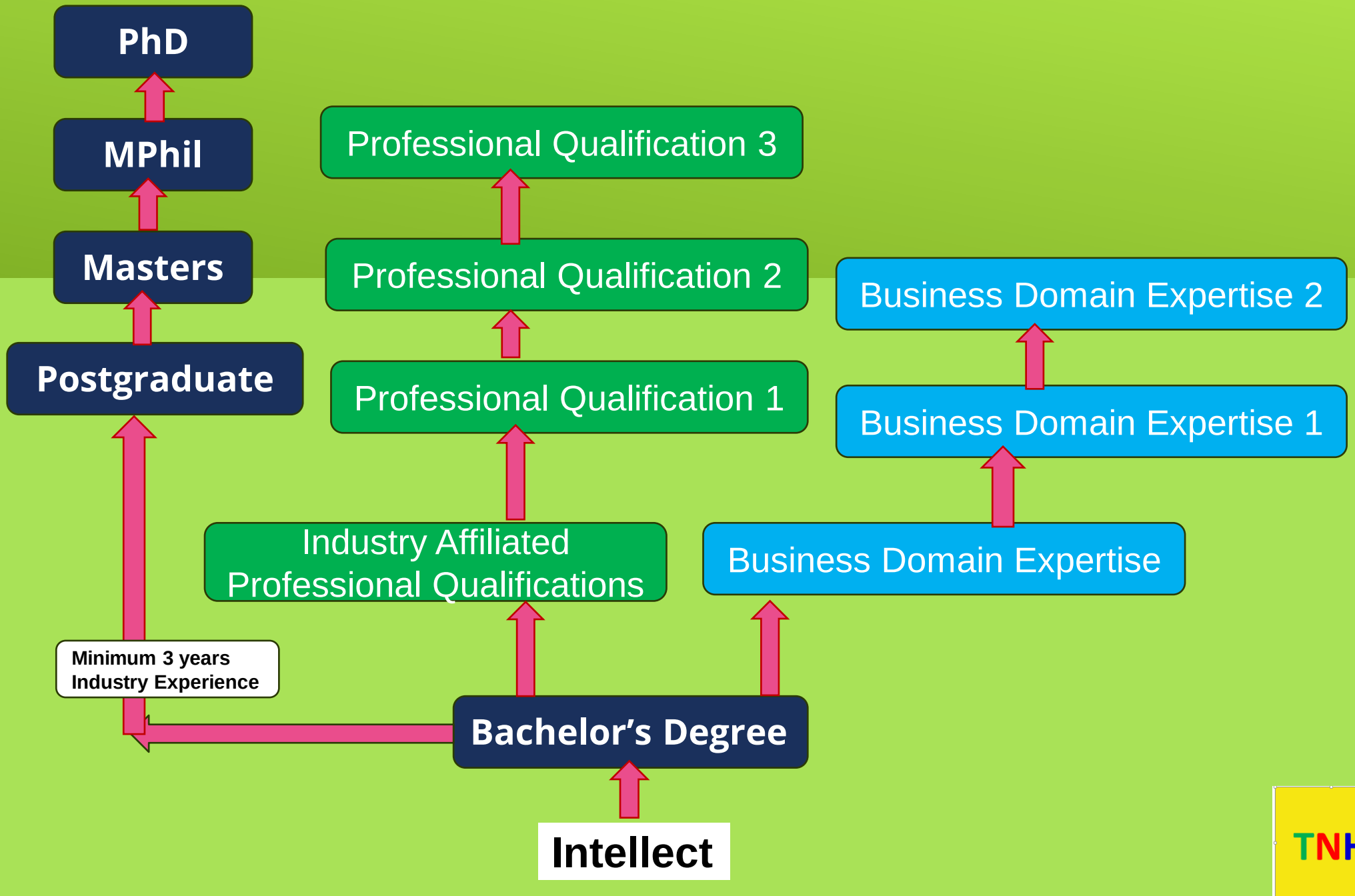
# Mapping the Academic, Industry and Business Domain

Always Remember the IT piece in the carrier portal

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# Mapping the Academic, Industry and Business Domain

Always Remember the IT piece in the carrier portal

## IT for Engineering

- Aerospace Engineering — Link1 — Link 2 — Link 3
- Architecting — Link1 — Link 2

## IT for Biomedical

- Link1 — Link 2 — Link 3
- Biology — Link 1 — Link 2
- Chemistry — Link 1 — Link 2

## IT for Commerce

- Link 1 — Link 2 — Link 3
- Entrepreneurship — Link 1 — Link 2
- Business Management — Link 1 — Link 2
- Accounting — Link 1 — Link 2

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# How To Start ?

- ❑ Find out where are you now
- ❑ Define what you want to achieve
- ❑ Have well defined objectives
- ❑ Identify the sequence of tasks with clarity to achieve the objectives
- ❑ Keep continuous innovation
- ❑ Let the transformation happen
- ❑ Let every moment to be a challenging moment
- ❑ Grab the knowledge with learning styles
- ❑ Feed the knowledge to identified skills
- ❑ Build competencies up to level 4

# Personnel Innovation

- Searching for new opportunity
- Generating new ideas
- Championing
- Application

Porter's Five Forces

USP

SWOT

PEST

Time Management Matrix

| | URGENT | NOT URGENT |
|---|---|---|
| IMPORTANT | *Quadrant I:* Urgent & Important | *Quadrant II:* Not Urgent & Important |
| NOT IMPORTANT | *Quadrant III:* Urgent & Not Important | *Quadrant IV:* Not Urgent & Not Important |

**All ways try to operate in Quadrant II**

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# The Takeaway

- Carrier starts at Prenatal
- Circuits forms at a rapid speed before three years
- Quality Parenting , Home grown environment matters for achieving career heights
- It is required to identify the prioritized learning style for you and try to improve the others
- Every moment is a challenging moment which should be used for innovation by competency building
- It is Live to learn , Learn to live
- As an intellect research yourself to find the carrier for you
- Do the self assessment using the tools
- Build your Academic , Industrial and Domain level Qualifications in parallel

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# To be the ultimate knowledge hub for the most demanding technologies in the industry.

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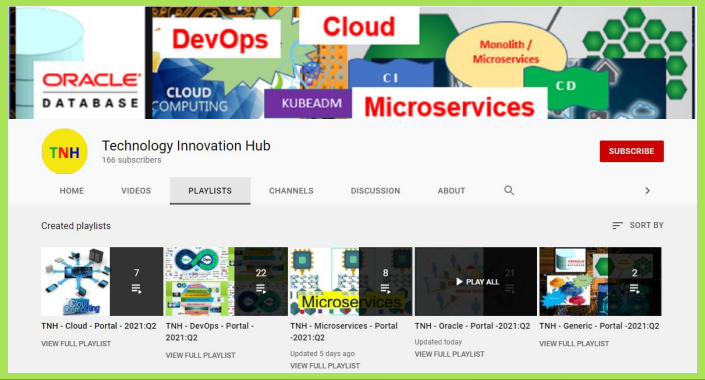
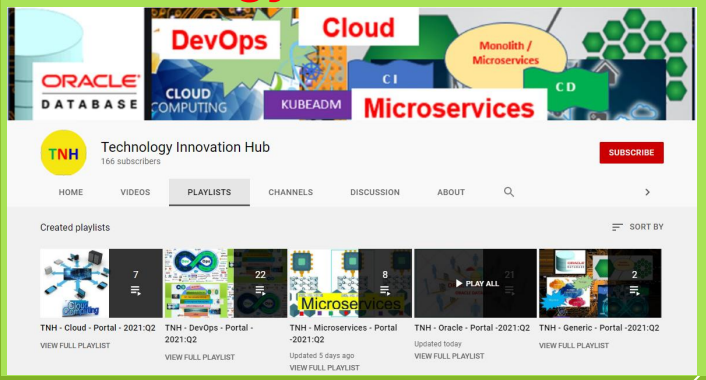
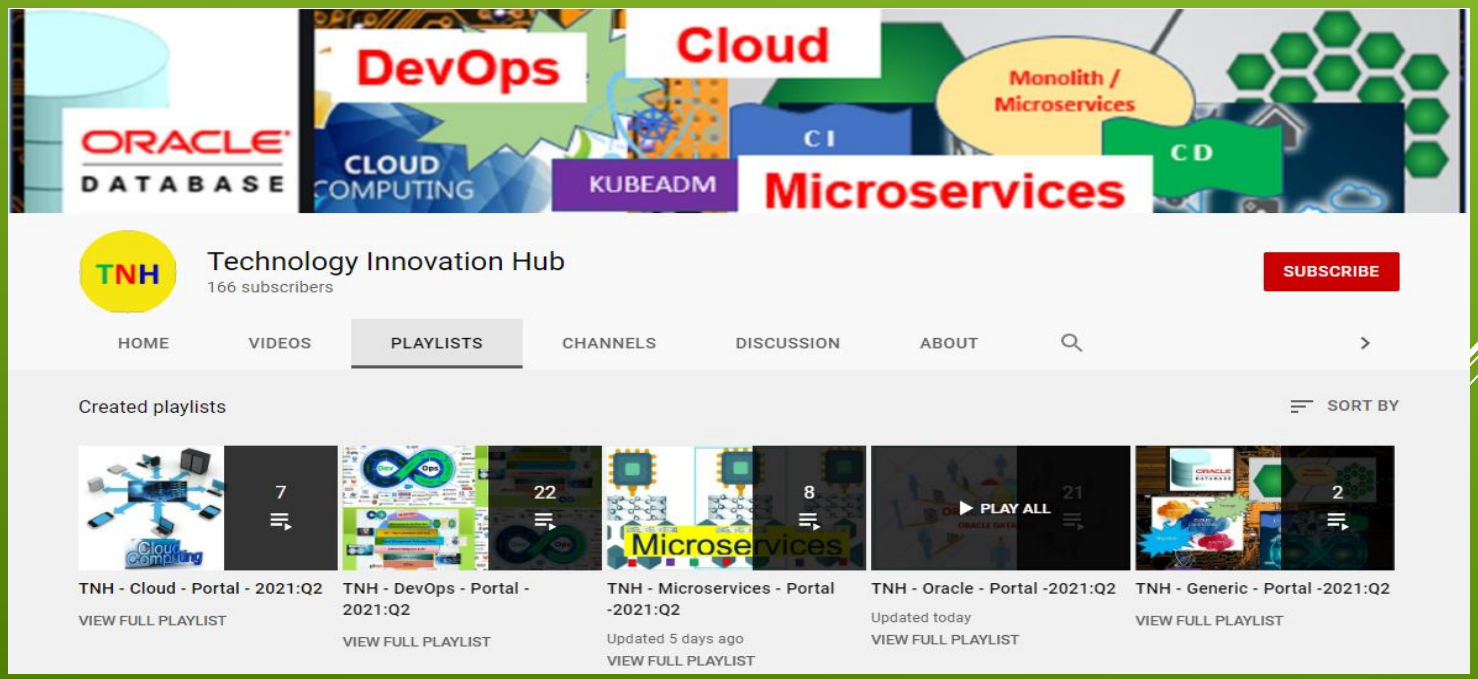



Technology Innovation Hub




# Thank You.

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