"Selagi masa bersama kita, mengkritik tidak langsung bererti menentang, menyetujui tidak semestinya menyokong, menegur tidak bermakna membenci, dan berbeza pendapat adalah kawan berfikir yang baik..."

Dr. Mohd Shahril NIZAM bin Shaharom
BSc Comp (Software Engineering), M.Ed (Multimedia in Education), PhD (Instructional Design)

| Senior Lecturer Department of Curriculum & Instructional Technology University of Malaya | Fellow (Trainer) Academic Enhancement and Leadership Development Centre (ADeC) University of Malaya | Rakan Pembimbing Perkhidmatan Awam Malaysia (AKRAB) (A16049322) | AKRAB Care (AC220620) |

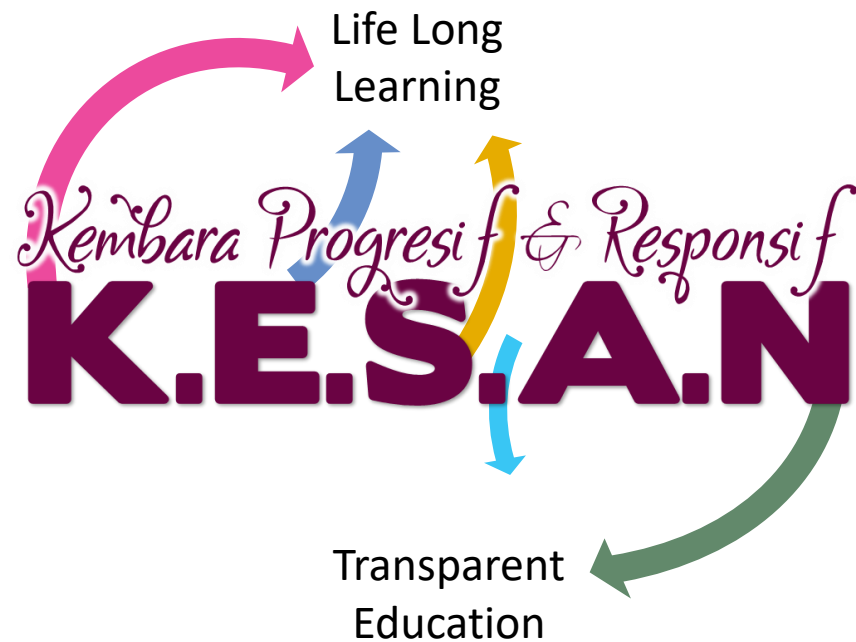www.drsn.pro　　f DRSN　　drSN.pro　　drSNpro　　drSNpro　　drSNpro

My Personal Fundamental Framework

"We are here today due to our previous 'KESAN'. To progress to the next level, we need to continuously improve our 'KESAN'.

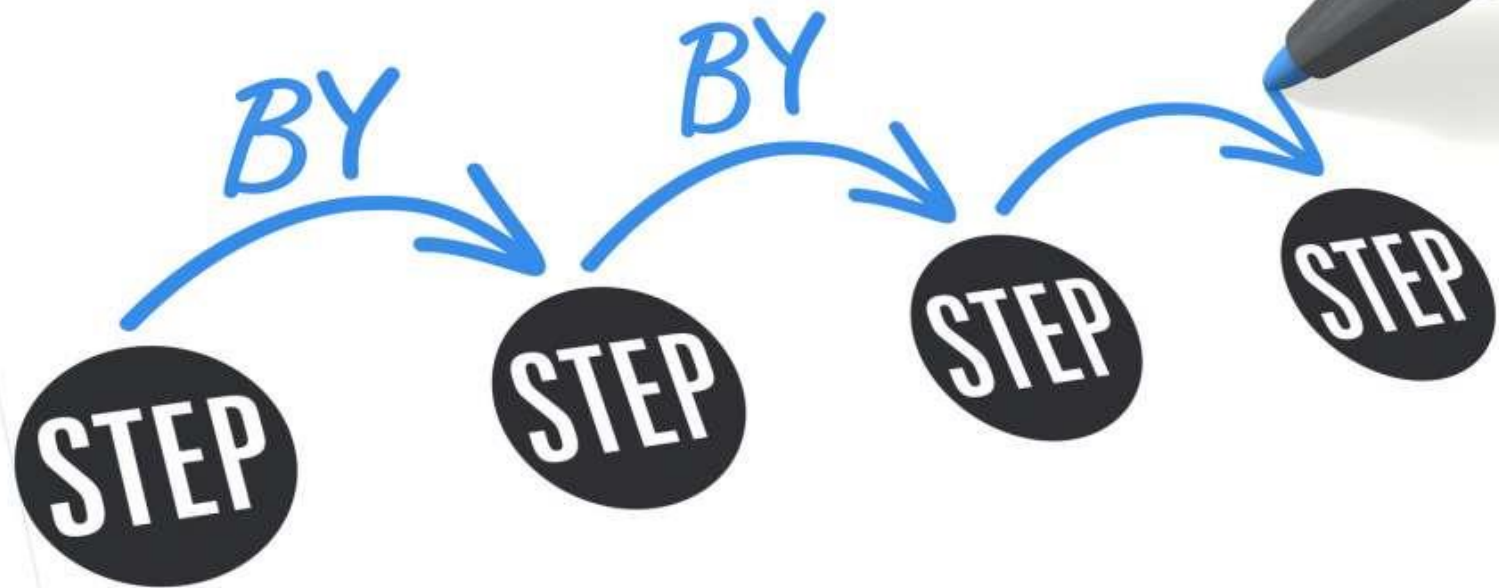Otherwise, the probability of us misusing power is very high."

-drSNpro-

Life Long Learning

Kembara Progresif & Responsif

K.E.S.A.N

Transparent Education

K
E
S
A
N

ROUND

1

Introduction

10-15 MIN

STEP BY STEP BY STEP STEP

Good → Better → Best

The Fundamental

Transition

Future/ Target

Generation Gap

Digital Skills

Hyflex

Each generation has its own unique perspective, challenges, and contributions, and we can all grow by listening to and learning from people who are different from us.

Digital Skills that all educators need to explore progressively to help the new generation enhance their potential in knowledge, experience and skills (KES)

Try to enhance the default things into something more commercial and it can be repeated without limit. As educators, we need to constantly learn something new (always appropriate/fit to our new generation)

ROUND
2

Digital Skills

15-30 MIN

Introduction

Introduction

Analogy

Example: The history of television

Get ready for Gen Z

It's the Biggest Challenge – The Generation Gap

Get ready for Gen Z

The first generation of the 21st Century has arrived!
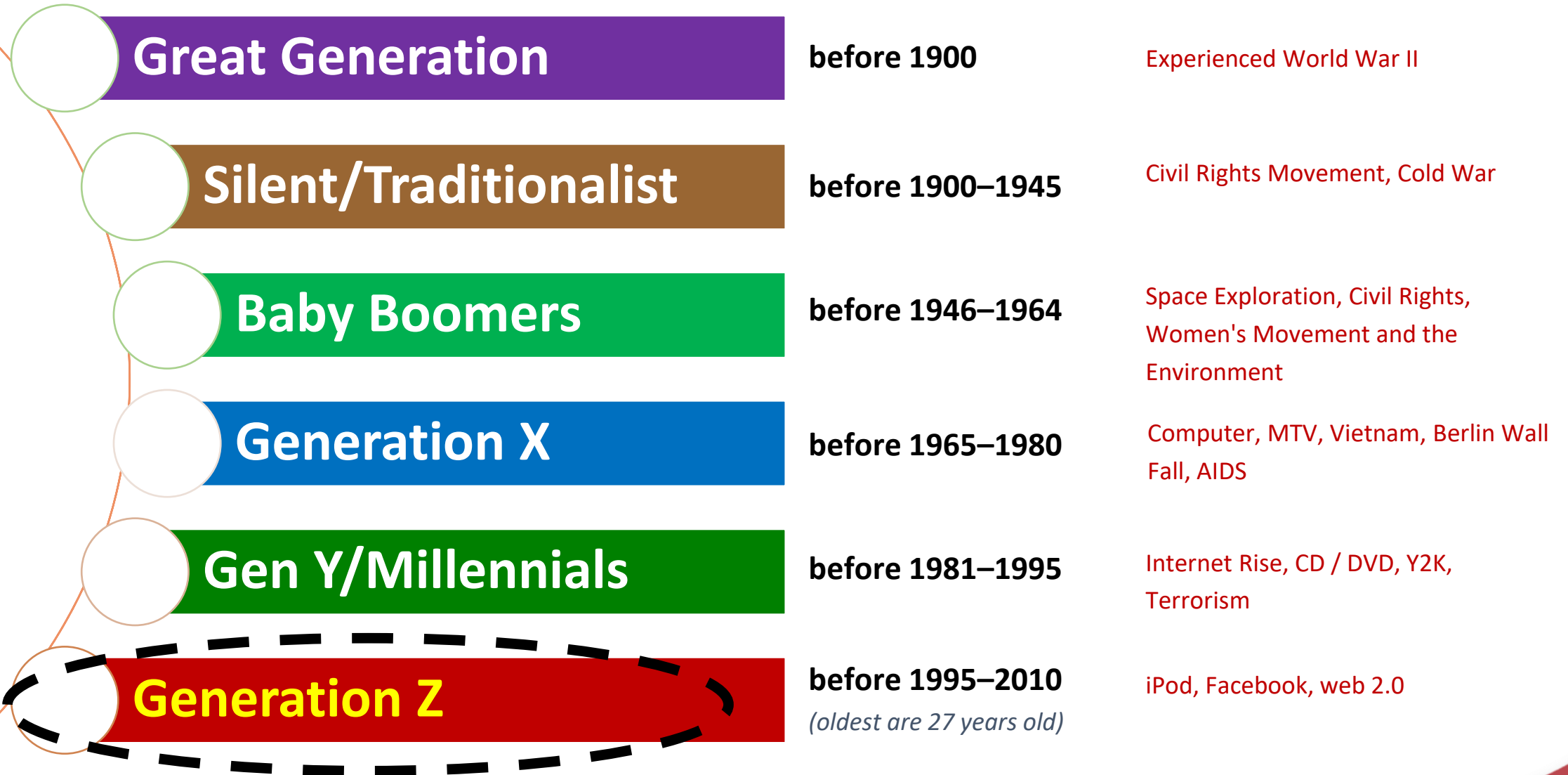
Get ready for Gen Z

Generation Gap

	Born	Historical Events
Great Generation	**before 1900**	Experienced World War II
Silent/Traditionalist	**before 1900–1945**	Civil Rights Movement, Cold War
Baby Boomers	**before 1946–1964**	Space Exploration, Civil Rights, Women's Movement and the Environment
Generation X	**before 1965–1980**	Computer, MTV, Vietnam, Berlin Wall Fall, AIDS
Gen Y/Millennials	**before 1981–1995**	Internet Rise, CD / DVD, Y2K, Terrorism
Generation Z	**before 1995–2010** *(oldest are 27 years old)*	iPod, Facebook, web 2.0

Sumber rujukan [Meet-the-generations]

Silent Generation / Traditionalists (born before 1946)

Who?	Population	Characteristics	At Work	Historic Events
• Grew up during the Great Depression and WWII • Either fought in WWII or were children • Behaviors are based on experiences during the Depression and WWII • Wealthiest generation • Men typically worked while women stayed home to raise children • Has largest lobbyist group, AARP	• 55 million • Majority are retirees • Largest voting population	• Behaviors are based on experiences from the Depression • Want to feel needed • Strive for financial security • "Waste not want not" attitude • Conformity • Conservatism • Traditional family values • Strive for comfort • Demand quality • Simplicity • Understands the nobility of sacrifice for the common good • Patriotic • Patience • Team players	• Loyal to employers and expect the same in return • Possess superb interpersonal skills • Enjoy flexible arrangements so they can work on their own schedule • Believe promotions, raises, and recognition should come from job tenure • Measure work ethic on timeliness, productivity, and not drawing attention	• Great Depression • WWII • The Cold War • McCarthyism • Started the Civil Rights Movement • Children were "seen, but not heard"

Baby Boomers (born 1946-1964)

Who?	Population	Characteristics	At Work	Historic Events
• Grew up during the Civil Rights Movement and the Cold War • Born during a spike in child births after WWII • Created the term "workaholic" • The largest generation • Single largest economic group • Sometimes referred to today as "Empty Nesters"	• 76 million • Makes up 28% of Americans	• Run local, state, and national governments • Largest workforce • Believe rules should be obeyed unless they are contrary to what they want; then they're to be broken • Experimental • Individualism • Social cause oriented • Free spirited • Can be less optimistic, cynical, and distrust government • Want products and services that show their success	• Work ethic is measured in hours worked • Less importance placed on productivity • Teamwork is critical to success • Relationship building is important • Expect loyalty from those they work with	• Assassinations of JFK, Robert Kennedy, and Martin Luther King, Jr. • Cold War • Walk on the Moon • Vietnam War • Protests and Sit-Ins • Civil Rights, Women's, and Environmental Movements • Watergate • Nixon Resignation • Self-discovery

Generation X / Busters (1965-1980)

Who?	Population	Characteristics	At Work	Historic Events
• Defined as "slackers" • They have the "carpe diem" attitude • First generation to develop ease and comfort with technology • "X" described the lack of identity that members of Generation X felt, not sure where they belonged • Experienced more divorces than any other generation • Had to learn to fend for themselves	• 50 million • Single parent families	• Quest for emotional security • Independent • Very self-reliant • Informality • Entrepreneurial • Expect immediate and ongoing feedback and is comfortable giving feedback to others • Reject rules • Mistrust institutions • Believe friends do not equal family • "Latchkey" kids • Multi-taskers • Suspicious of Boomer values • Value family time	• Casual, friendly work environment • Involvement • Flexibility and freedom • A place to learn • Work smarter, not harder • Want open communication regardless of position, title, or tenure • Value control of their time • Look for a person to whom they can invest loyalty, not a company	• AIDS • End of Cold War • Vietnam • Watergate • Nixon resignation • Computers • Grunge/Hip-Hop • Vietnam • MTV • Challenger explosion • Fall of Berlin Wall • Reaganomics

Generation Y / Millennials (born 1981-1994)

Who?	Population	Characteristics	At Work	Historic Events
• Grew up with technology-computers, cell phones, internet, etc. • Also known as the "Entitlement" generation • Boomer and late X'er parents raised them to be sheltered and to constantly build Millennials' self-esteem • Plagued with high levels of student debt • Second largest generation to be entering the workforce under the Boomers	• 80 million • More ethnically and racially diverse than older generations	• Ambitious yet clueless • Optimistic • Patriotic • Impatient • Entrepreneurial • Individualistic yet group-oriented • Want to be like peers but with a unique twist • Very informal • Busy • Short attention span • Acknowledge and admire some authorities • More culturally and racially tolerant • Acceptant of change • Un-trusting of "the man" • Achievement-oriented • Financially savvy • Want instant gratification • "Everybody wins!"	• Searches for the individual who will help them achieve their goals • Want open, constant communication and positive reinforcement from their boss • Search for job that provides great, personal fulfillment • Want to be close to their peers • Want leadership from bosses and supervisors • Look for opportunities to learn • Work to live, rather than living to work	• Oklahoma City bombing • Rise of the Internet • O.J. Simpson trial • Death of Princess Diana • CDs/DVDs • Columbine shootings • Y2K • Terrorism • Swine flu- 1988

Generation Z / Digital Natives (born after 1994)

Who?	Population	Characteristics	At Work	Historic Events
• Also known as Generation M, Net Generation, Internet Generation • Grown up with world, wide, web. (Became available after 1991) • Born during minor fertility boom around US Global Financial Crisis • The children of Generation X	• 23 million and growing	• Highly connected to the use of communications • Like Instant Gratification • Thrive on acceleration and next, next, next • Independent people, lacking a community- oriented nature due to social media • Are very open book with little concern to privacy and personal information. Except for when it comes to money • Thrive on small bits of information. Think in terms of status's and Twitter language • Under a lot of pressure to succeed	• Very collaborative and creative • Will have to solve the worst environmental, social and economic problems in history • Will not be team players • Will be more self-directed • Will process information at lightning speed • Will be smarter	• 9/11 attacks - 2011 • Great Recession - 2008 to present • Terrorism - these individuals do not remember a time without war • Swine Flu outbreak - 2009 • Hurricane Katrina - 2005 • iPod - 2001 • Facebook – 2004

What does Generation Z need to engage in learning?

Ability to express opinions and Flexibility to learn in the way that works best for them.

Access to too much data makes Gen Z go for the quick answer rather than the longer problem-solving approach.
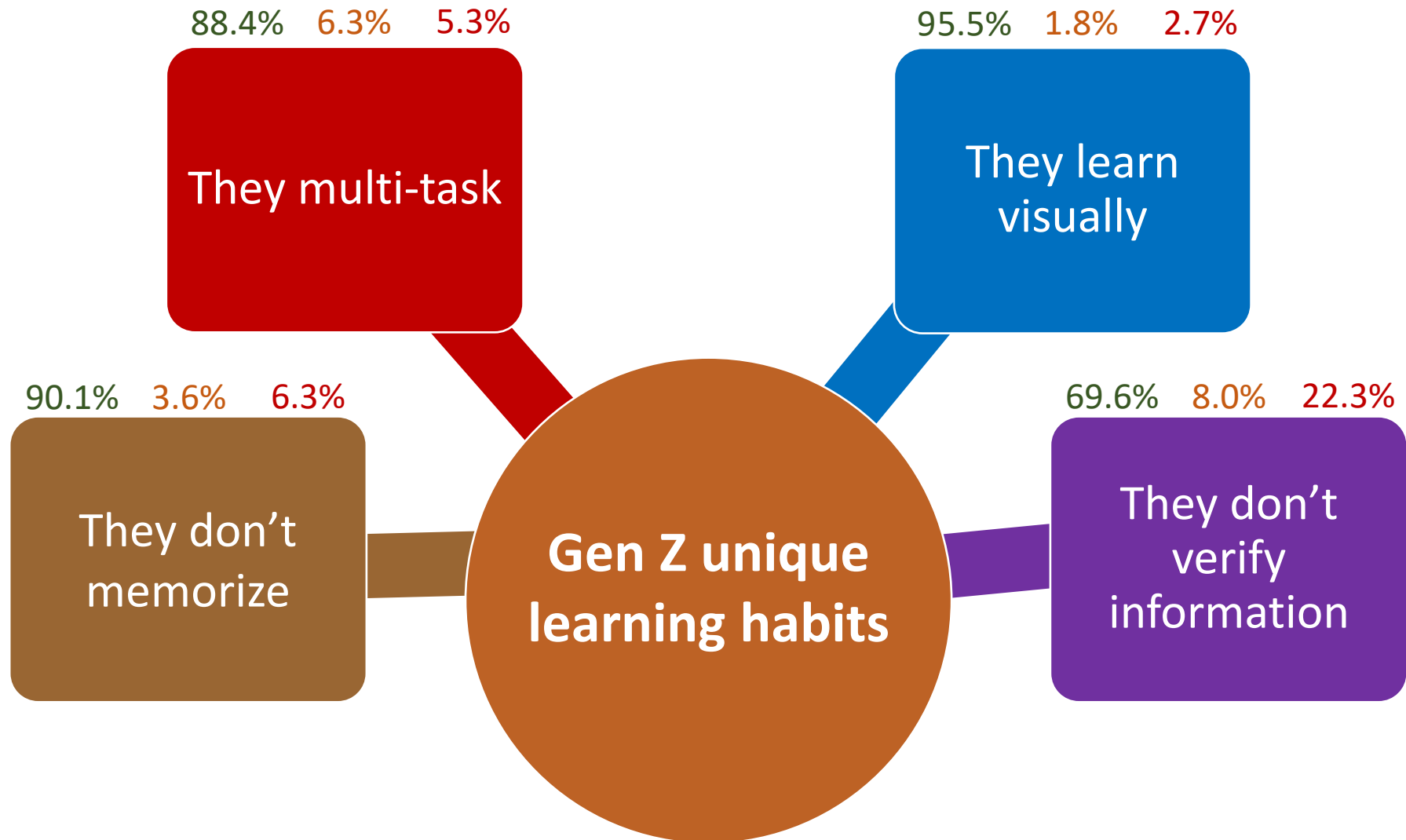
Gen Zs do not take the time to determine the reliability of their information.

Cheating and hacking are considered brilliant in Gen Z's world, but not so in the education world.

Gen Z must learn to discover, curate, and manage information.

Prefers to work in teams/small groups.

Gen Z unique learning habits

88.4%   6.3%   5.3%

They multi-task

95.5%   1.8%   2.7%

They learn visually

90.1%   3.6%   6.3%

They don't memorize

69.6%   8.0%   22.3%

They don't verify information

Gen Z unique learning habits

How to engage Gen Z

87.5%   4.5%   8.0%
Provide structure, safe space

95.5%   3.6%   0.9%
Build a digital presence

91.1%   3.6%   5.3%
Make a community commitment

90.2%   1.8%   8.0%
Give them a voice

92.9%   2.7%   4.5%
Offer flexible scheduling

94.6%   4.5%   0.9%
Engage via mobile

78.6%   6.3%   15.2%
Celebrate Diversity

Provide feedback

92.0%   3.6%   4.5%
Create teamwork

86.6%   3.6%   9.8%
Awareness programme

If we teach today's students as we taught yesterday's, **we rob them of tomorrow.**

[John Dewey](#)

nizamsaril@um.edu.my

"Didiklah anak-anakmu, karena mereka akan hidup pada zaman yang berbeza dengan zamanmu,"

-Saidina Umar-

Why am I sharing so much about gen Z?
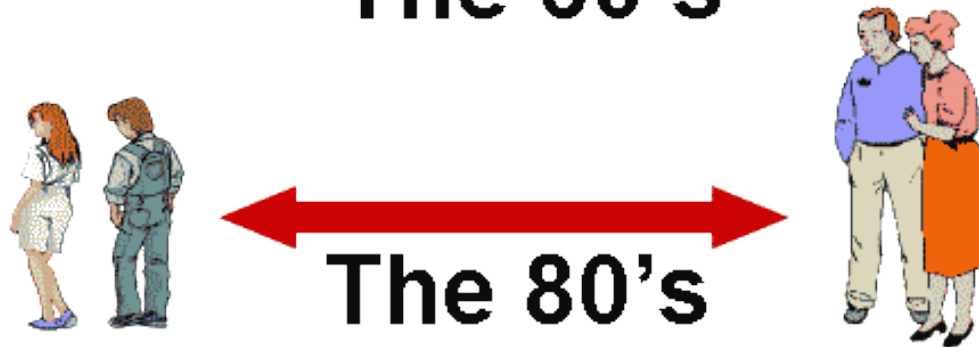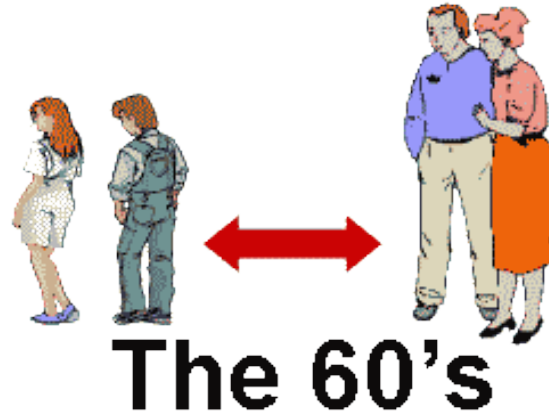
Why am I sharing so much about gen Z?

Are we still 100% applying/feed our 'life script' or life format to them?

GENERATIONS

Why am I sharing so much about gen Z?

The Internet in Real-Time
How Quickly Data is Generated

Twitter: 11 Accounts Created, 5700 Tweets
YouTube: 2 Video Hours Uploaded, 2314 Video Hours Watched
Google+: 5787 +1s
WordPress: 23 Blog Posts
Google: 4608 Searches, $1602 Ad Revenue
amazon: 51 Items Purchased, $2359 Money Spent
foursquare: 35 Check-Ins
yelp: 0.5 Reviews
Apple: 634 App Downloads
Android: 1236 App Downloads
Facebook: 52196 Likes, 54976 Posts, 6 GB of Data
LinkedIn: 182 User Searches
Skype: 23148 Minutes Used
Instagram: 18519 Likes, 1000 Comments, 694 Uploaded
Reddit: 1 Posts, 13 Comments, 212 Votes
Tumblr: 463 Posts
Pinterest: 238 Pins
Email: 3402778 Emails Sent
Dropbox: 11574 Files Saved
Snapchat: 5787 Stories Viewed, 8102 Messages Sent
WhatsApp: 12 Accounts Created, 219907 Messages Sent
Netflix: 386 Hours Watched
Pandora: 1019 Hours Streamed

By the way, in the 1 seconds you've been on this page, approximately 22574 GB of data was transferred over the internet.

https://www.betfy.co.uk/internet-realtime/

Note: This material was taken in 2016.

Digital Skills

Mohd Shahril Nizam bin Shaharom (Dr.)
B Sc. Comp (Software Engineering), M.Ed (Educational Technology), PhD (Instructional Technology)
Department of Curriculum & Instructional Technology
Faculty of Education, University of Malaya.

nizamsaril@um.edu.my

Introduction

What are digital skills?
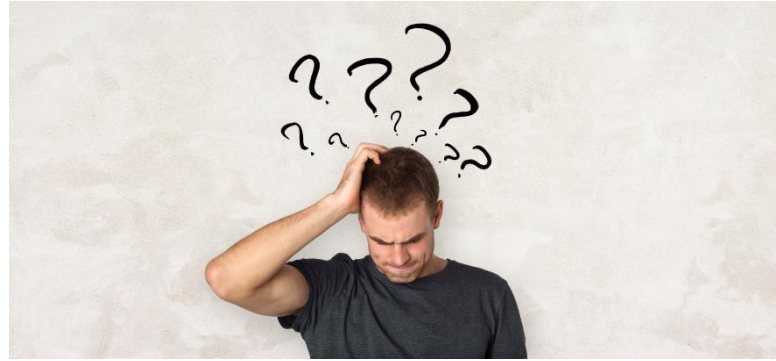
ARE YOU READY FOR THE DIGITAL FUTURE?

What are digital skills?
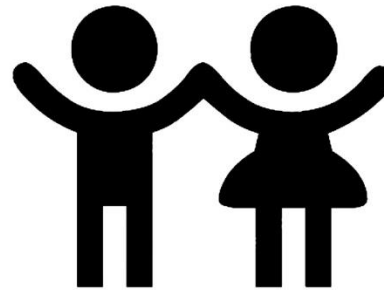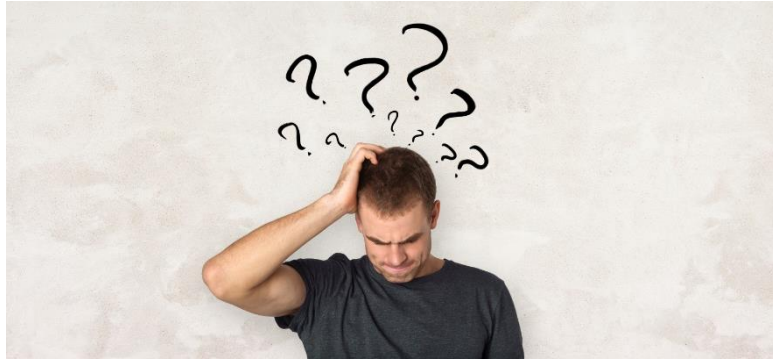
Digital Skills
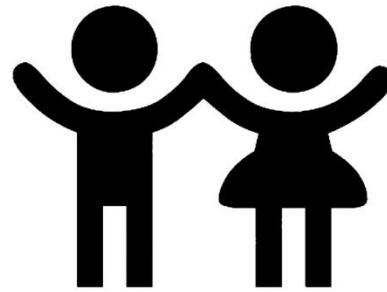
Digital Skills

Digital Skills

Digital Skills
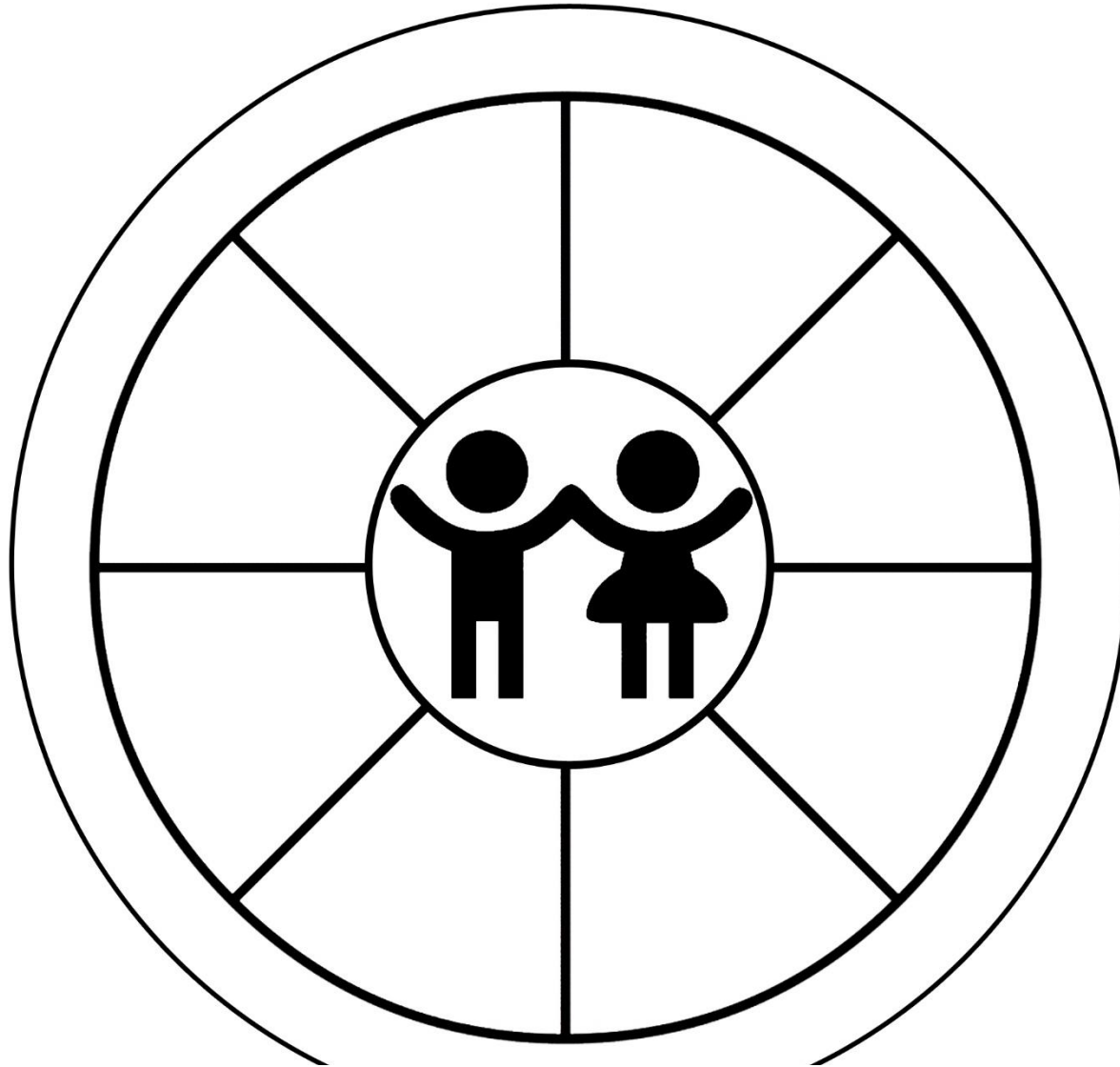
Digital intelligence or "DQ" is the set of social, emotional and cognitive abilities that enable individuals to face the challenges and adapt to the demands of digital life.
These abilities can broadly be broken down into eight interconnected areas:

Digital Skills

- The ability to create and manage one's online identity and reputation.
- This includes an awareness of one's online persona and management of the short-term and long-term impact of one's online presence.
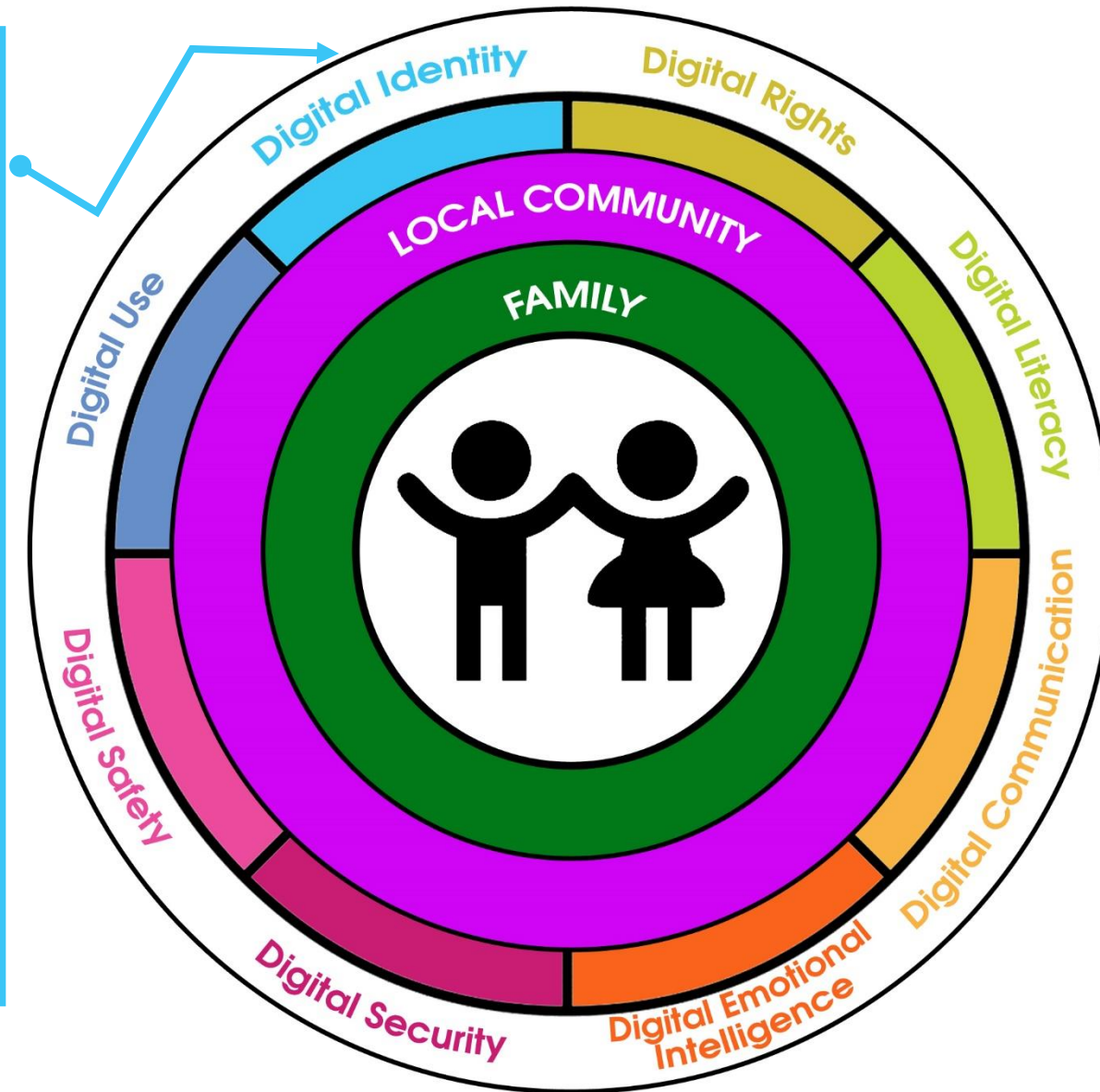
Digital Identity

- Digital Citizen
- Digital Co-creator
- Digital Entrepreneur
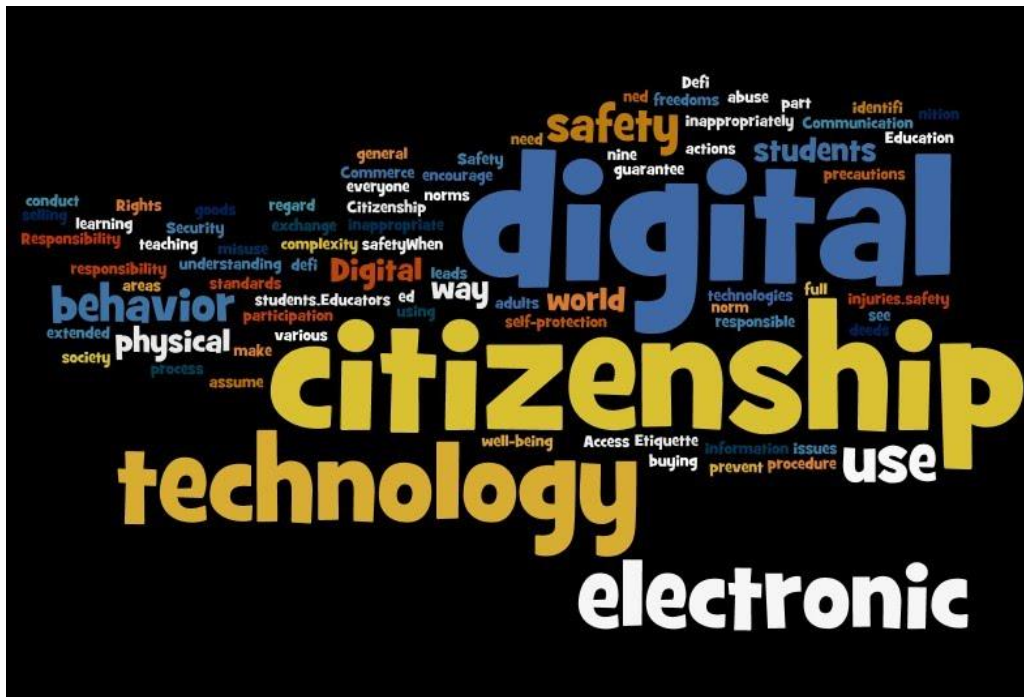
Digital Skills

- The ability to use digital devices and media, including the mastery of control in order to achieve a healthy balance between life online and offline.
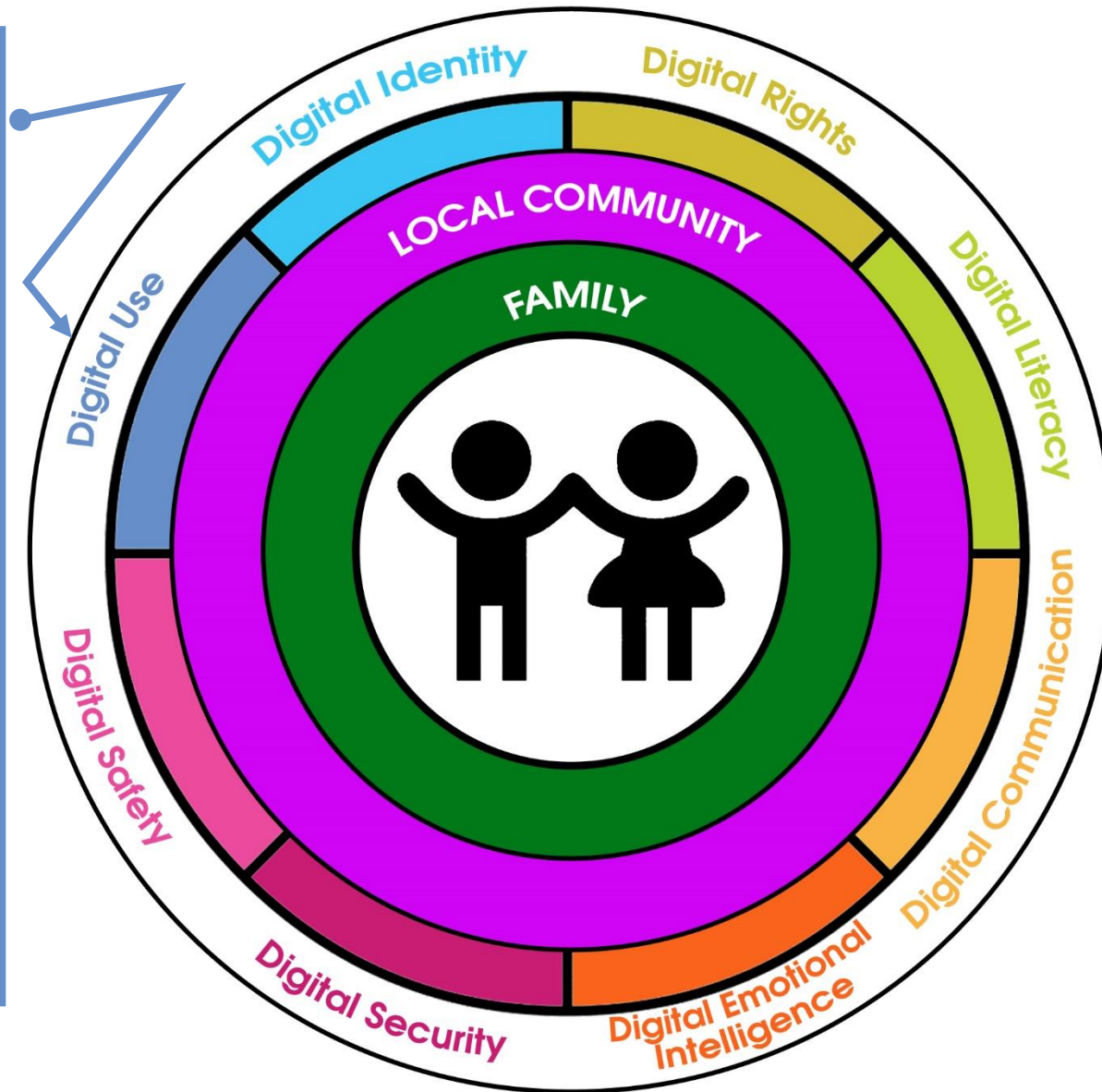
Digital Use

- Screen Time
- Digital Health
- Community participation

Force On Neck	10-12lb	27lb	40lb	49lb	60lb
Neck Tilt	0 degrees	15 degrees	30 degrees	45 degrees	60 degrees
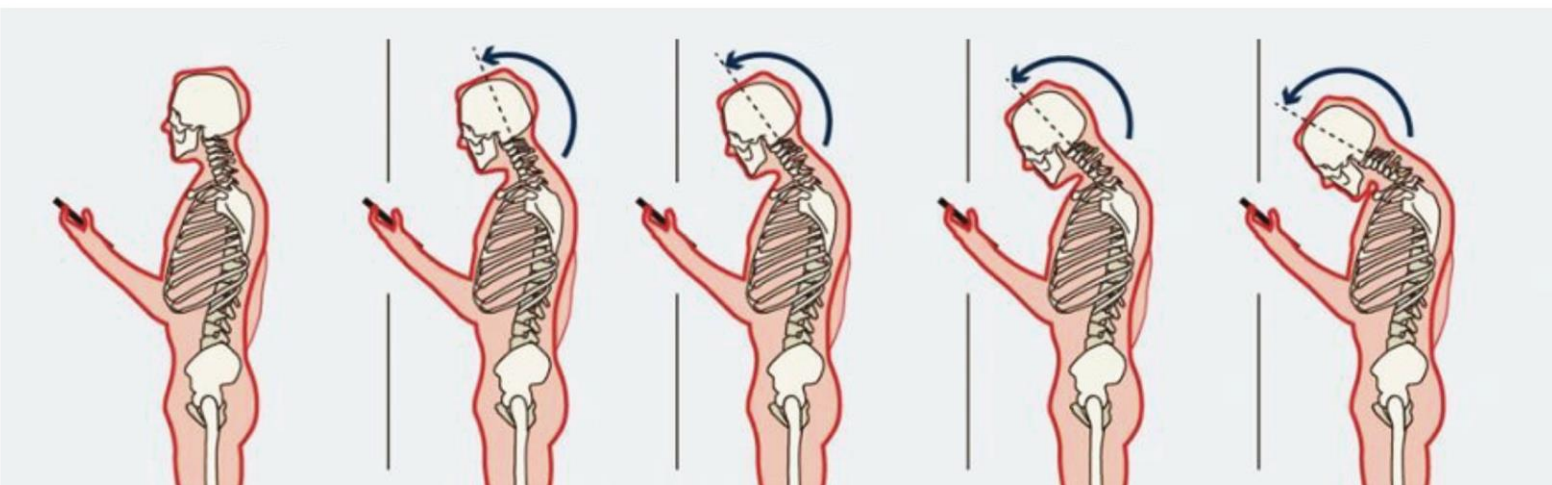
Image source: "Forces on the neck", Text Neck, Physiopedia, https://www.physio-pedia.com/Text_Neck

EYES OVEREXPOSED:
START THE CONVERSATION TO REDUCE DIGITAL EYE STRAIN

Digital eye strain is the physical eye discomfort felt by many individuals after two or more hours in front of a digital screen

90% of Americans use digital devices for two or more hours each day.

60% of Americans use digital devices for five or more hours each day.

More than nine out of 10 people with digital eye strain use devices for two or more hours each day.

77% 77% of the individuals who suffer from digital eye strain use two or more devices simultaneously.

70% 70% of women report experiencing symptoms of digital eye strain and are more likely than men to simultaneously use multiple devices.

Use of technology can have unintended consequences for our health.

76% 76% of Americans look at their digital devices in the hour before going to sleep.

73% Adults under 30 experience the highest rates of digital eye strain symptoms (73%) compared with other age groups.

73% of Americans said they did not know about the benefits of computer eyewear.

56% of Americans are not aware of blue light or the damage it may cause to their eyes

#1 reason for not wearing computer eyewear:
"My eye care provider never recommended them"

90% of patients do not talk with their eye care provider about digital device usage.

THE VISION COUNCIL

Digital Skills

- The ability to manage risks online *(e.g. cyberbullying, grooming, radicalization)* as well as problematic content *(e.g. violence and obscenity)*, and to avoid and limit these risks.
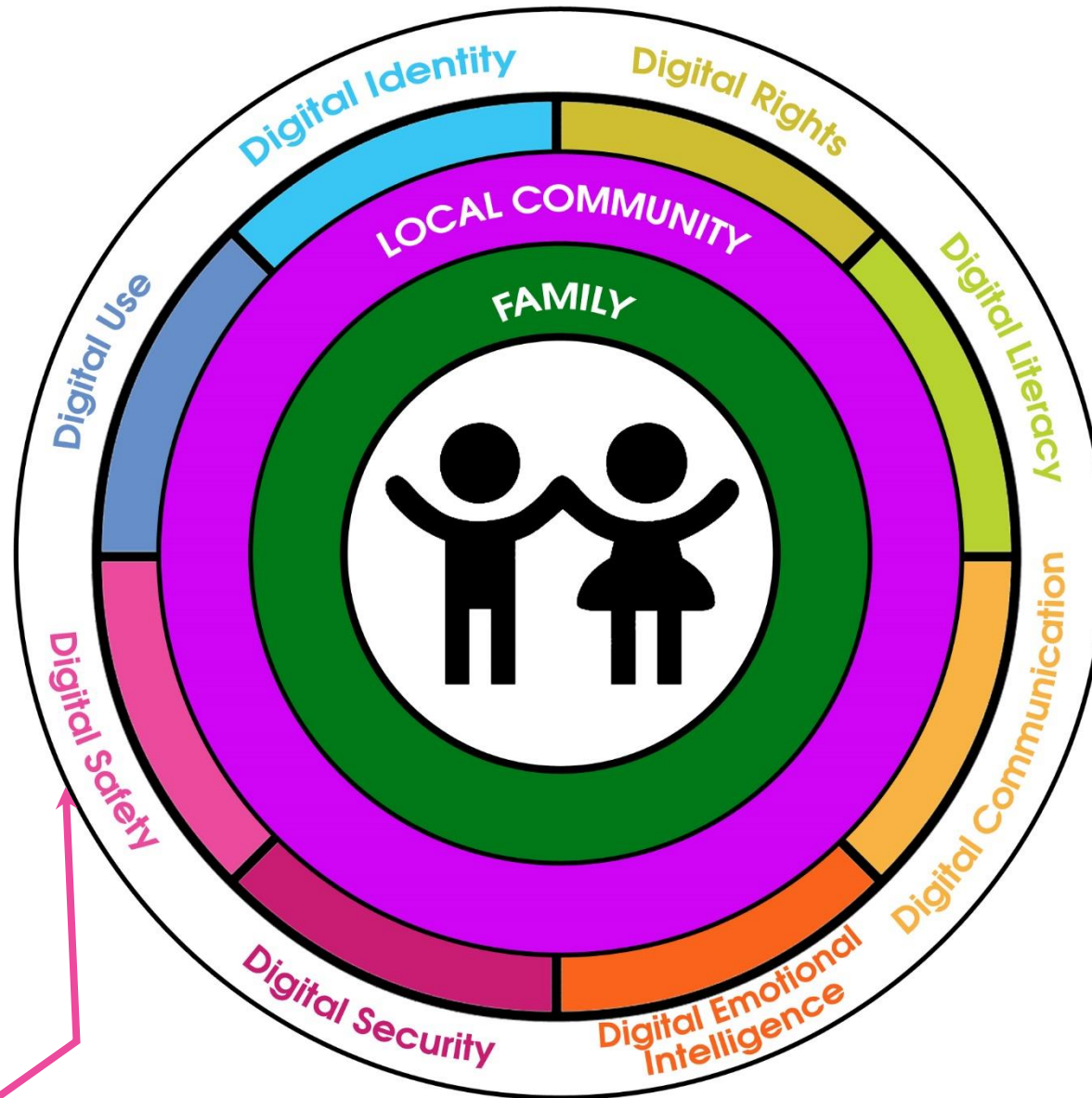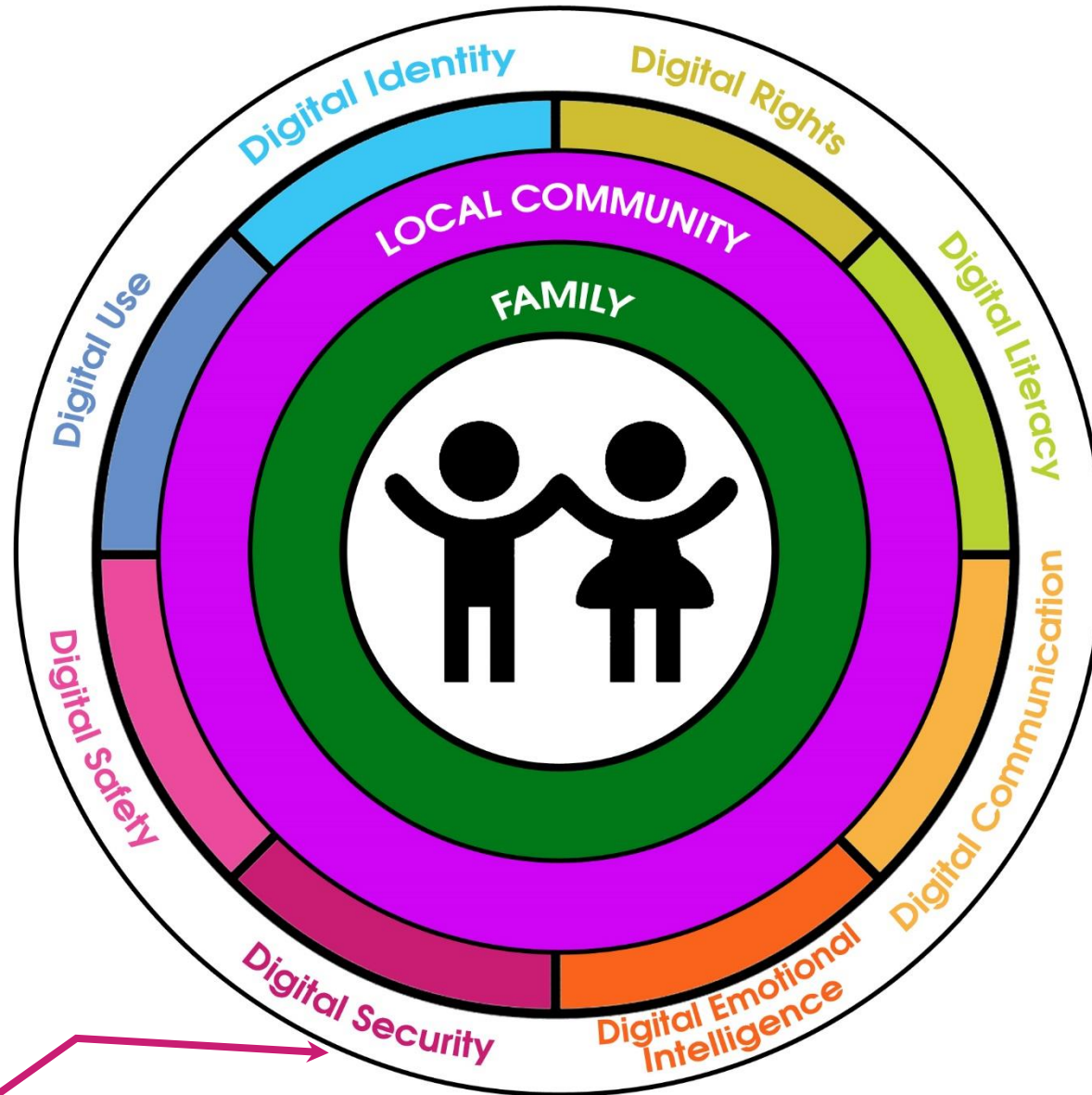
Digital Safety

- Behavioural Risks
  - Content Risks
- Contact Risks

Digital Skills

- The ability to detect cyber threats *(e.g. hacking, scams, malware),* to understand best practices and to use suitable security tools for data protection.

Digital Security

- Password Protection   - Internet Security
- Mobile Security

Do's	Don'ts
1) Only talk to people you know	1) Do not give any private information
2) Stay away from naughty sites ;)	2) Do not give friends information
3) Stay away from strangers	3) Do not talk to strangers
4) Keep everything appropriate	4) Do not go to non age appropriate websites
5) Ask parents about sites	5) Do not friend people you don'

Digital Skills
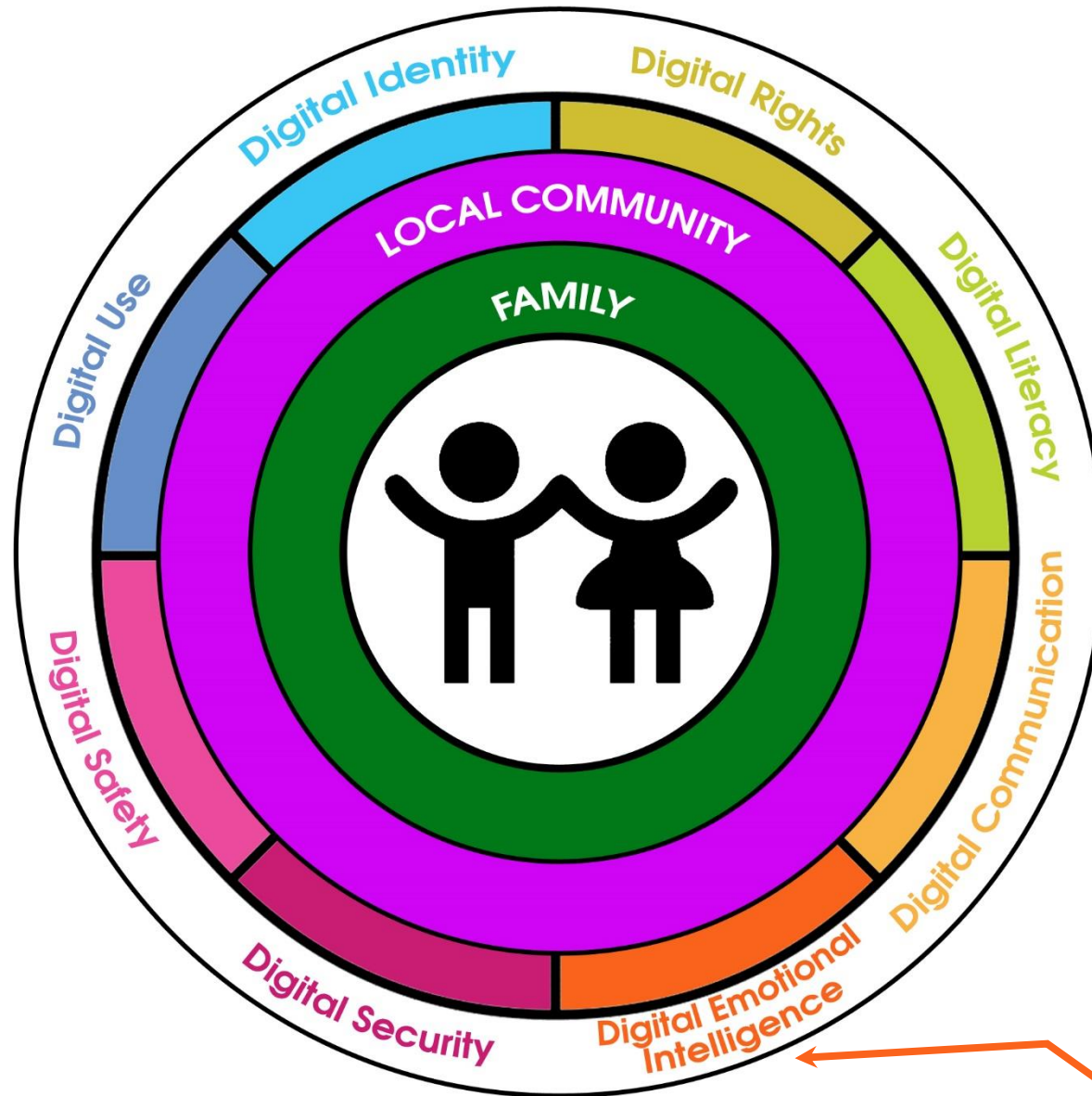
- The ability to be empathetic and build good relationships with others online.

Digital Emotional Intelligence

- Social Awareness
- Emotional Awareness
- Empathy & Sensitivity

HOW TO DEVELOP EMOTIONAL INTELLIGENCE
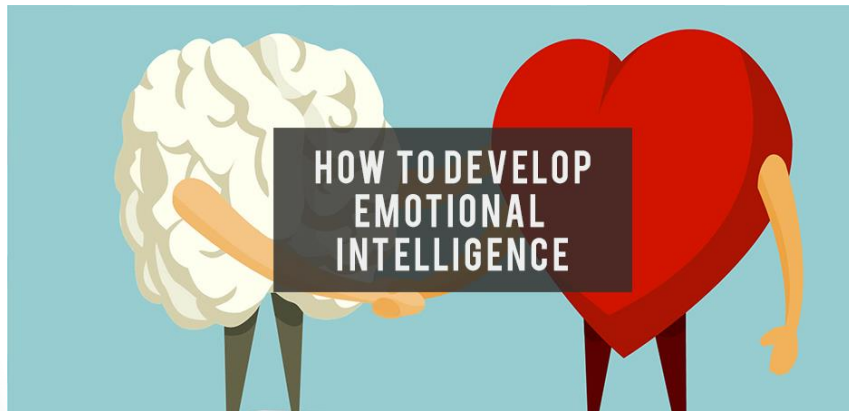
ADAPTED FROM AND REPRODUCED BY PERMISSION FROM JULIA WEST.

Intensity of Feelings	HAPPY	SAD	ANGRY	AFRAID	ASHAMED
HIGH	Elated Excited Overjoyed Thrilled Exuberant Ecstatic Fired up Passionate	Depressed Agonized Alone Hurt Dejected Hopeless Sorrowful Miserable	Furious Enraged Outraged Boiling Irate Seething Loathsome Betrayed	Terrified Horrified Scared stiff Petrified Fearful Panicky Frantic Shocked	Sorrowful Remorseful Defamed Worthless Disgraced Dishonored Mortified Admonished
MEDIUM	Cheerful Gratified Good Relieved Satisfied Glowing	Heartbroken Somber Lost Distressed Let down Melancholy	Upset Mad Defended Frustrated Agitated Disgusted	Apprehensive Frightened Threatened Insecure Uneasy Intimidated	Apologetic Unworthy Sneaky Guilty Embarrassed Secretive
LOW	Glad Contented Pleasant Tender Pleased Mellow	Unhappy Moody Blue Upset Disappointed Dissatisfied	Perturbed Annoyed Uptight Resistant Irritated Touchy	Cautious Nervous Worried Timid Unsure Anxious	Bashful Ridiculous Regretful Uncomfortable Pitied Silly

The five core emotions run left to right across the top of the table. Manifestations of each emotion based upon the intensity felt are described down each of the columns in the table.

Digital Skills
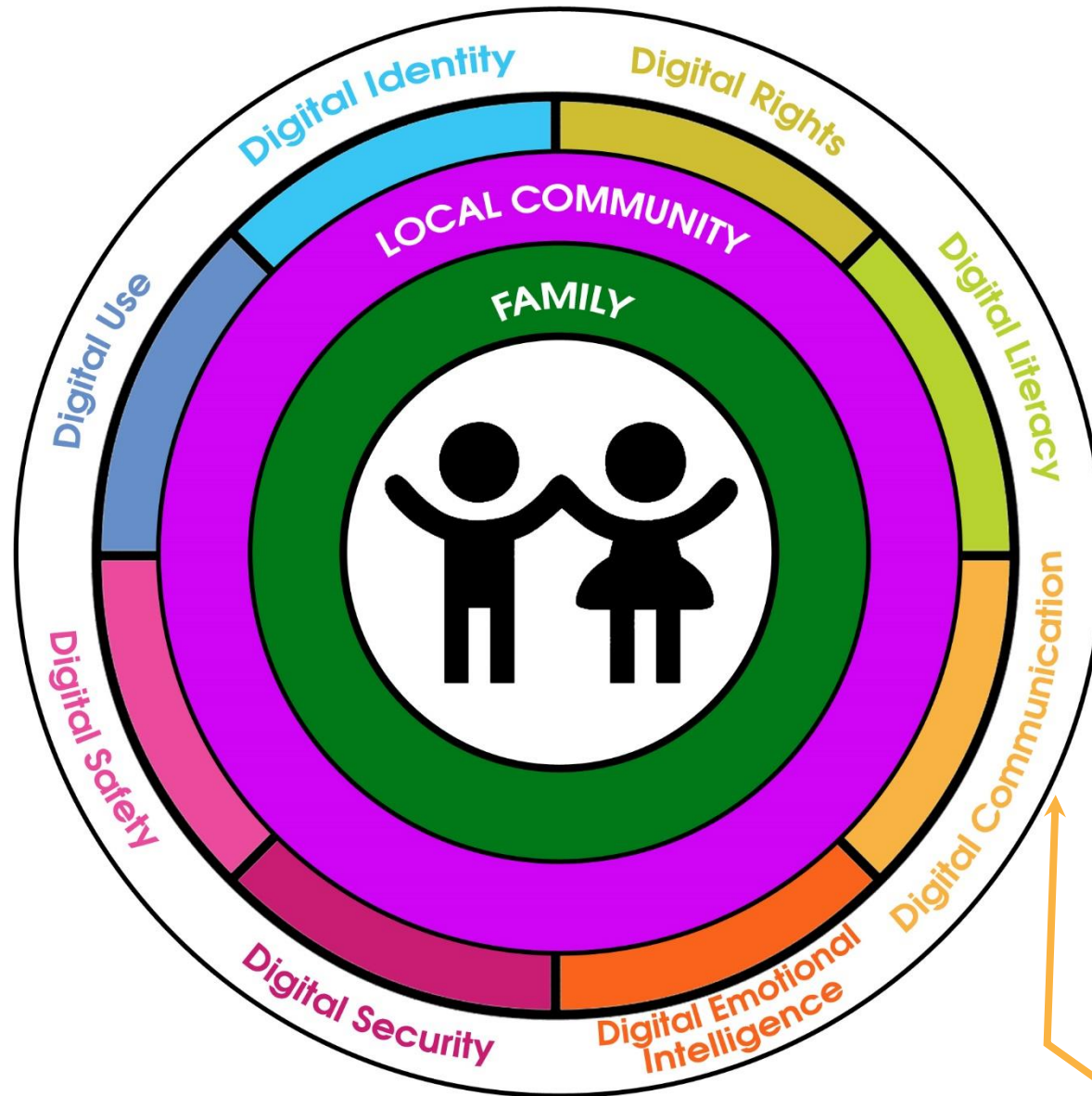
- The ability to be empathetic and build good relationships with others online.

Digital Communication

- Online Collaboration
- Online Communication
- Digital Footprints

What is a digital footprint?

- A digital footprint is an online footprint in which people can look at what you have done. Whether is was just adding pictures to Facebook or joining a forums, someone is able to track what you have done. Everyone and anyone has a digital footprint, whether they know it or not.

We ALL leave a digital footprint

Once it's on-line it's virtually impossible to scrub out

. . and the data on you will follow you around for life

Info on you

graham@ogilviedesign.co.uk

DIGITAL FOOTPRINT
Be smart about what you share.

Blogs and Wikis
Protect what is personal!
Don't share full name, address, school, phone number.
Use private settings.
Follow rules for posting.

Websites & Games
Choose websites carefully.
Don't share passwords.
Don't post photos without permission.

Public Profiles
Don't use your full name.
No specific addresses or names.
Your audience matters!
Don't be too personal!

Emails & Texts
Be nice.
Don't send embarrassing photos.
Don't talk to people you don't know.

THINK BEFORE YOU SHARE

Digital Skills

- The ability to find, evaluate, utilize, share and create content as well as competency in computational thinking.

Digital Literacy

▪Computational Thinking ▪Content Creation
▪Critical Thinking

WHAT IS DIGITAL LITERACY?

Digital literacy is the ability to use technological tools, understand how they work and, at the highest level, the aptitude to create new technological tools and services.

Find a variety of media contents

Critically evaluate a variety of media contents

Use a variety of media contents

Digital literacy

Make new media contents

Share a variety of media contents

unicef
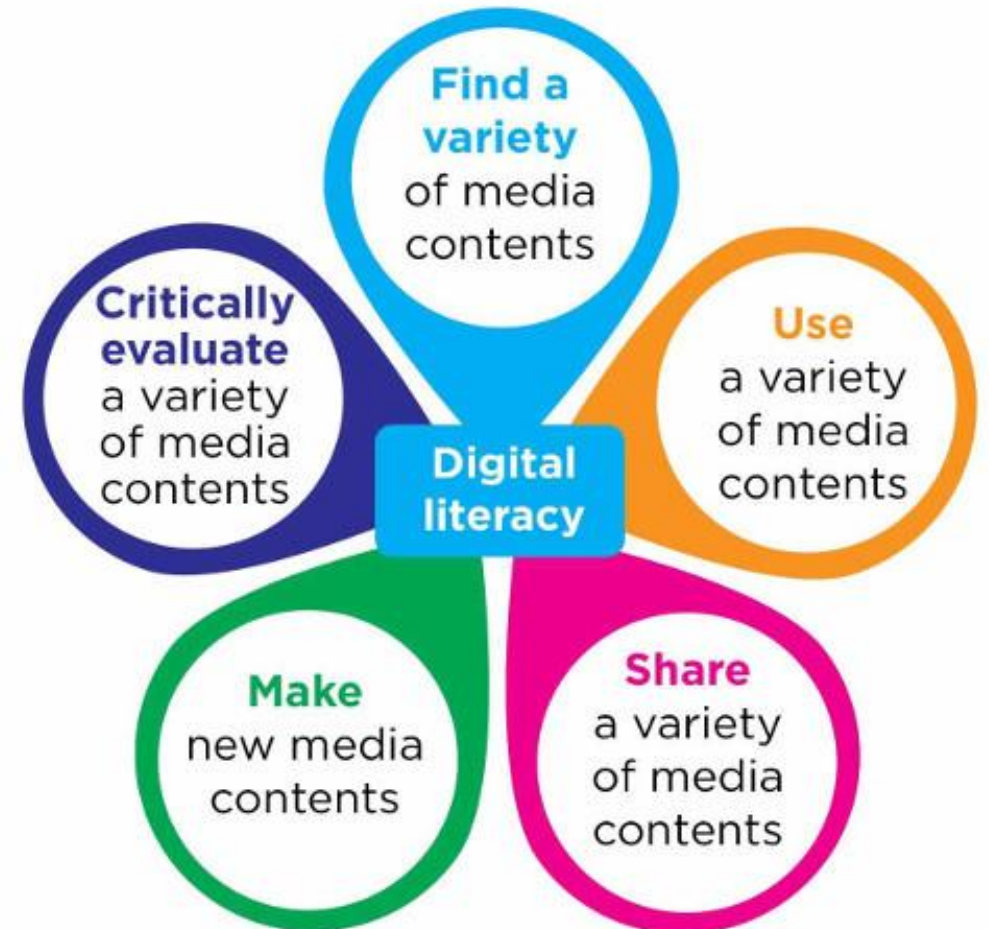
Digital Skills
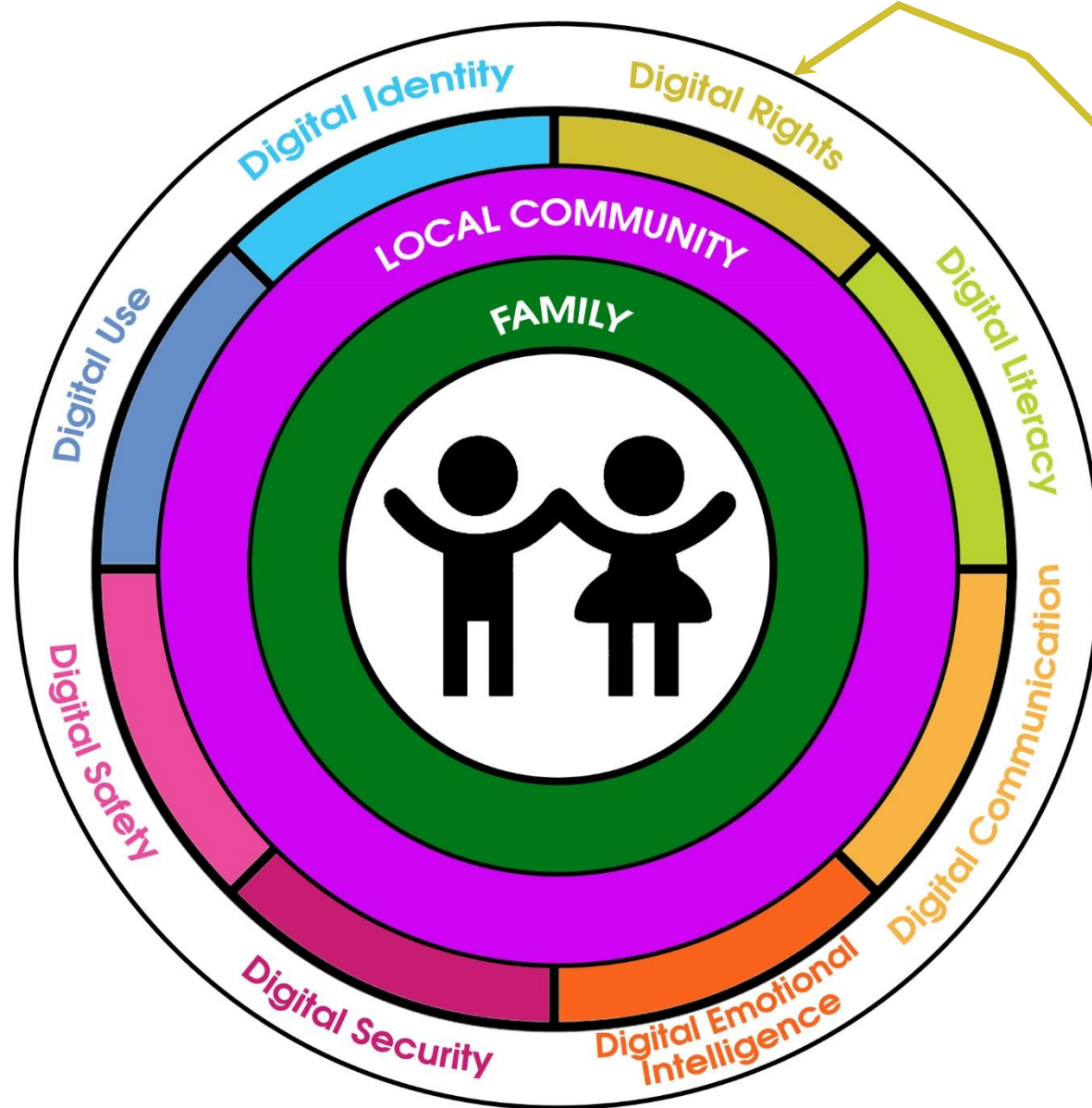
- The ability to understand and uphold personal and legal rights, including the rights to privacy, intellectual property, freedom of speech and protection from hate speech.

Digital Rights & Responsibilities

- Freedom of Speech
  - Privacy
- Intellectual Property Rights

Digital Rights and Responsibilities

The privileges and freedoms extended to all digital technology users and the behavioral expectations that come with them
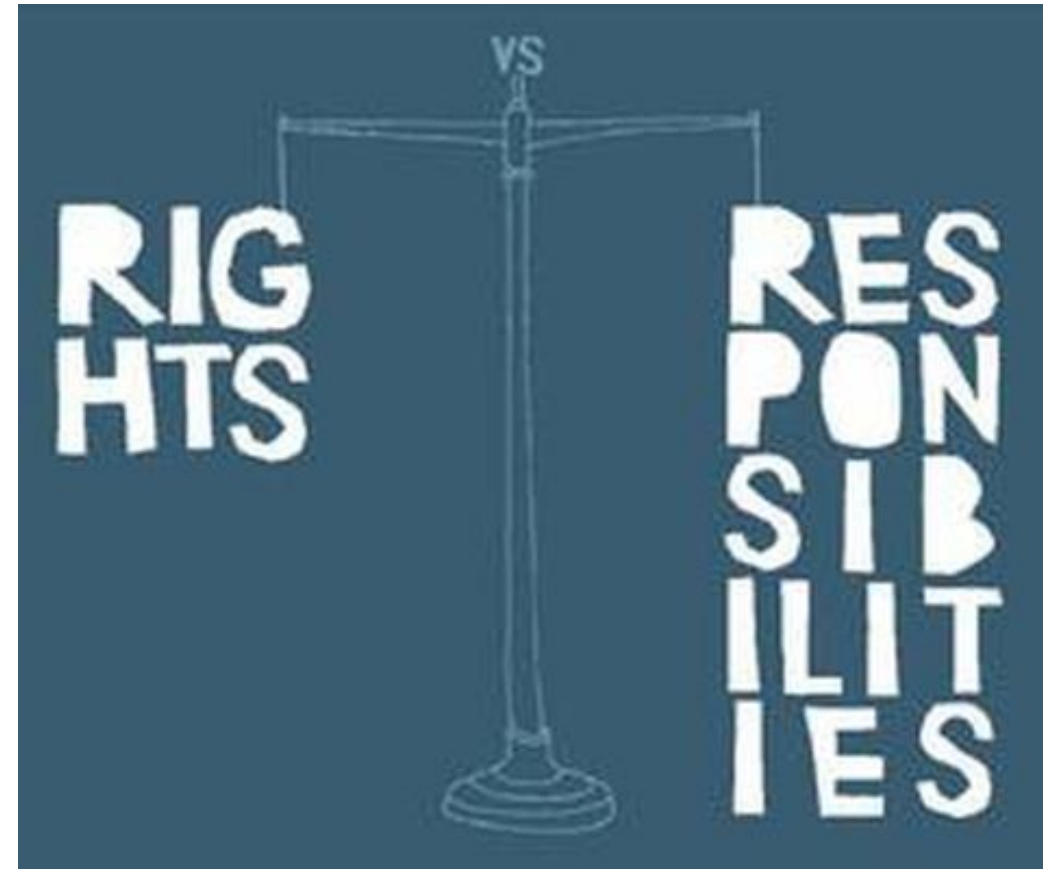
RIGHTS VS RESPONSIBILITIES

Digital Rights & Responsibilities

- Freedom of Speech
    - Privacy
- Intellectual Property Rights

Freedom of Speech is Not a Licence to abuse. It is a responsibility.

LICENSES | **TERMS**

Attribution
BY — Others can copy, distribute, display, perform and remix your work if they credit your name as requested by you

No Derivative Works
ND — Others can only copy, distribute, display or perform verbatim copies of your work

Share Alike
SA — Others can distribute your work only under a license identical to the one you have chosen for your work

Non-Commercial
NC — Others can copy, distribute, display, perform or remix your work but for non-commercial purposes only.

privacy

creative commons

Digital Skills

Digital Skills

- ▪Digital Citizen
- ▪Digital Co-creator
- ▪Digital Entrepreneur

Digital Identity

Digital Rights

- ▪Freedom of Speech
- ▪Intellectual Property Rights
- ▪Privacy

- ▪Screen Time
- ▪Digital Health
- ▪Community participation

Digital Use

LOCAL COMMUNITY

FAMILY

Digital Literacy

- ▪Computational Thinking
- ▪Content Creation
- ▪Critical Thinking

- ▪Behavioural Risks
- ▪Content Risks
- ▪Contact Risks

Digital Safety

Digital Communication

- ▪Online Collaboration
- ▪Online Communication
- ▪Digital Footprints

- ▪Password Protection
- ▪Internet Security
- ▪Mobile Security

Digital Security

Digital Emotional Intelligence

- ▪Social Awareness
- ▪Emotional Awareness
- ▪Empathy & Sensitivity

ROUND
3

Hyflex Learning

15-30 MIN

What is Hyflex Learning?

Hybrid Learning

Flexible Learning
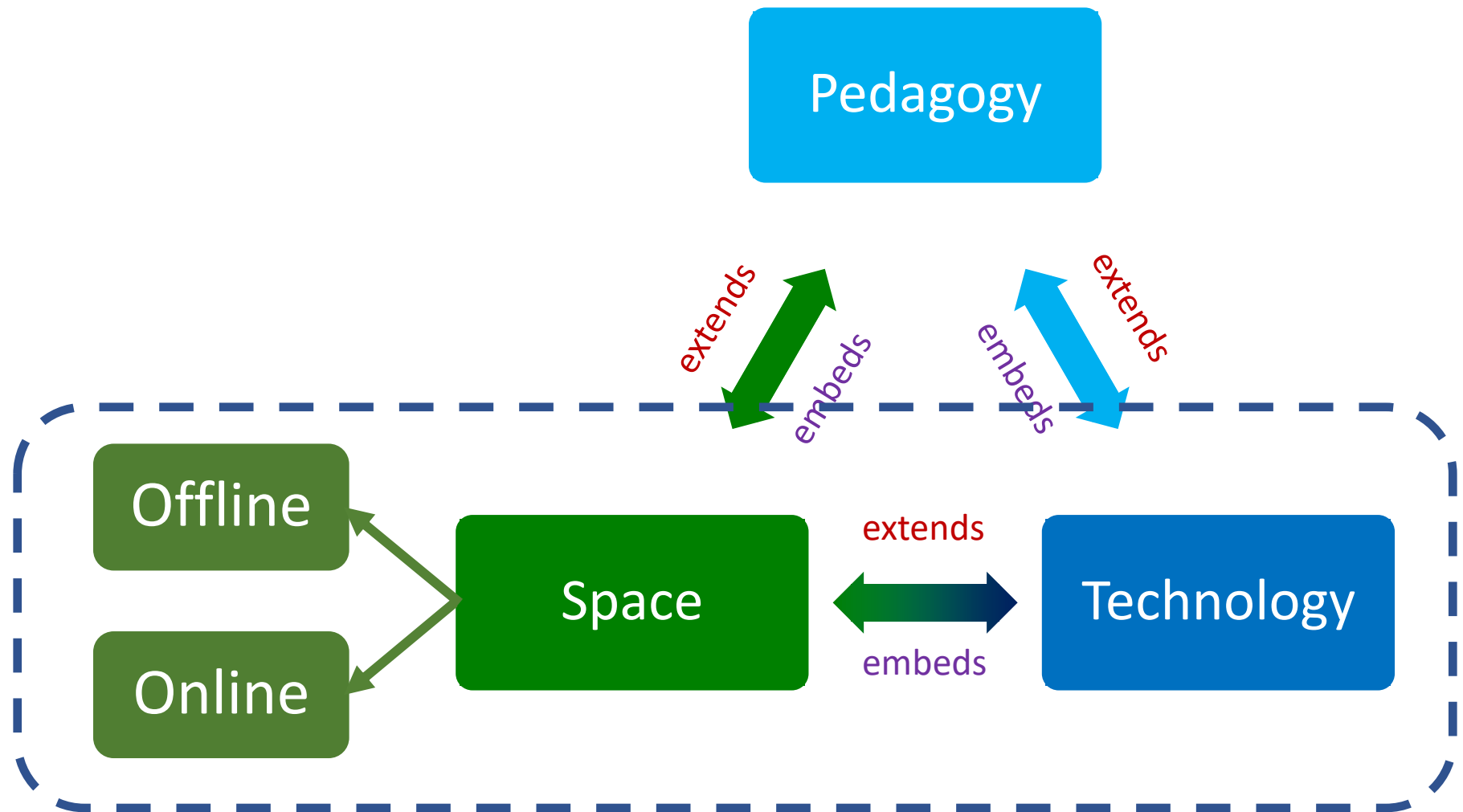
The Framework

VMDO Architects' Design Diagram
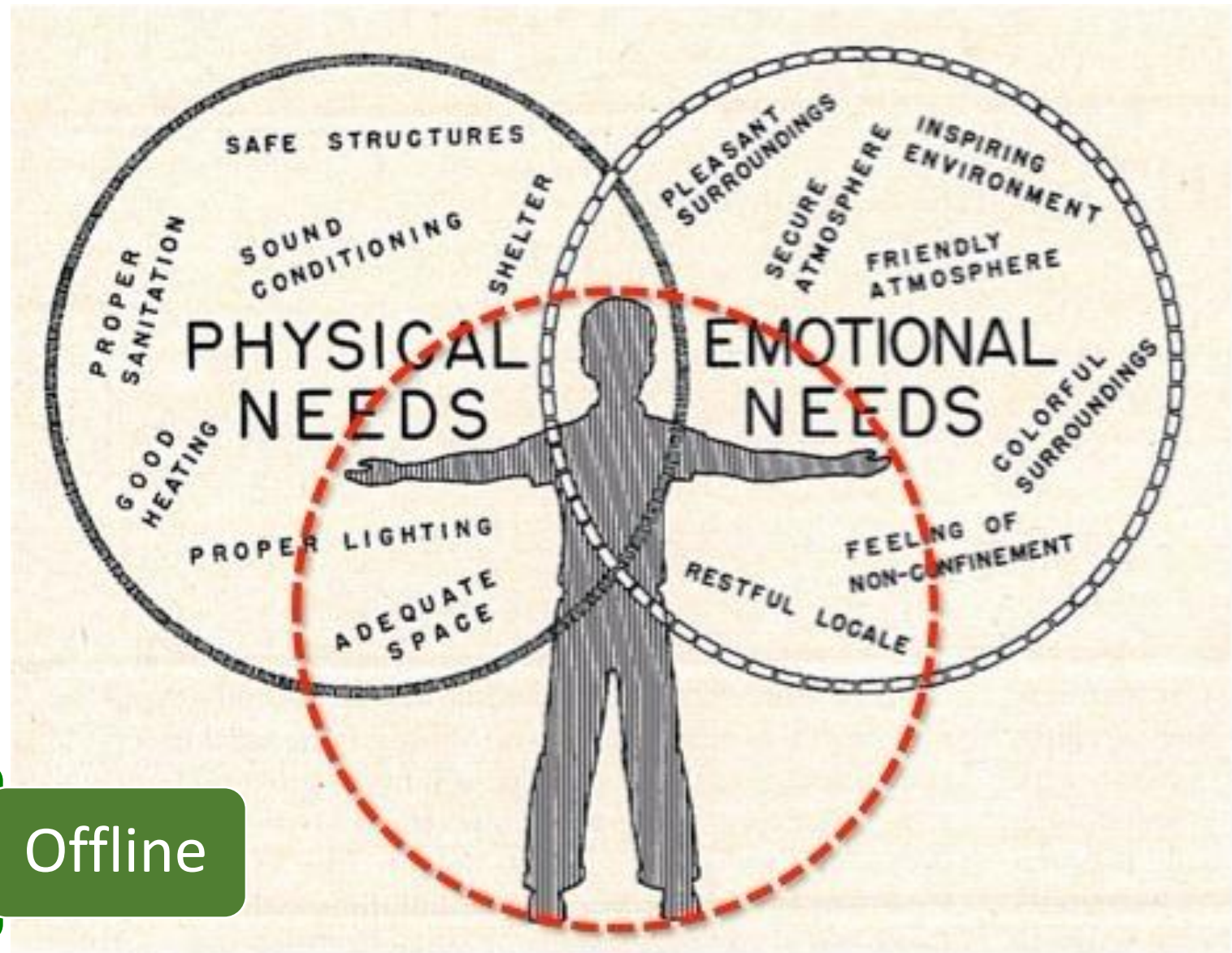
Online Engagement
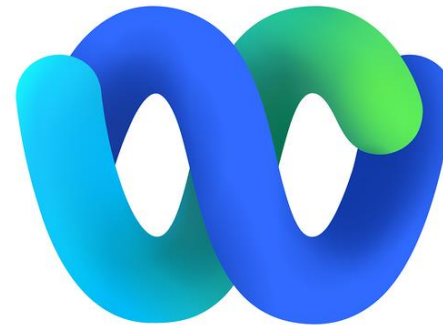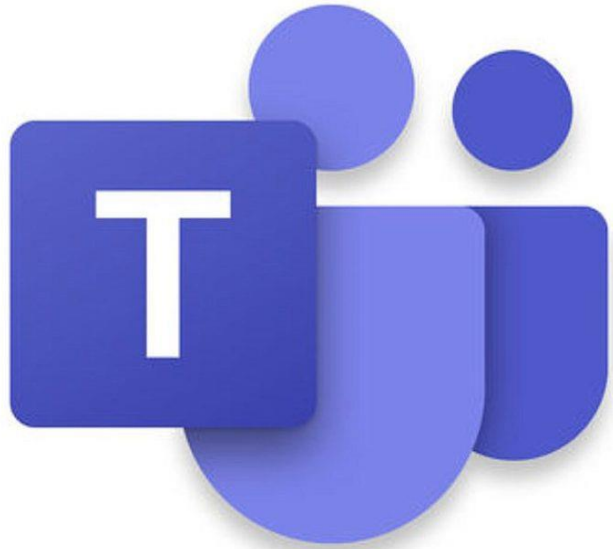
Space   Online

TCMAK Framework
(Technological Content Method-Action Knowledge Framework)

Three primary forms of knowledge:

Technology (TK)

Content (CK)

Method-Action (MAK)

Technological Content Method-Action Framework (TCMA Framework)

Technological Knowledge (TK)

Content Knowledge (TK)

Method-Action Knowledge (MAK)

Contexts
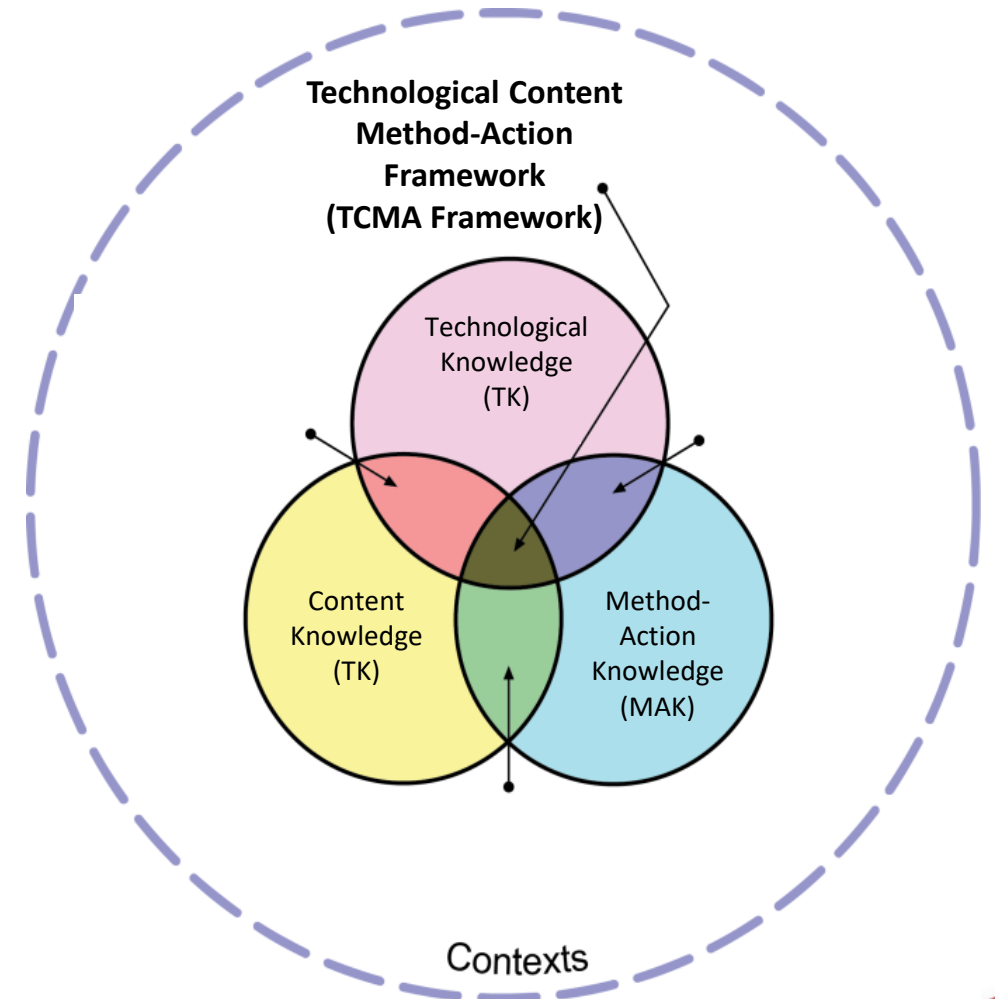
TCMAK Framework
(Technological Content Method-Action Knowledge Framework)

The TCMA framework goes further by emphasizing the kinds of knowledge that lie at **the intersections** between three primary forms:
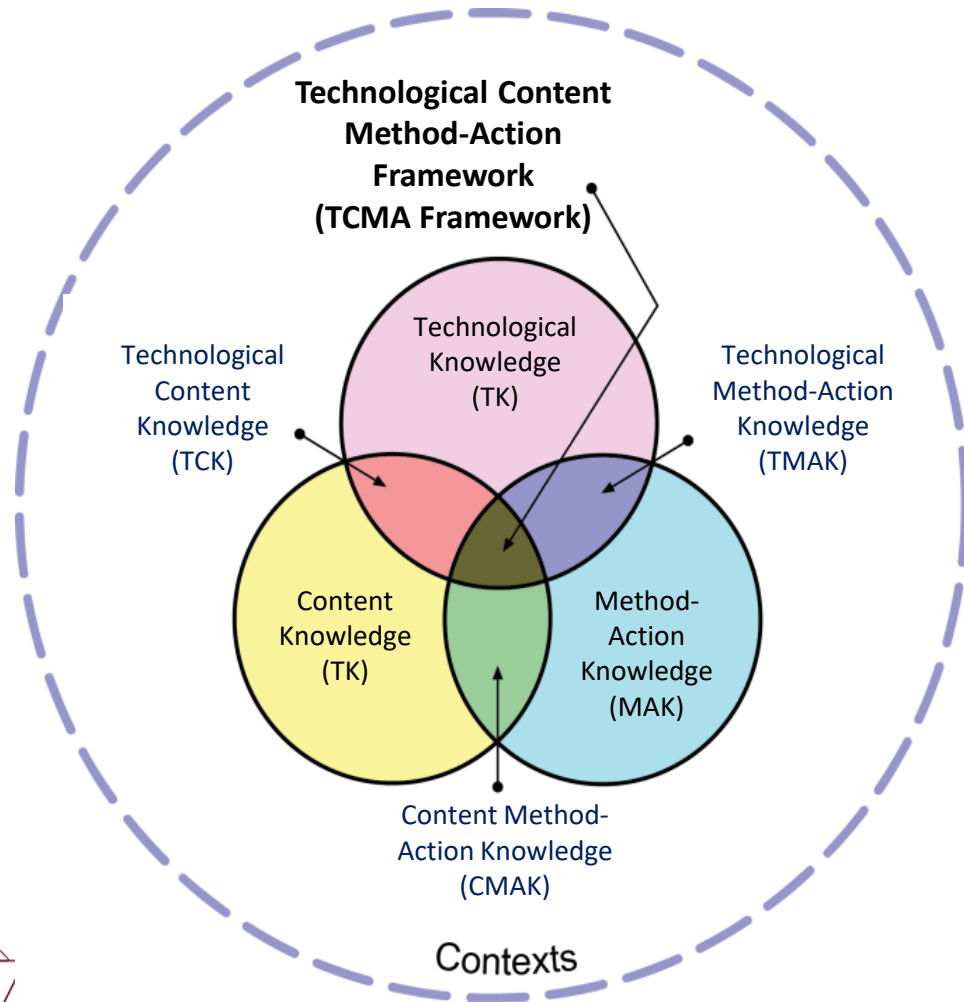
Technological Content Knowledge (PCK)

Technological Method-Action Knowledge (TMAK)

Content Method-Action Knowledge (TCK)

Conventional Learning

Curriculum

Learning Materials
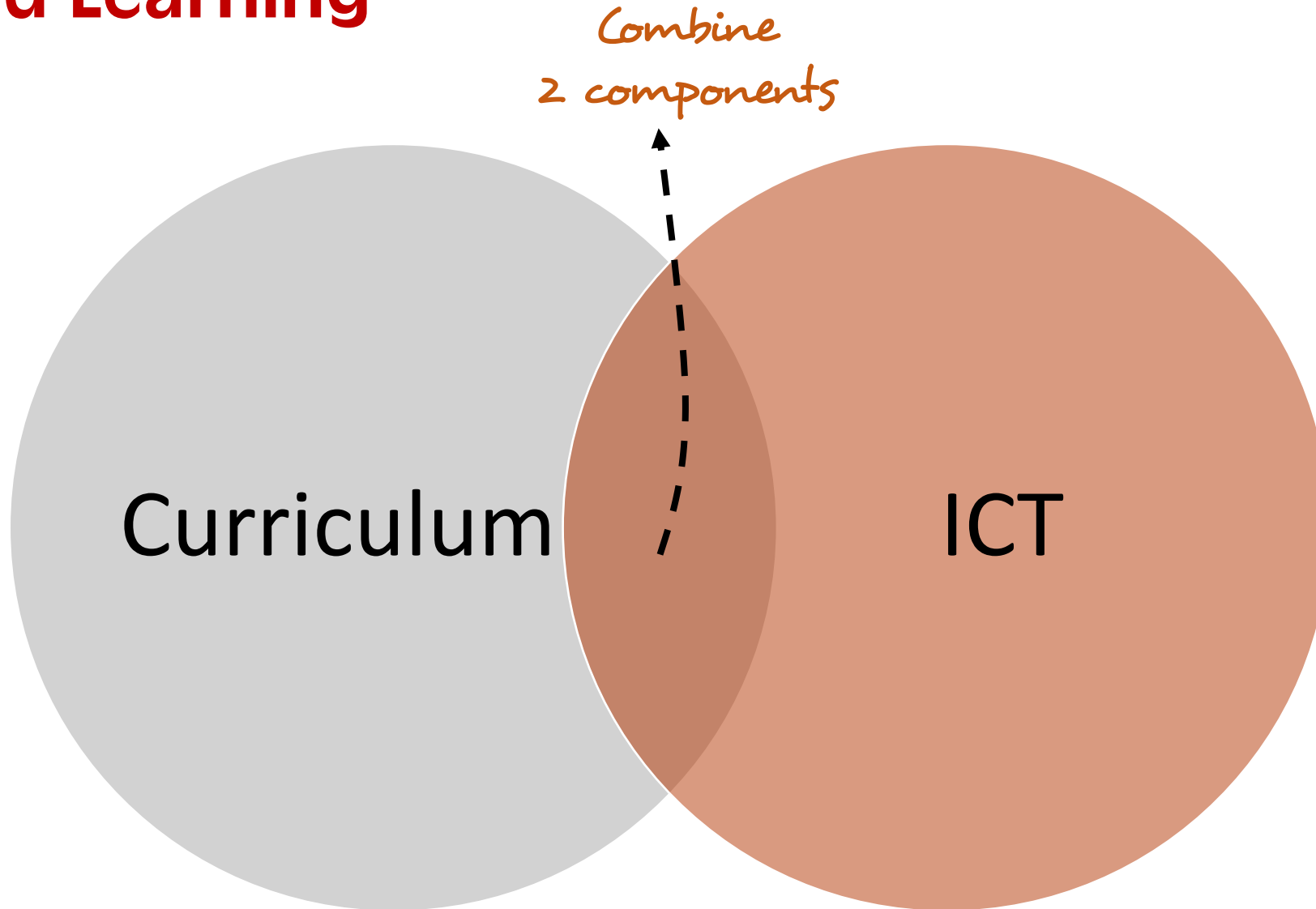
Blended Learning
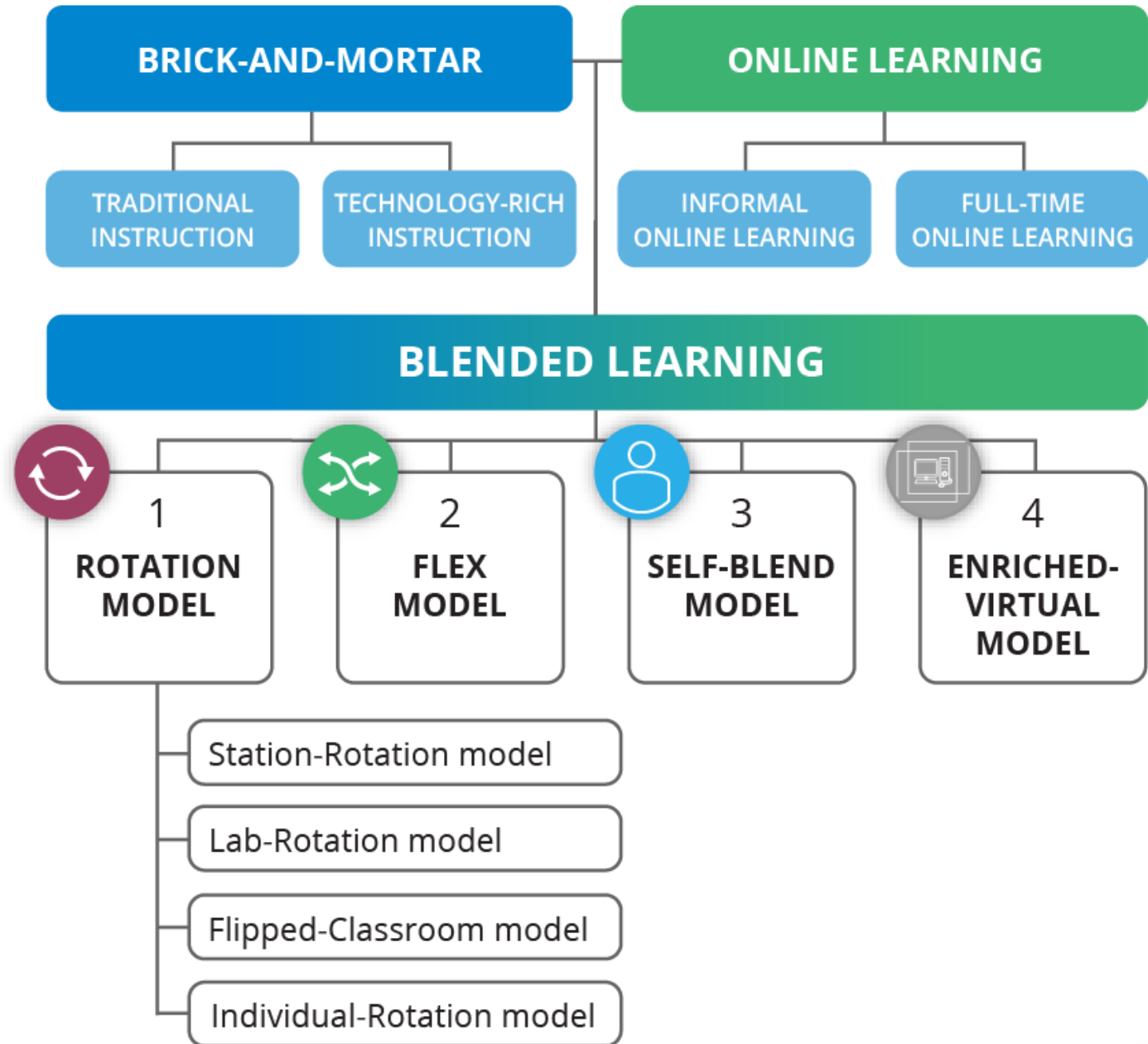
The Path to Our Teaching Progress

100% IN-PERSON ← → 100% ONLINE

FACE-TO-FACE

Learning takes place in a traditional, brick-and-mortar classroom.

BLENDED

Technology is used to complement traditional classroom learning.

HYBRID

Learning takes place online and offline with online learning replacing some face-to-face instruction.

ONLINE

All learning takes place online.
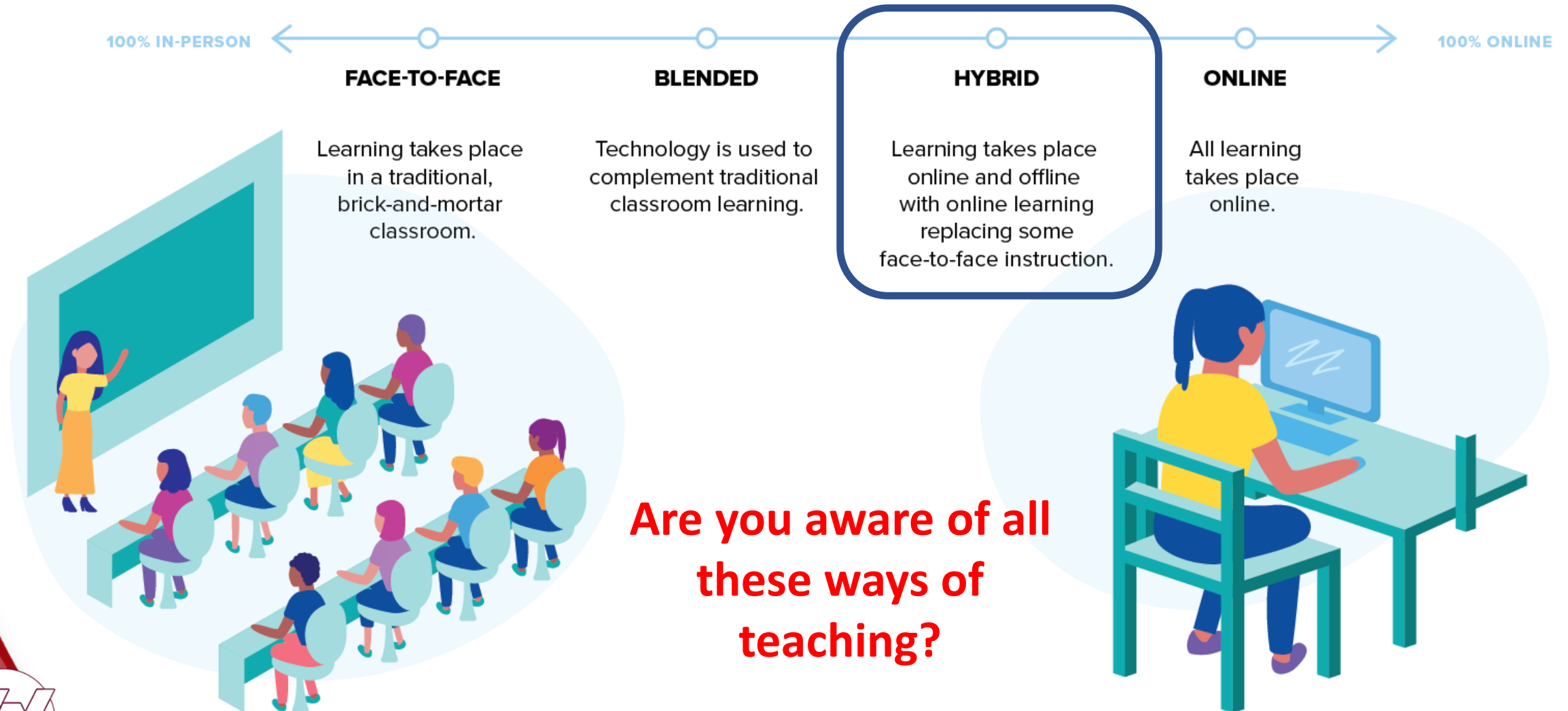
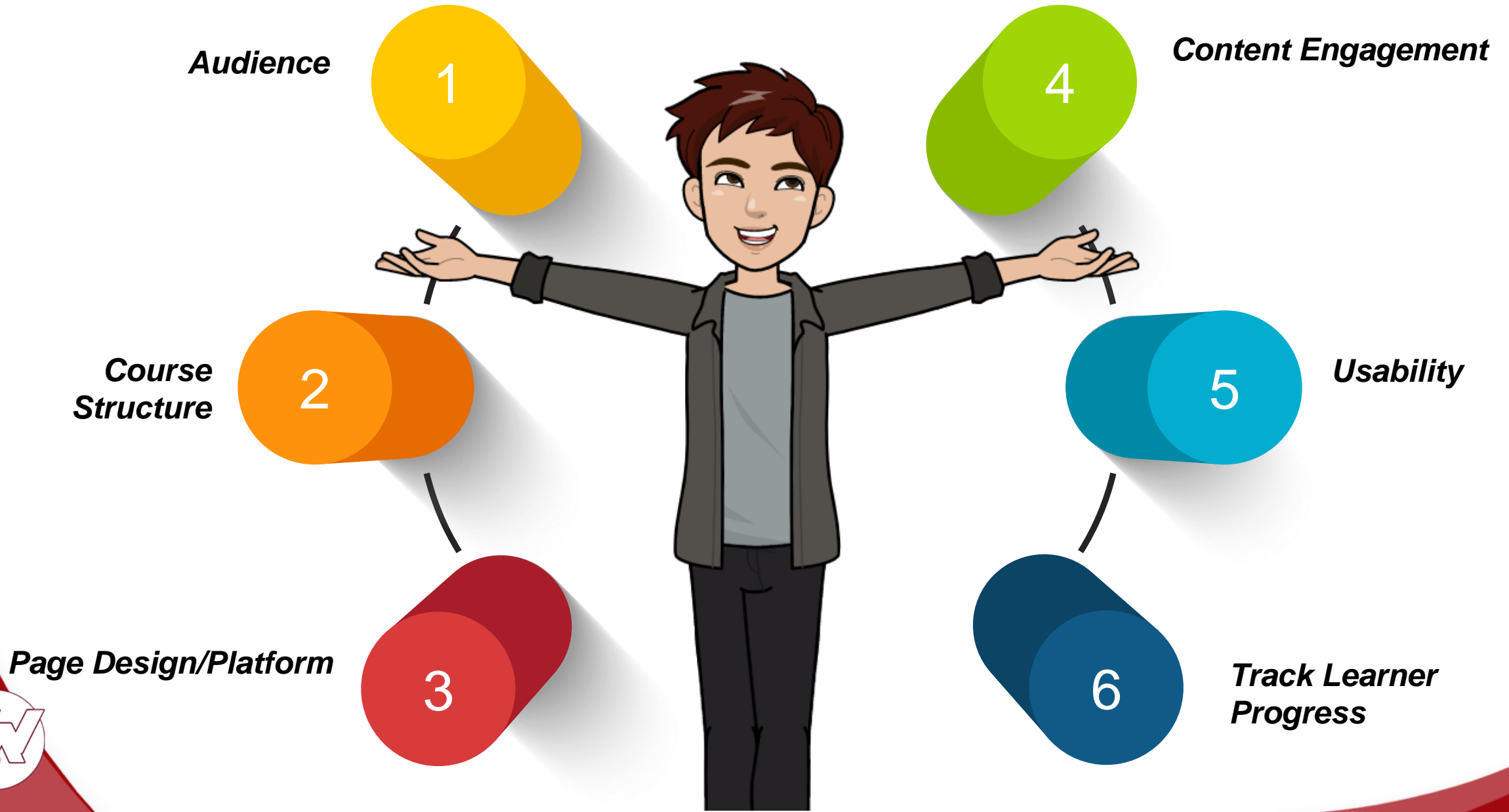**Are you aware of all these ways of teaching?**

Hybrid Learning

A model of course design that combines traditional, face to face class time with online and out-of-class course work.
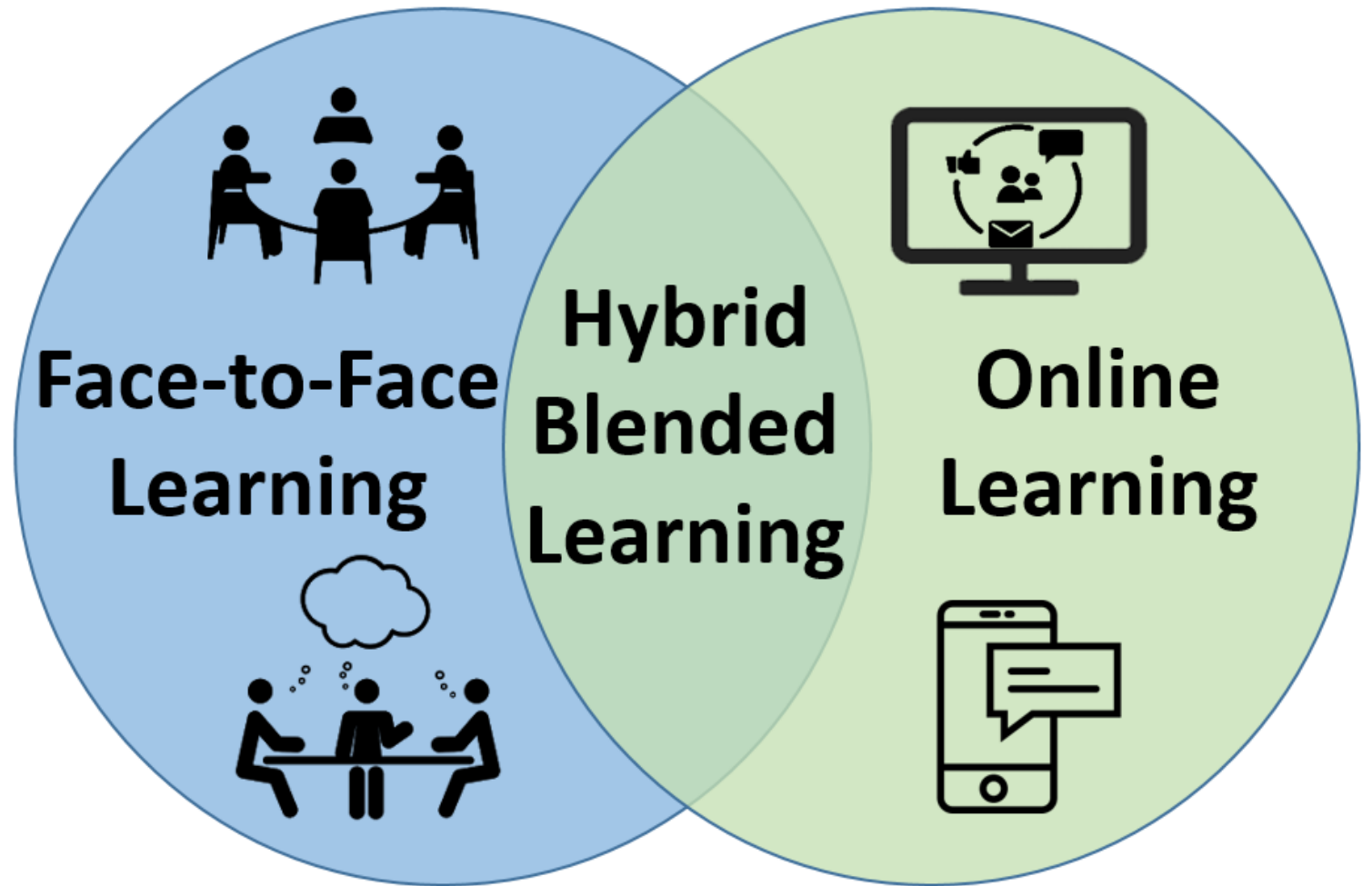
Benefits of Hybrid Learning

A flexible learning experience.

A

The freedom of independent academic exploration.

C

Synchronous communication opportunities.

B

More efficient use of resources.

D

Hybrid Learning

A model of course design that combines **traditional-face to face class time** with **online and out-of-class** course work.

Online learning

+

Offline learning

➡

Hybrid Strategy
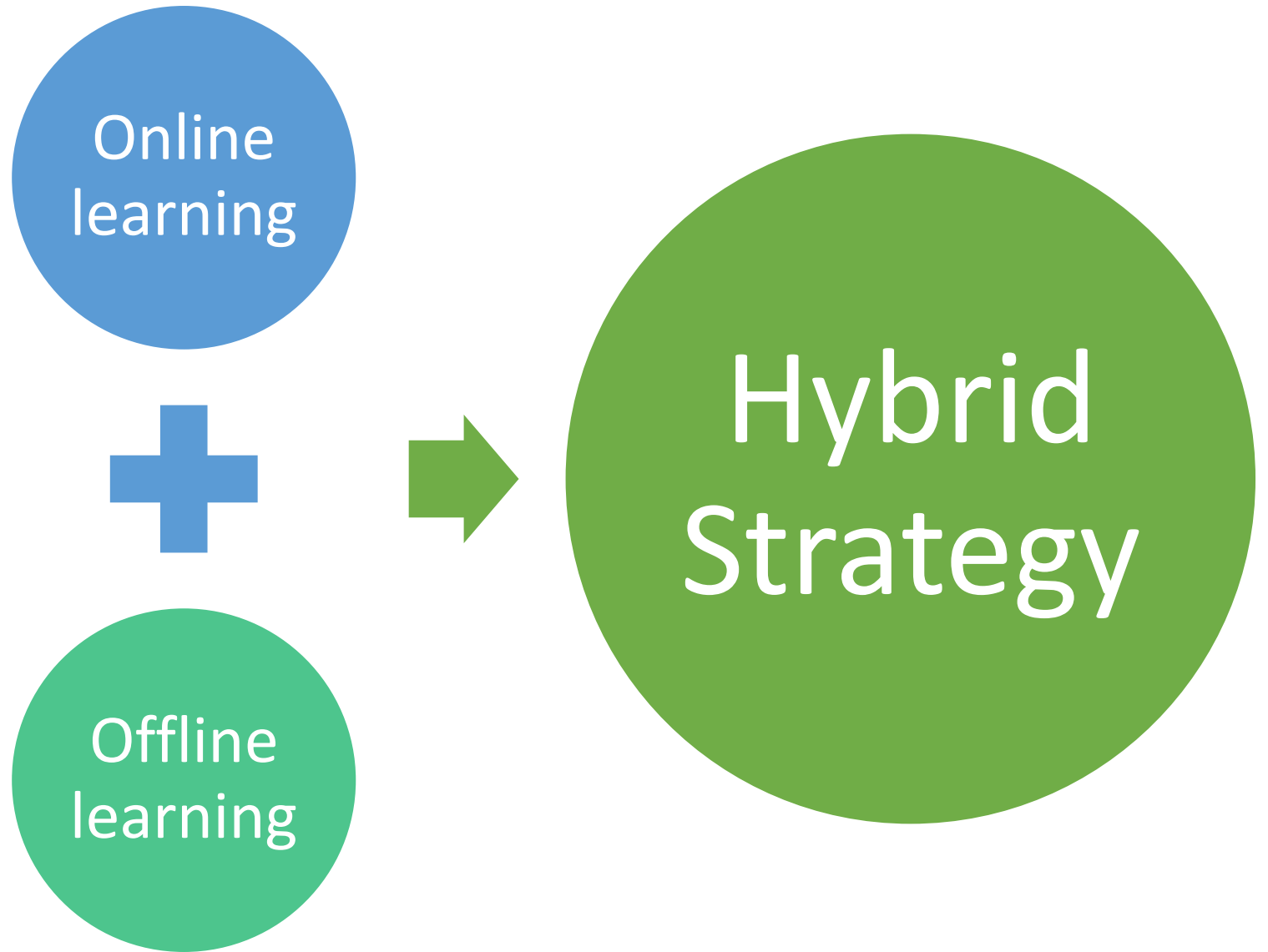
The Path to Hybrid Learning

Synchronous

Face to face

Virtual

Hybrid
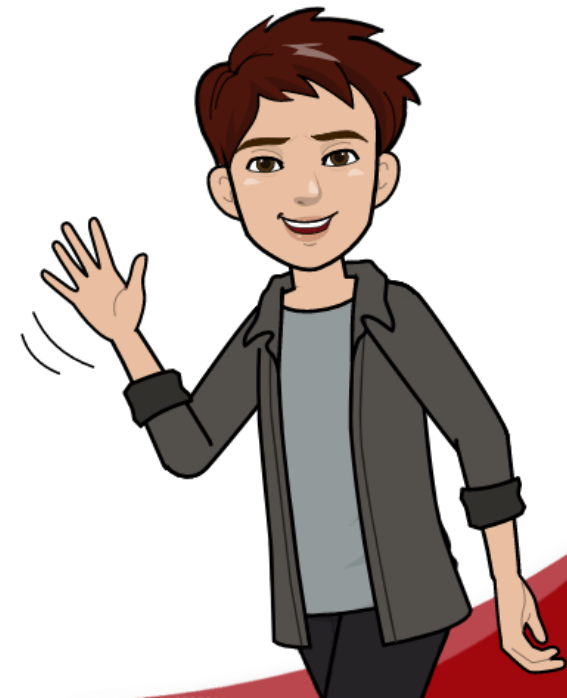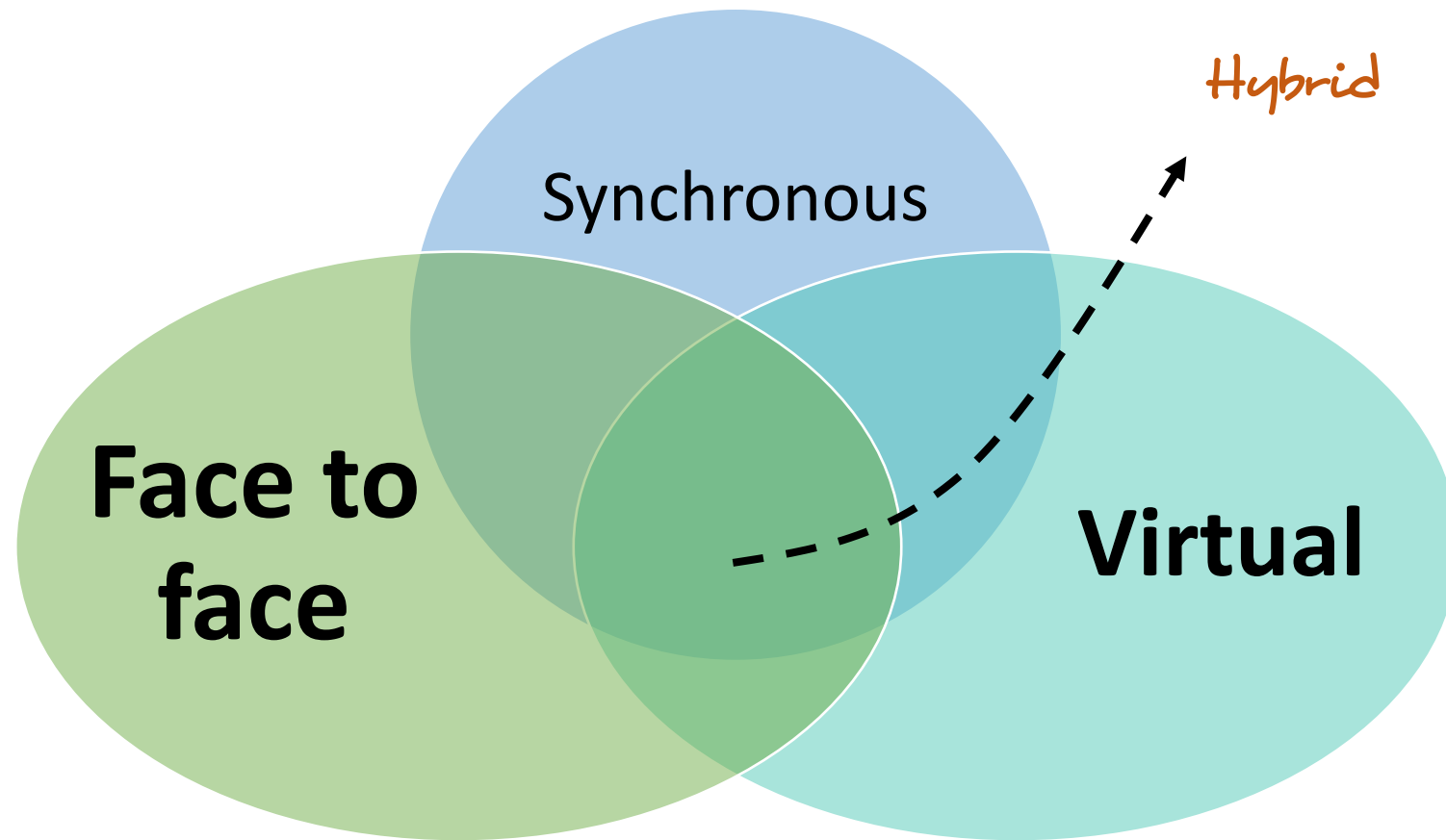
Online Learning Components

Audience

1

Course Structure

2

Page Design/Platform

3

4

Content Engagement

5

Usability

6

Track Learner Progress

LoCOSS

Low Cost Open Space Studio

Mohd Shahril Nizam bin Shaharom (Dr.)
B Sc. Comp (Software Engineering), M.Ed (Educational Technology), PhD (Instructional Technology)
Department of Curriculum & Instructional Technology
Faculty of Education, University of Malaya.

dr.SN
nizamsaril@um.edu.my

The Previous Project in Faculty of Education
(Learning Studio: InTecPro-2018 project)

This learning space designed for educators to share and discuss with/among students. The difference is that each of these discussions will be recorded live so that students who cannot attend will be able to participate in the discussion. Each of these sessions will be archived as a collection of teaching materials (in video form) for future generations (just like a reference book)

The Previous Project in Faculty of Education
(Learning Studio: InTecPro-2018 project)

InTecPro (Instructional Technology Production Learning Studio)

Learning Studio is a space like a recording studio where students are allowed to / can produce more commercial assignments.

Example

Example Proven+Successful Commercial Project

Example Proven+Successful Academic Project

What is Flexible Learning?

Flexible Learning

- Lifelong learning skills
- Contextualized Learning
- Integrated Opportunities
- Flexible Learning
- Student Empowerment
- Holistic Capabilities
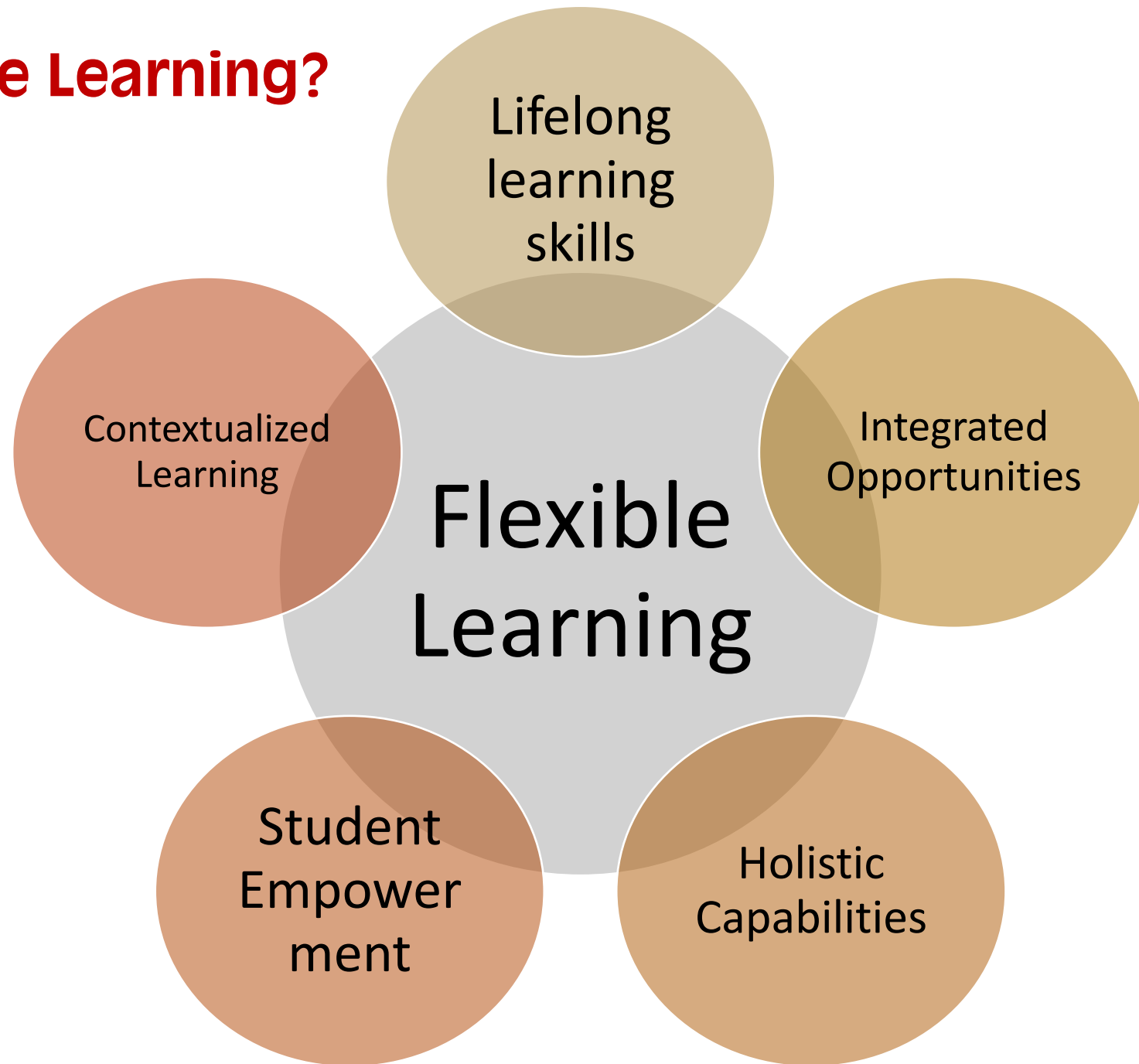
What is Hyflex?

	Space	
	SAME SPACE	**DIFFERENT SPACE**
SAME TIME	**Offline** (Physically Meeting)	**Online** (Online Meeting)
DIFFERENT TIME	Share assignment/message in the same box	Asynchronous

Time

Synchronous

Asynchronous

The Path to Hyflex Learning

Synchronous

Face to face

Virtual

Asynchronous
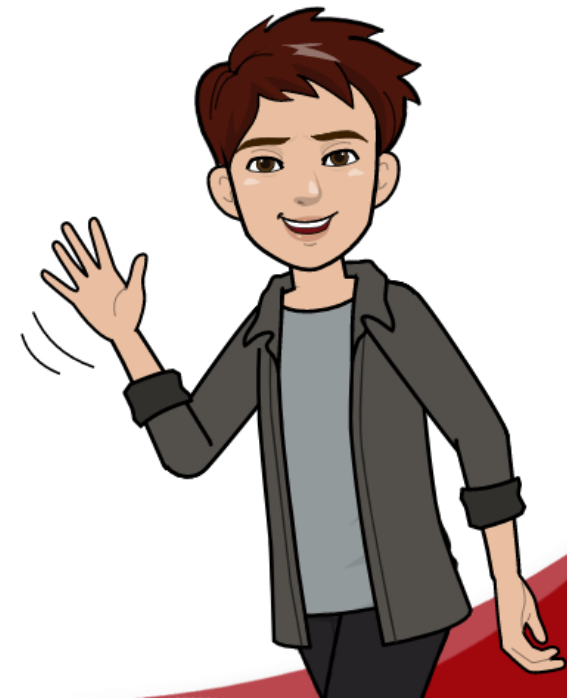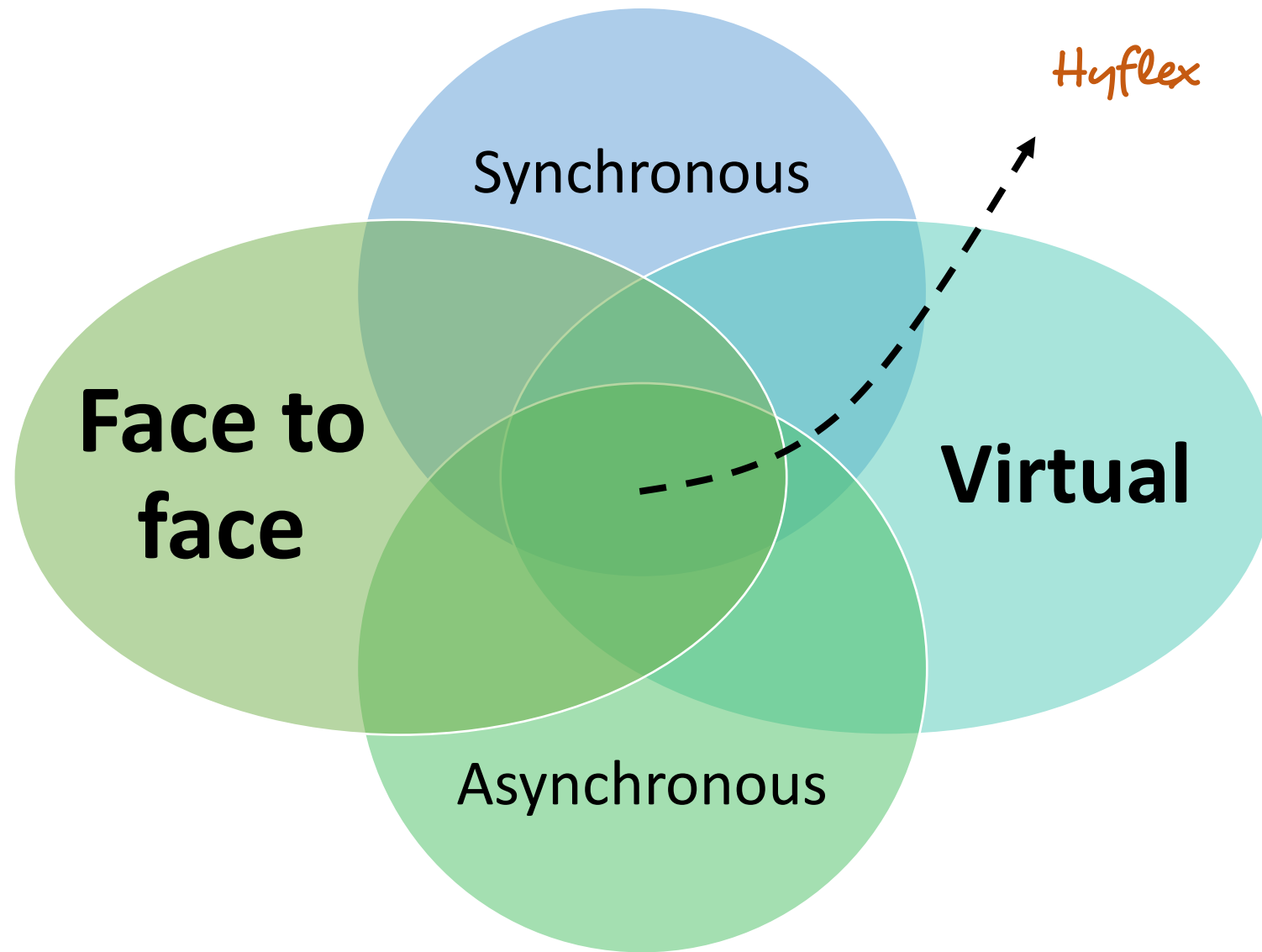
Hyflex

Why we need to offer Hyflex Learning

1 **Expensive opportunity**

- Attending college or university is an overwhelming and expensive opportunity for many students.

2 **Diversity of our students**

- Diversity of our students has changed over time.
- Allow for schedulers to expand class sizes or offer more courses in the same number of classrooms

3 **Adult Learners**

- The percent of adult learners enrolling in undergraduate programs continues to rise (NCES, 2021).

The Foundation of Future Workforce
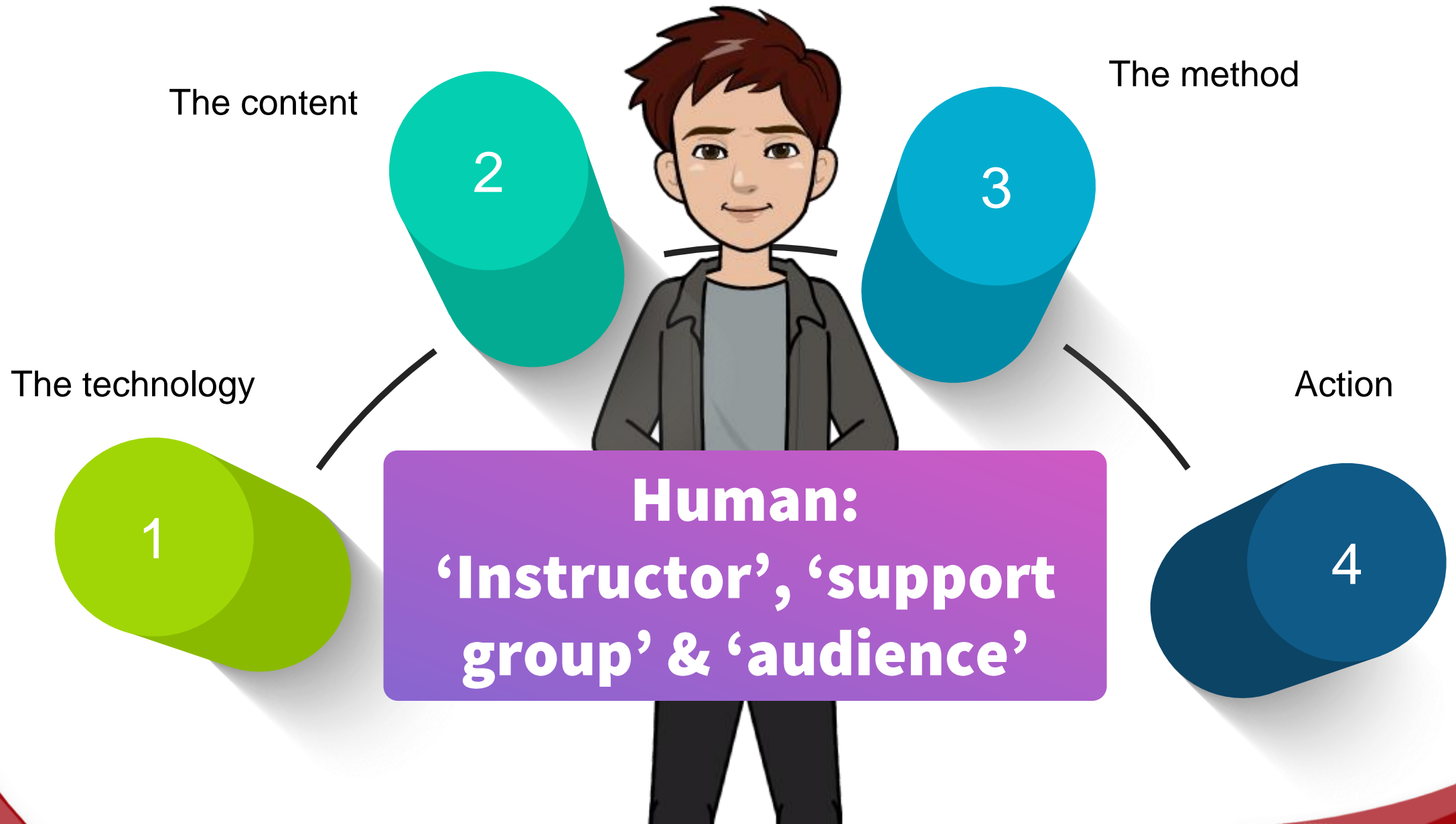
What is the direction of your character's role in this life?

Pilot • Copilot • Passenger

DR. MOHD SHAHRIL NIZAM SHAHAROM

Pensyarah Kanan
Jabatan Kurikulum dan Teknologi Pengajaran
Fakulti Pendidikan
Universiti Malaya.

www.drsn.pro DRSN drSN.pro drSNpro drSNpro
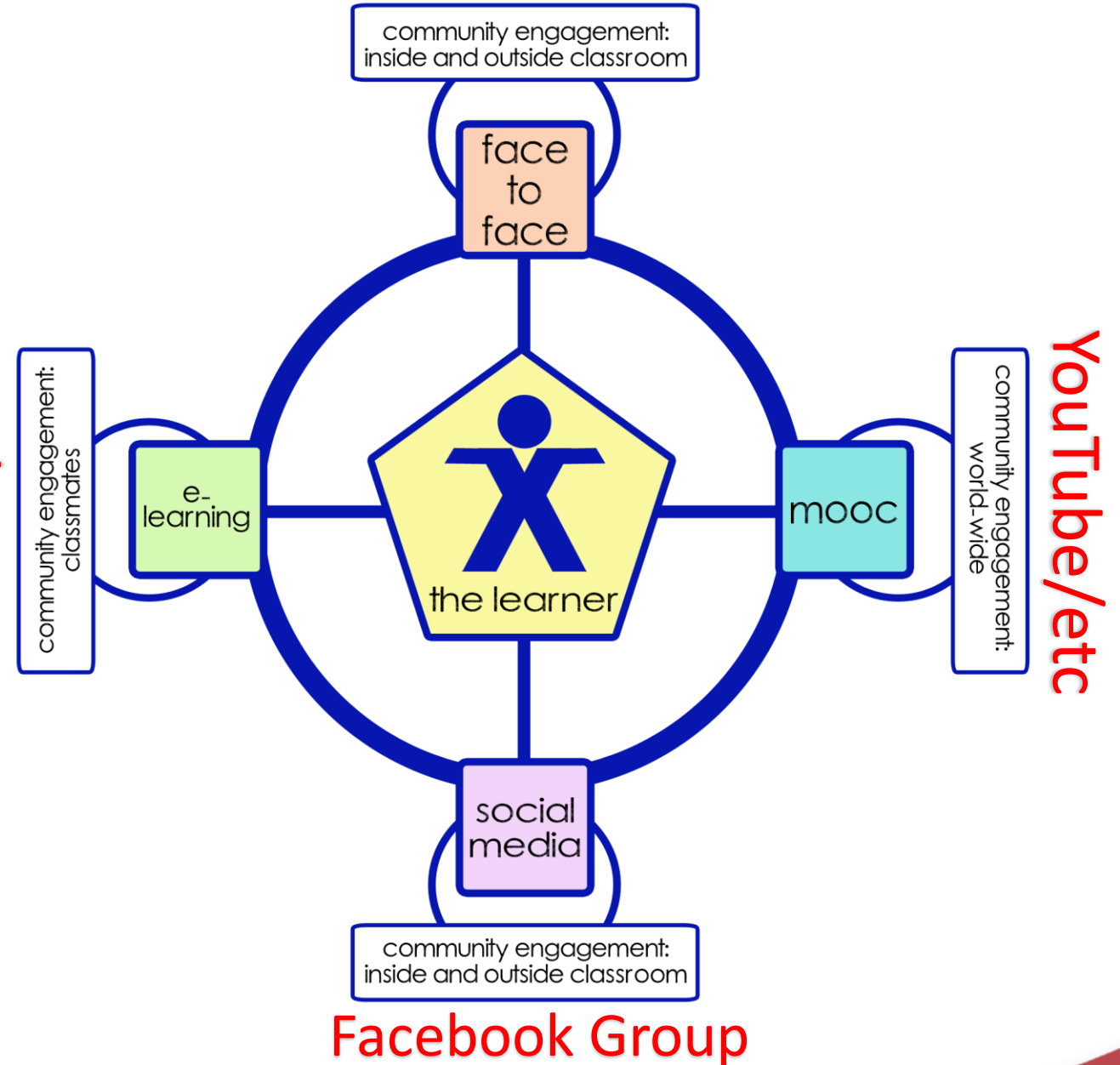
PERANAN GURU

MUALLIM
Penyampai Ilmu pengetahuan

MURSYID
Pembimbing jiwa dan kalbu

MUDARRIS
Penunjuk cara

MUADDIB
Pembentuk adab pekerti

MURABBI
Pendidik jasmani emosi, rohani dan intelek

MUJAHID
Pejuang dan penegak kebenaran

There are only two options: **make progress** or **make excuses.**

I hope this sharing will give us new ideas in maximizing the potential of our KESAN to improve our educational practices.
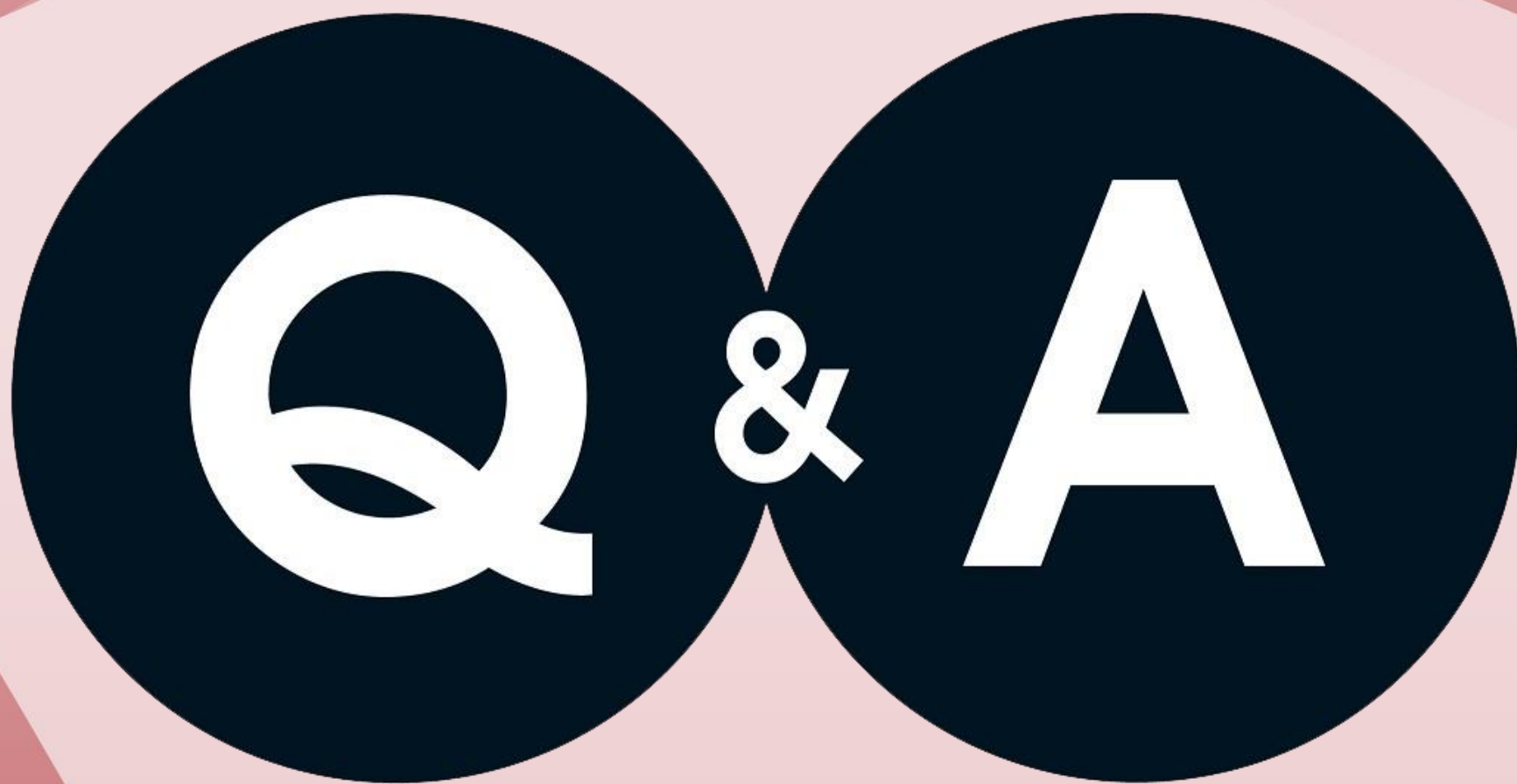
Thank You