

# #01: RETHINKING TEACHING, REDESIGNING LEARNING & EDUCATION 4.0

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## FEATURES OF FUTURE UNIVERSITY MODEL

Table 3.1: 7 Features of 4-Quad Future University Model

FEATURES	NO CHANGE TRADITIONAL BRICK & MORTAR UNIVERSITY	MARGINAL CHANGE JUKEBOX UNIVERSITY	ADAPTIVE CHANGE UBERISED UNIVERSITY	RADICAL CHANGE NANO CERTIFICATION
FACULTY MEMBERS	Professors and lecturers	Professors and lecturers	Mobilise/freelance professors & lecturers	Professional practitioners / experts in the field of study
LEARNING MATERIALS	Books and journals	Books, journals, blended learning, MOOCs 4.0	MOOCs 4.0	User generated contents
KNOWLEDGE PHILOSOPHY	Specialisation and sub-specialisation	Specialisation and sub-specialisation	Adaptive, embedded, Appreciation of social, cross-disciplines	Integration of cross-disciplines, appreciation of knowledge and wisdom
STUDENTS	School leavers and mid-career mobility	School leavers and mid-career mobility	School leavers, mid-career mobility and lifelong learners	Lifelong learners, early and mid-career, knowledge seekers Basic education and higher education combined
LEARNING VENUES	Campus and internet	Multiple campuses and internet	Multiple campuses, industry and internet	No physical campus needed, industry and internet
LEARNING MODELS	Lectures, tutorials, labs and studios	Lectures, tutorials, labs and studios	MOOCs 4.0, on-demand courses	Online lectures, peer teaching, students as MOOCs 4.0 co-creators
ACADEMIC OUTCOMES	Academic certificate and expertise	Academic certificate and expertise	Academic certificate from multiple universities, e-Portfolio	Certification by professional bodies/ community / industries/ e-Portfolio

Source: Framing Malaysian Higher Education 4.0 Future-proof Talent (MOHE, 2018)

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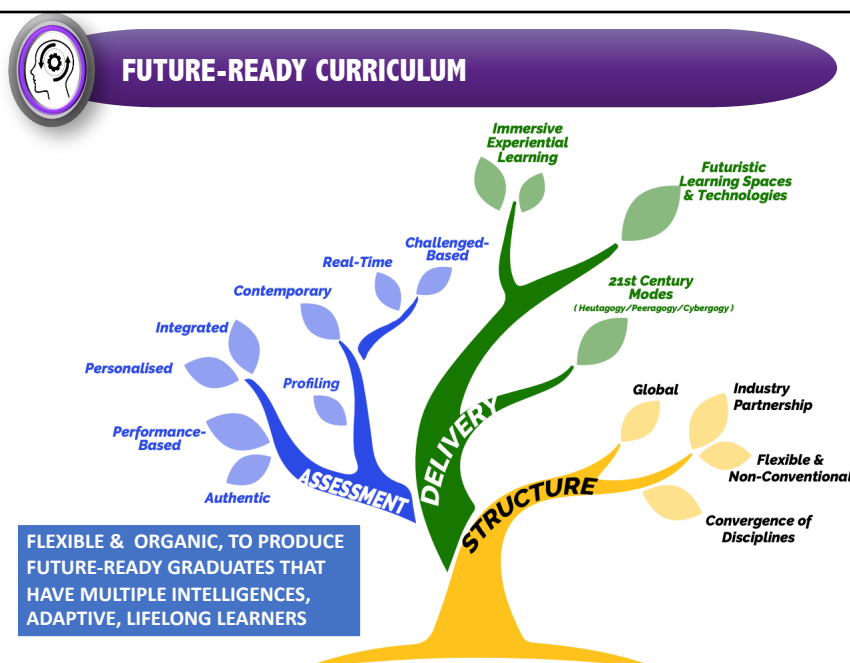


Figure 4.3 Fluid and Organic Curriculum Structure

Source: Framing Malaysian Higher Education 4.0 Future-proof Talent (MOHE, 2018)

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## New Roles

Challenges of future LnT must be turned into opportunities for change!

### \*Changes of Organizational Structures:

- New Business Models
- Enhancing Interdisciplinary
- New concepts of faculties & departments

### \*Changes of learning:

- Personalized and Adaptive Learning
- Massive, Crowd-based learning
- Distance Learning, Learning on-demand

### \*Changes of Accreditation Procedures:

- New roles of examination offices
- Flexible Curriculum of Degree Programs
- Encourage the use of Organic Curriculum

### Changes of Thinking:

- Data-driven decision making and thinking
- Innovative-based thinking
- Humanization of technology thinking

### \*Changes of Teaching Methods:

- Learning Spaces, Futuristic Learning Spaces & Advanced Technology in L&T
- Flipped Classroom, case-based, problem-based, Course-less structure

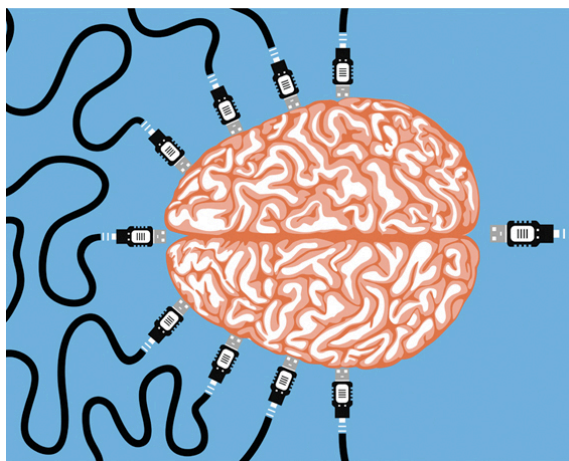
### Changes of Assessment Methods:

- Holistic, Authentic
- Personalized-based Assessment
- Real-time, Contextual, Integrated

Source: \*Partly Adapted from Sabina-Jeschke, Engineering Education for Industry 4.0 (2016)

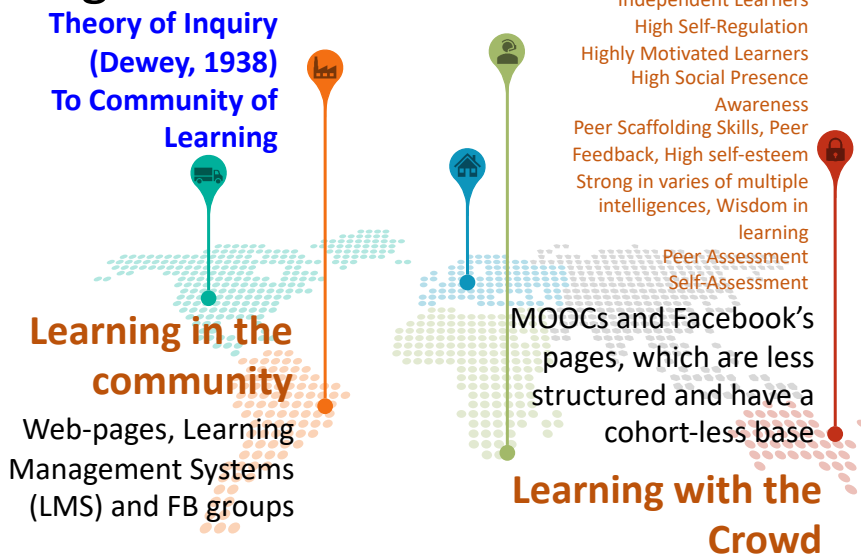
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## Tech is altering our brains...



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## Learning Evolution



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### Learning with Community

- LMS, web-based, FB group

### Learning with Crowd

- MOOCs, FB Page

Community vs Crowd!

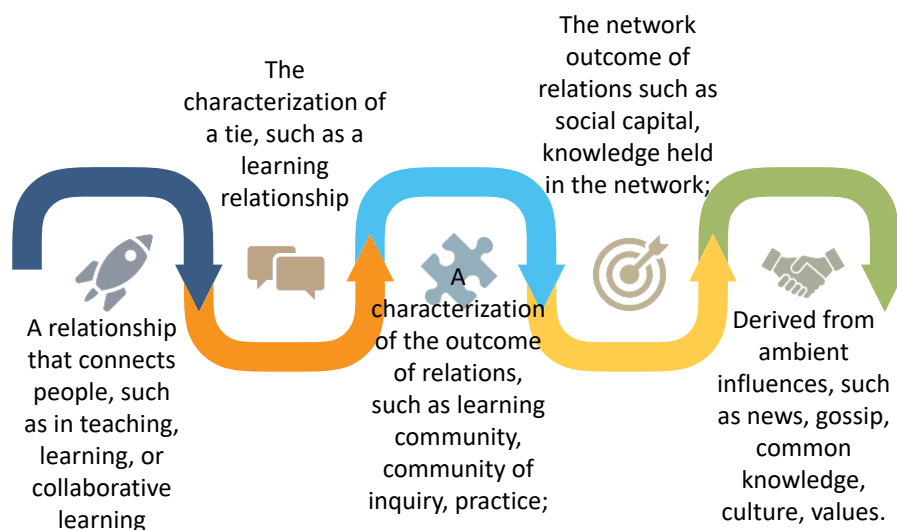
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## Crowd-Sourced Learning Skills

- Independent Learners
- High Self-Regulation
- Highly Motivated Learners
- High Social Presence Awareness
- Peer Scaffolding Skills, Peer Feedback
- High self-esteem
- Strong in varies of multiple intelligences
- Wisdom in learning
- Peer Assessment
- Self-Assessment

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## New Learning Perspectives



Haythornthwaite &amp; de Laat, 2014

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## Learning is...

LEARNERS  
WILL INTERACT  
WITH CONTENT,  
EXPERTS,  
PEERS

A SOCIAL  
NETWORK  
RELATION

THE CROWD IS  
MASSIVE AND  
COMPLEX

INTERACT WITH  
SOCIETIES,  
ENVIRONMENTS,  
TECHNOLOGIES  
AND  
SURROUNDINGS

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## “New” Learning Theories

Situated  
Cognition



02  
Capability  
of Brain

Distributed  
Cognition

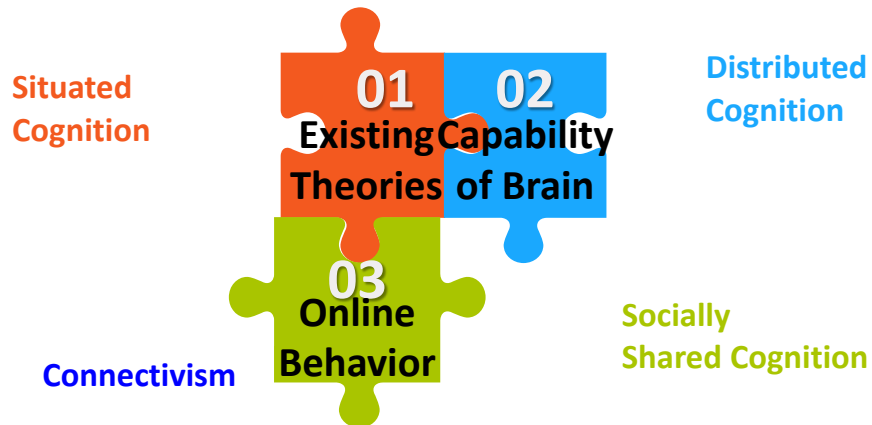
Connectivism



Socially  
Shared Cognition

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## “New” Learning Theories



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## Existing Learning Theories

Behaviorism

Cognitivism

Constructivism

## Digital Age

Connectivism



Learning is a process of reacting to external stimuli



Learning is a process of acquiring and storing information



Learning is a process of constructing subjective reality based



Learning is a process of connecting nodes or information sources

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Top 200 Tools for Learning 2019	
Top 10	YouTube, Google, P, Twitter, LinkedIn, Microsoft, W, WordPress, Zoom
11-20	Ti, slack, LinkedIn Learning, WhatsApp, X, Box, Facebook, Skype, Articulate
21-40	Kahoot!, N, Camtasia, TED, Snagit, Trello, Udemy, Padlet, Diigo, S, C, Y, CP, O, S, ISpring
41-60	TweetDeck, Ps, Instagram, Moodle, B, Coursera, H-P, HiHaHo, Workplace
61-80	Audible, Vime, Vimeo, Powtoon, K, FLSP, VYND, Wokelet, Id
81-100	Sp, Pr, Quizlet, Screencast-O-Matic, B, Biteable, G Suite, Ae
101-120	edX, Future Learn, AU, F, Quora, 3i, glide, Loom, Paxoby, B, Google Sites, WR, Lectora, Ruzer, Google Alerts
121-140	Codecademy, Deepl, q, totara, Scoop, Axqify, B, Google Sites, WR, Lectora, Ruzer, Google Alerts
141-160	Newspring, b, PBWORKS, we, nearpod, MindTools, D2L, EdCast, D2L, EdCast
161-180	Gomo, glisser, e, jive, zapier, Alison, Quizizz, edcast, CRONYCLE
181-200	docebo, SAP, easelly, mahara, fleeq, Cornerstone, LearnDash, thinkific, Wix, BlueJeans
<p>This list was compiled by Jane Hart of the Centre for Learning &amp; Performance Technologies from the results of the 13<sup>th</sup> annual learning tools survey and published on 18 September 2019</p> <p><a href="http://TopTools4Learning.com">TopTools4Learning.com</a></p> <p>Permission to re-use this image is granted provided full attribution remains</p>	

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## Paradigm Shift of Research Focus in LnT (through technology; social media, LRS, LA)

- **Who** learns from whom?
  - Who talks to, gives help to, collaborates with whom?
- **What** do they learn from each other?
- **Which media** support which kinds of learning?
- What **outcomes** do these relations build?
  - Access to resources Trust, mobility, equity, etc.
- What **benefit** accrues to the network?
  - social capital, shared knowledge, resources
- How do **resources flow** in the network

Source: Haythornthwaite (2014)

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# #01: BLENDED LEARNING OVERVIEW

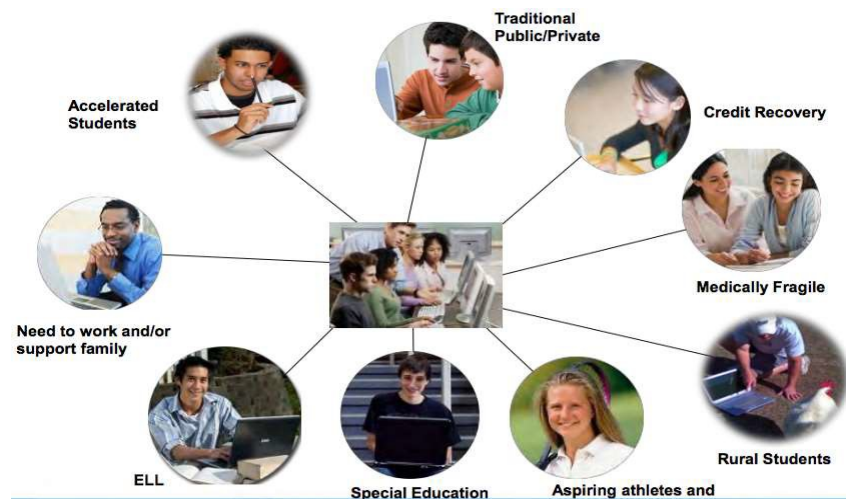
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## Understanding the ODL Learner Profiles

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## ODL Learner Profiles

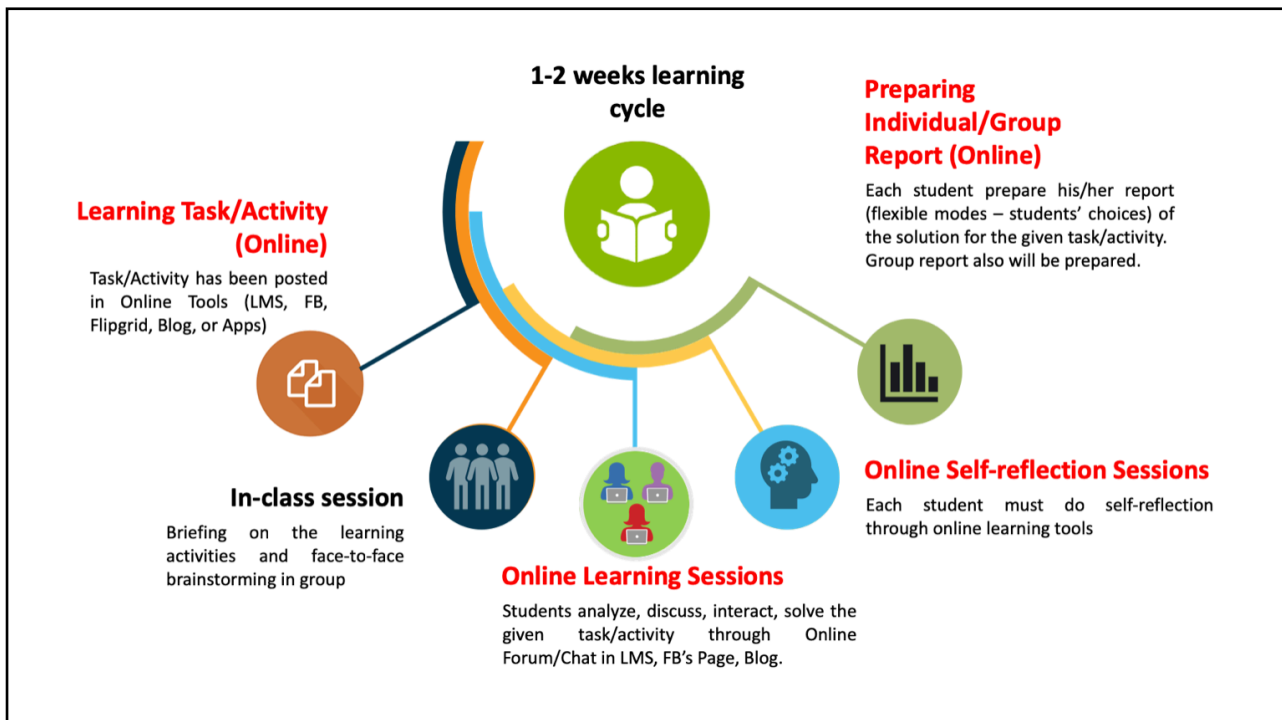


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## Tips

- Start with blended learning activity
- Get familiar with e-learning tools – forum, chat, quiz, choice – Asynchronous communication tools
- Plan blended learning cycle

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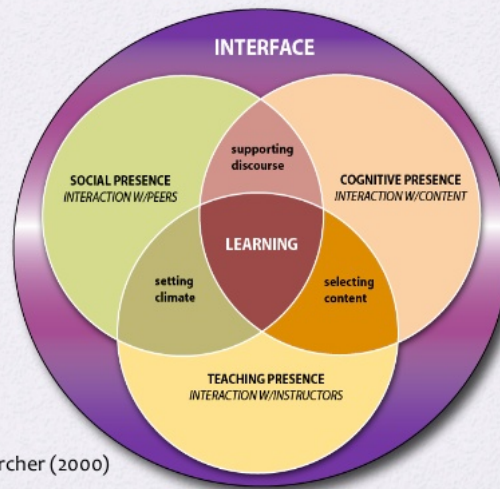
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## Engagement in Online Learning

- Online Learning without engagement is like a car without an engine.
- Engagement - behavioral, cognitive, and affective (emotion, motivation)
- How to engage learners in online learning??
- Learning activities and environment must be interesting.

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## Community of Inquiry (COI) Model of Engagement



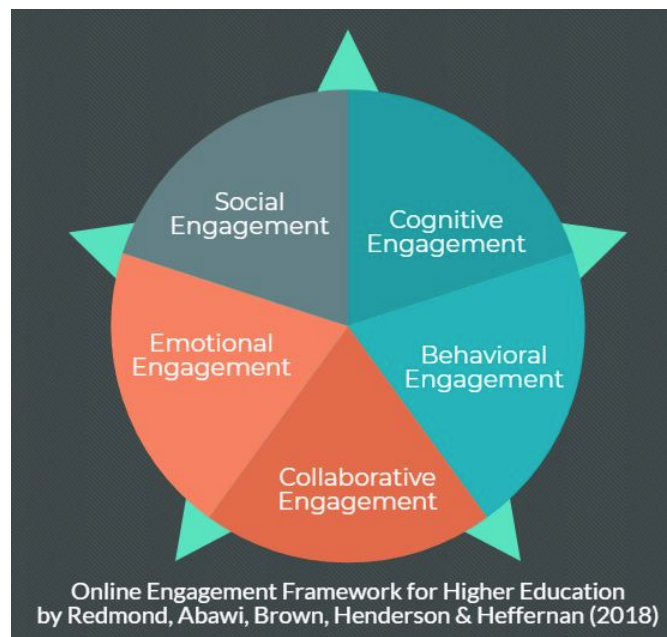
Garrison, Anderson & Archer (2000)

Zoraini Wati Abas

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26-28 Februari 2015

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## Tips to Maximize Engagement in E-learning

**TIP**

### Make learning collaborative


In order to bring in a collaborative environment in online modules, you can begin by designing assignments targeted at encouraging discussions.



**TIP**

### Keep the content simple and relevant


Use bullet points to make the content look crisp, relevant and comprehensible.



**TIP**

### Avoid intricate graphics and images


A good graphic design pulls together all aspects of your content (font, color, shapes) and adds fluidity to the overall course, making it both engaging and easy to navigate.



**TIP**

### Use gamification principles


Using gamified elements to your online modules and simulations to illustrate complex concepts, and providing instructions to the learner through illustration will engage online learning.



**TIP**

### Provide timely feedback

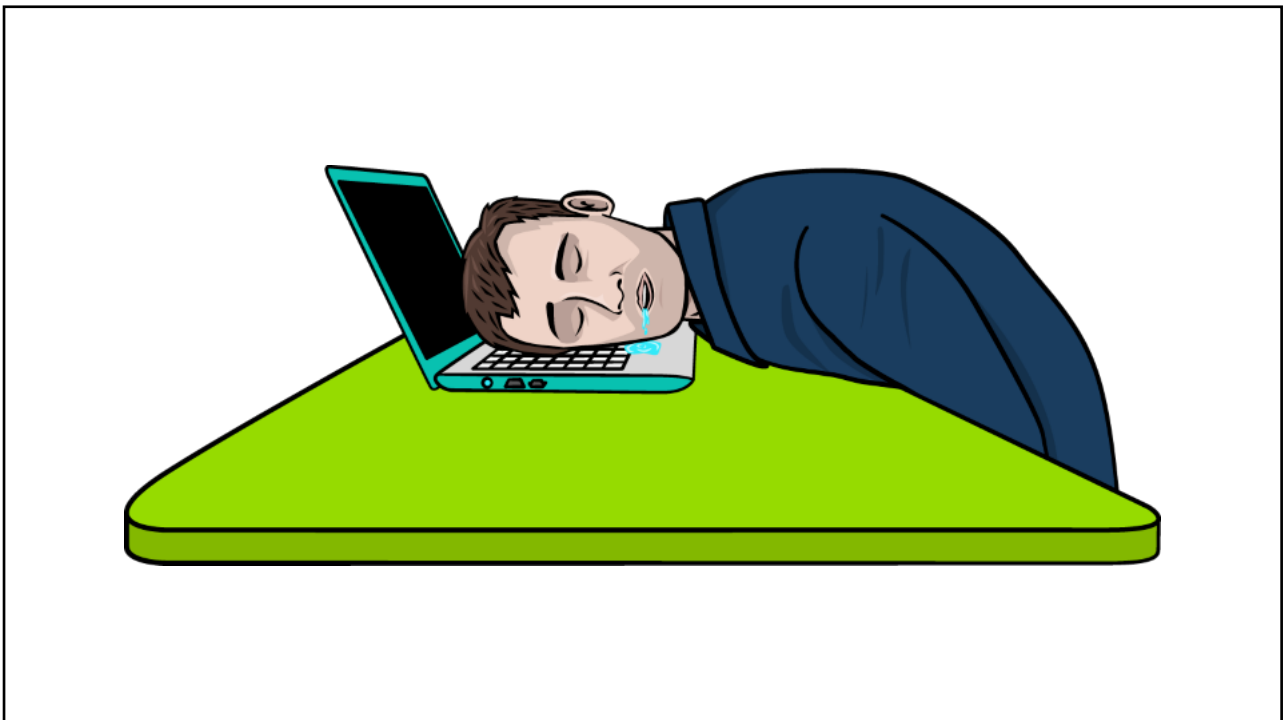
Provide instant feedback to your learners on their queries so that they can immediately identify which aspects of their learning they need to improve.



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## Challenges

- Internet line speed
- Totally new way of communication – speak loud and clear, word by word – don't speak too fast
- Patient – while waiting for responses from learners.
- New environment – new opportunities
- Your presence matters
- At starting point, you're the one who direct the students to the learning activities
- Always monitor where is every student – Are there in the forum, chat room or in Bigbluebutton session?
- Class preparation – a week before

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Thank You