HOW DO ONLINE CLASS DIFFER FROM FACE-TO-FACE CLASS ?

(Credit to Prof. Ir. Dr. Ahmad Kamal Ariffin.
Universiti Kebangsaan Malaysia)

4 KEY ELEMENTS OF TEACHING EXPERIENCE

LEARNERS

ENVIRONMENT
Context
(Where, when, whom, how?)

KNOWLEDGE
Content & Resources
(What knowledge, skills, attitude?)

responsible for

responsible for

MENTOR
Lecturer
(Learning designer, director, supporter, assessor)

UNIVERSITI PUTRA MALAYSIA
AGRICULTURE • INNOVATION • LIFE

(Boettcher, 2003-2016)
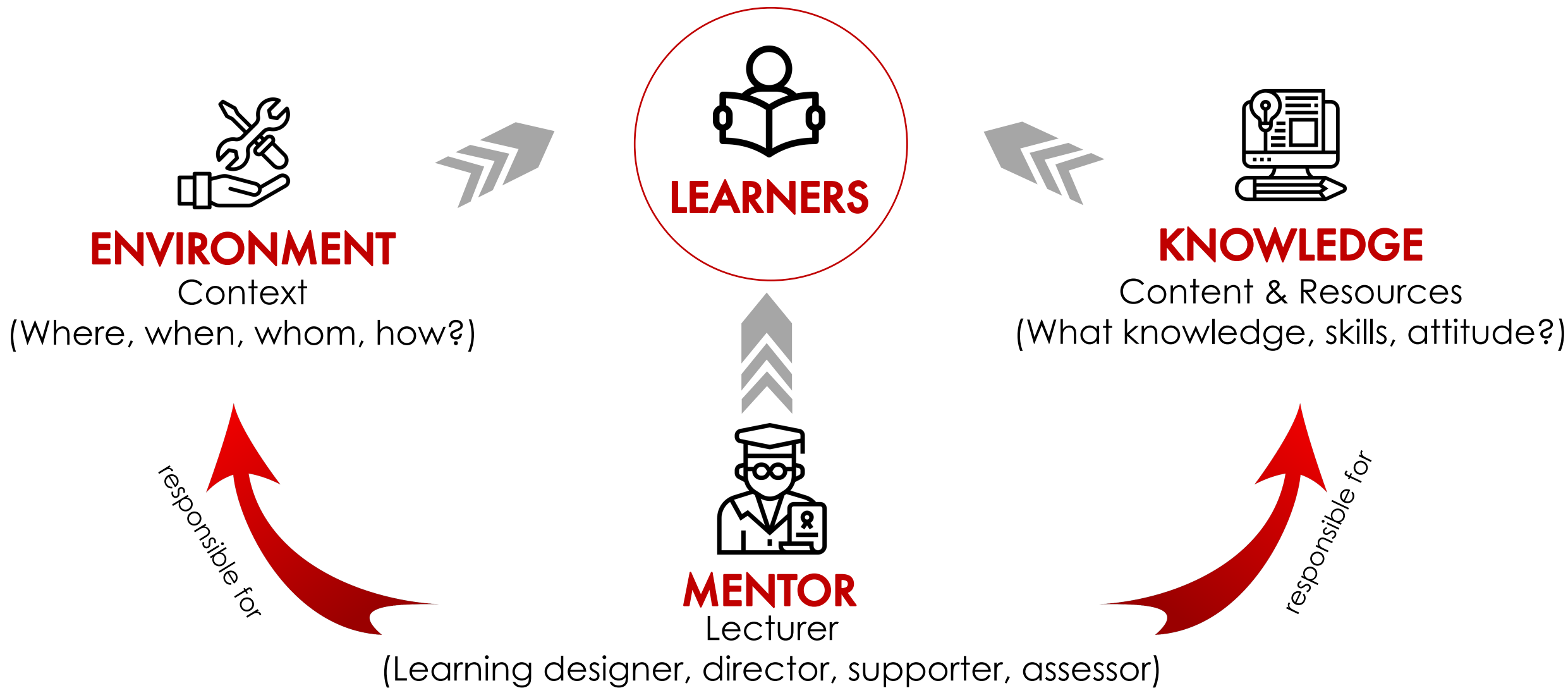
HOW DO ONLINE CLASS DIFFER FROM FACE-TO-FACE CLASS ?

MENTOR
- ✓ The faculty role shifts to more coaching, guiding, and mentoring
- ✓ Assessment is continuous

LEARNERS
- ✓ Learners are more active and direct more of their own learning experiences

KNOWLEDGE
- ✓ Content resources are flexible and virtually infinite

ENVIRONMENT
- ✓ Learning environments for gathering and dialogue are primarily asynchronous with occasional synchronous meetings

(Boettcher, 2003-2016)

SCOPE OF A LECTURER IN AN ONLINE CLASS

MENTOR

LEARNERS

KNOWLEDGE

ENVIRONMENT

Lecturer shifts to more coaching, guiding, and mentoring
- ✓ Prepare recorded/written mini-lectures and resource introductions
- ✓ Prepare facilitation and community-building experiences
- ✓ Monitor and guide students in their learning experiences

Assessment is continuous
- ✓ Continuous, multi-phased with community input rather than individual-focused
- ✓ Use a combination of:
  - ➤ automated quizzes
  - ➤ frequent postings in discussion forums
  - ➤ short papers, case study practices and analyses
  - ➤ customized projects

SCOPE OF STUDENTS IN AN ONLINE CLASS

MENTOR

LEARNERS

KNOWLEDGE

ENVIRONMENT

Learners are more active and direct more of their own learning experiences

- ✓ More emphasis on student choice and personal learning decisions
- ✓ Learners must do more thinking, writing, doing, sharing, reflecting, collaborating, and peer reviewing as part of a community of learners
- ✓ Involved in discussion forums with effective catalyst discussion questions

UNIVERSITI PUTRA MALAYSIA
AGRICULTURE ● INNOVATION ● LIFE

(Boettcher, 2003-2016)

SCOPE OF KNOWLEDGE IN AN ONLINE CLASS

MENTOR

LEARNERS

KNOWLEDGE

ENVIRONMENT

Content resources are flexible and virtually infinite
- ✓ Use variety of content resources
- ✓ Can be overwhelming for students - establish a weekly rhythm with regular, rigorous milestones
- ✓ Encourage students to suggest, contribute and create additional content resources

Give core concepts to students
- ✓ Concepts are not words, but organized and detailed knowledge clusters
- ✓ You don't have to give everything to students

(Boettcher, 2003-2016)

HOW MUCH CONTENT IS ENOUGH FOR ONLINE LEARNING?

SCOPE OF KNOWLEDGE IN AN ONLINE CLASS
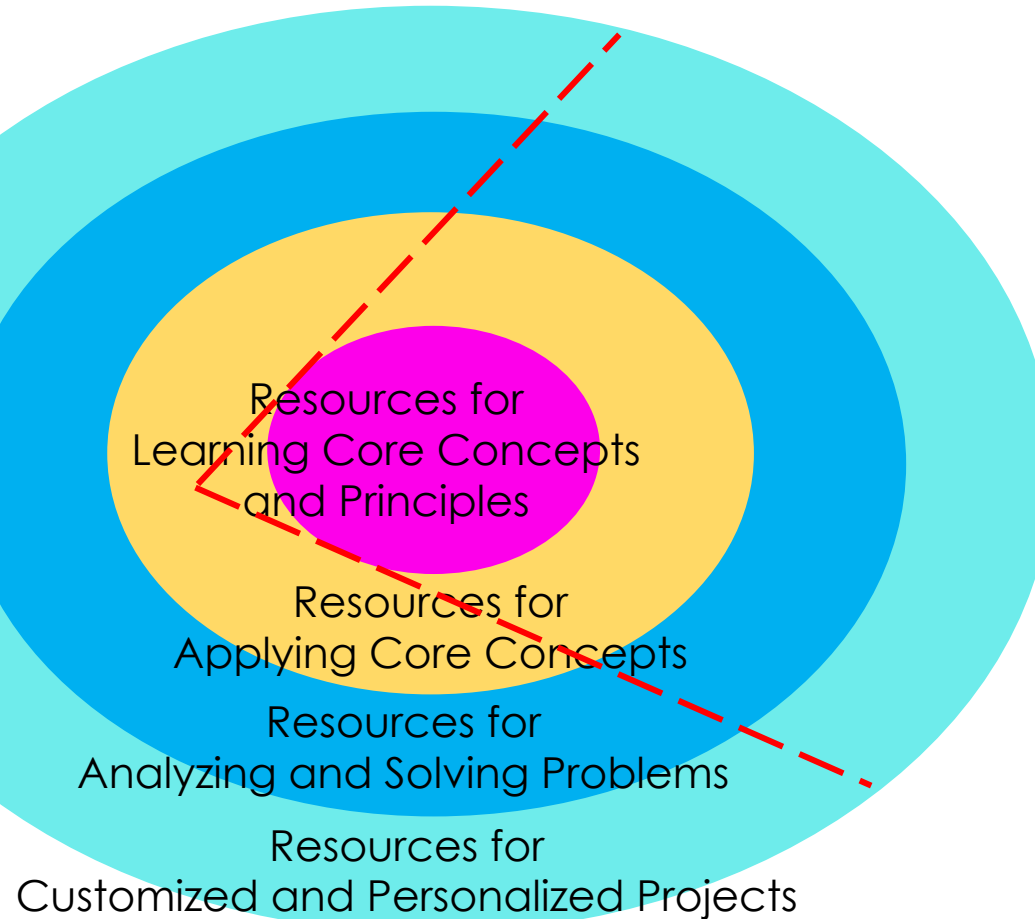
MENTOR

LEARNERS

KNOWLEDGE

ENVIRONMENT

OUR GOAL: Each student is to master a slice of the pie, but to be sure that the slice includes the whole of the center with the core concepts
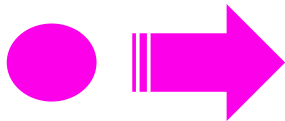
CUSTOMIZING CONTENT RESOURCES

Resources for Learning Core Concepts and Principles

Resources for Applying Core Concepts

Resources for Analyzing and Solving Problems

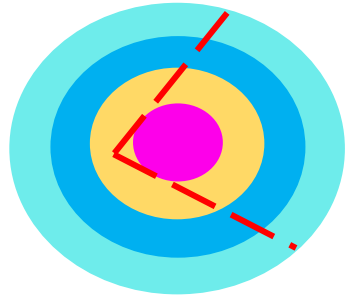Resources for Customized and Personalized Projects

As students move outwards from the core, students apply the core concepts in more complex scenarios. By the fourth layer, students direct their own experience and work on applying concepts to complex problems where solutions may or may not be able to be known.
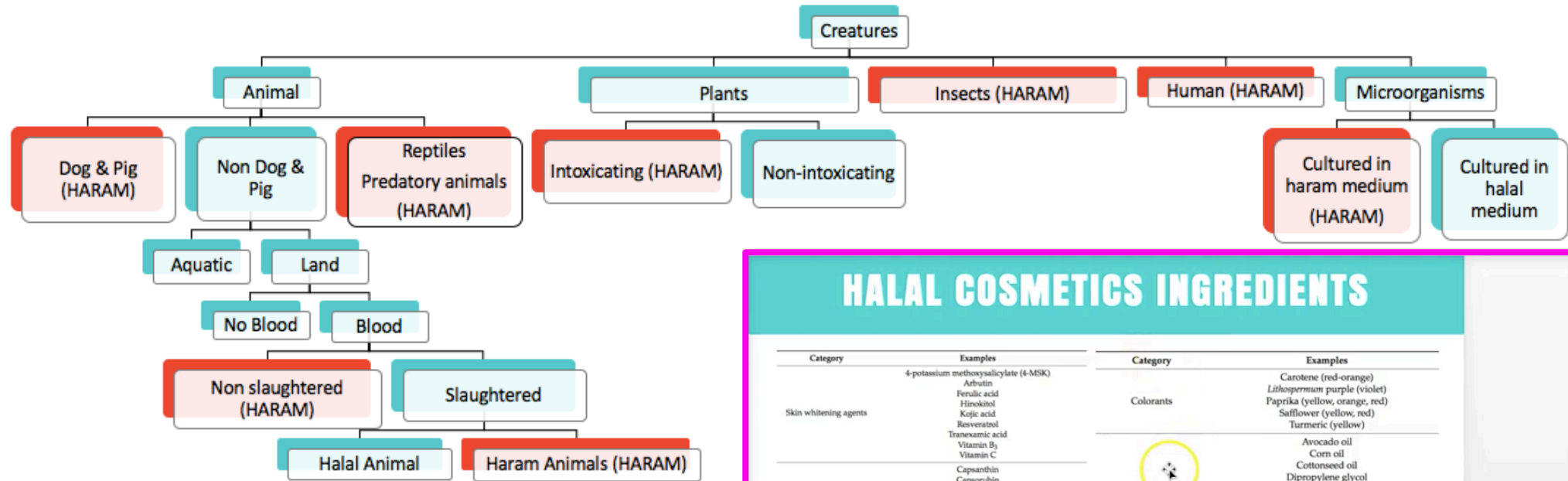
(Boettcher, 2003, 2007, 2010)

EXAMPLE OF CUSTOMIZING CONTENT RESOURCES

STEP 1- Provide learning core concepts & principles
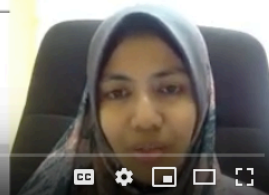

Resources for Learning Core Concepts and Principles

NAJS TREE (ORGANISMS)

Creatures
- Animal
  - Dog & Pig (HARAM)
  - Non Dog & Pig
    - Aquatic
    - Land
      - No Blood
      - Blood
        - Non slaughtered (HARAM)
        - Slaughtered
          - Halal Animal
          - Haram Animals (HARAM)
  - Reptiles Predatory animals (HARAM)
- Plants
  - Intoxicating (HARAM)
  - Non-intoxicating
- Insects (HARAM)
- Human (HARAM)
- Microorganisms
  - Cultured in haram medium (HARAM)
  - Cultured in halal medium

IMPORTANT: THIS NAJS TREE IS APPLICABLE UNDER

HALAL COSMETICS INGREDIENTS

Category	Examples	Category	Examples
Skin whitening agents	4-potassium methoxysalicylate (4-MSK) Arbutin Ferulic acid Hinokitol Kojic acid Resveratrol Tranexamic acid Vitamin B$_3$ Vitamin C	Colorants	Carotene (red-orange) Lithospermum purple (violet) Paprika (yellow, orange, red) Safflower (yellow, red) Turmeric (yellow)
Anti-aging agents	Capsanthin Capsorubin Delphinidin Gallic acid Genistein Glycyrrhizin Lutein Phloretin Salidroside Sclareol Trans-communic acid (TCA) Umbelliferone Vitamin B$_3$	Solvents	Avocado oil Corn oil Cottonseed oil Dipropylene glycol Jojoba oil Liquid paraffin (mineral oil) Polyethylene glycol Safflower oil Sesame oil Water
Thickeners	Carboxymethyl cellulose Carnauba wax Carrageenan Petrolatum		

6:07 / 35:17

STEP 2- Provide resources for applying core concepts
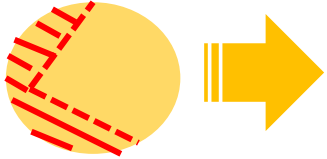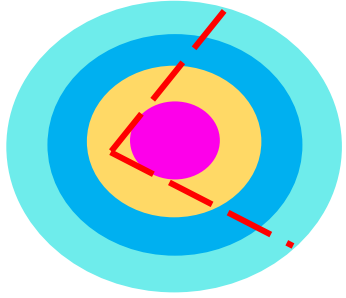
Resources for
Applying
Core Concepts

Quiz

Company Maju is planning to apply for Malaysia halal certification. During audit, the auditor from JAKIM asked for the documentations of water filtering system in the processing line.

How does water filter affect the halal status of the product?

STEP 3- Provide resources for analyzing and solving problems
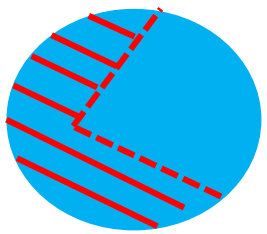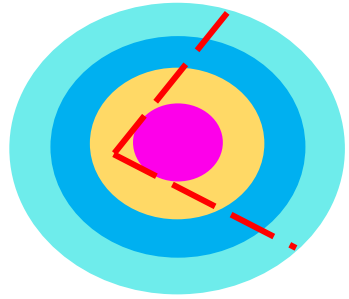
Resources for Analyzing and Solving Problems

Halal ingredients identification

This is an individual assignment.

Find 2 products (food, cosmetic or pharmaceutical product) with more than 6 lists of ingredients. These products should have a very vague and unclear list of ingredients. Note that the two products chosen should be in the same category (If you choose cosmetics, you should have 2 cosmetic products).

Based on the information from the list of ingredients, write a simple report (max 5 pages) that consists of the item below:

i) Photo of each product

ii) List of ingredients

iii) Suggest a way of making the list of ingredients clearer.

iv) If there are any syubhah ingredients, list the possible halal ingredients to replace it.

v) Final thought and reflection of the activity.

Due date is on the 24th March 2020.

STEP 4- Provide resources for customized and personalized projects

Resources for Customized and Personalized Projects
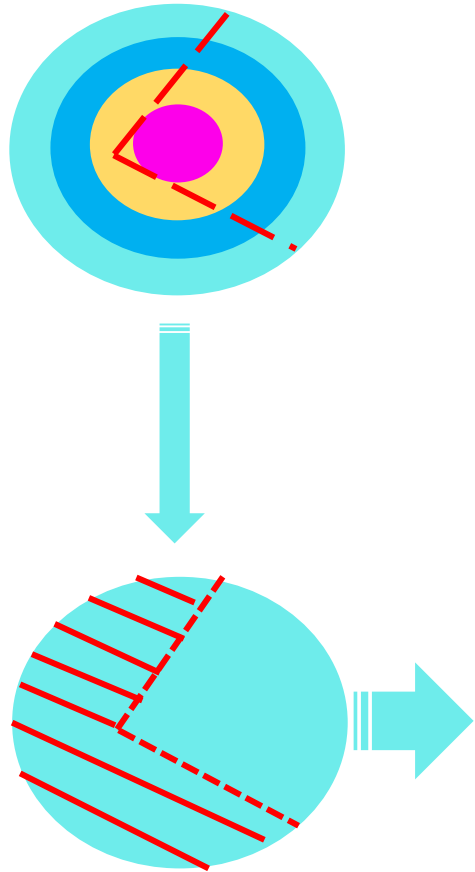
Mini Project

Assume that you are a halal executive in a food manufacturing company.

a) Choose a food product that has high risk in having non-halal ingredients.

b) Design a standard operating procedure on ingredient screening of the food.

c) Visually, draw a flow chart of the processing steps.

d) Identify all the halal critical points in the processing procedures and come up with plan of action if any of the critical points were breached.

e) Present your mini project in an interactive video form and submit by 24th May 2020.
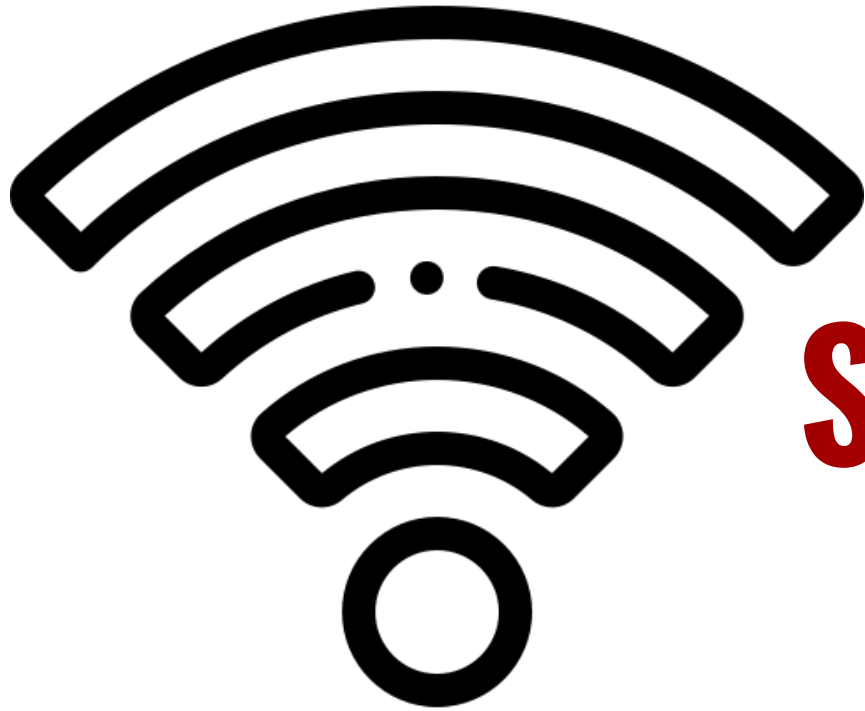
MENTOR

LEARNERS

KNOWLEDGE

ENVIRONMENT

Learning environments for gathering and dialogue are primarily asynchronous with occasional synchronous meetings

- ✓ Primarily asynchronous—available at different times
- ✓ Expect that learners reflect on what they have learned from the resource assignments before they come to class (online) to participate in the course activities, such as posting their reflections in the discussion areas
- ✓ Synchronous gatherings for
  - ➤ consensus-building discussions
  - ➤ question-and-answer sessions
  - ➤ peer critiques
  - ➤ collaborative project work

UNIVERSITI PUTRA MALAYSIA
AGRICULTURE • INNOVATION • LIFE

(Boettcher, 2003-2016)

WHAT ABOUT STUDENT'S INTERNET CONNECTION?

INTERNET BANDWITH

	Low	Medium	High
SPEED	Below than 1.5 Mbps	1.5 Mbps to 2.5 Mbps	More than 2.5 Mbps
APPS	**Group messaging** (e.g., Whatsapp, Telegram)	**PutraBLAST** **Gamification apps** (e.g., Quizizz, Kahoot) YouTube, FlipGrid, H5P	**Virtual Conference** (Big Blue Button, Zoom, Microsoft Team, Webex) **Google suite** (Doc, Slides, Drawing)
APPROACHES	Micro learning (slide as pdf, voice note, image with caption, text messages)	• Presentation slide • Interactive content • Survey • Quiz • Collaborative activities	• all approaches of low and medium bandwidth • **Virtual conference**
ACTION	1. Choose a focused content to learning outcome and save as image. Write description as caption and upload. 2. Create Q&A activity. 3. Respond to students' answers	1. Upload interactive learning content 2. Conduct collaborative activity 3. Create assessment using gamification apps 4. Respond to students' answers	1. Conduct virtual conference using various functions Conduct collaborative activity 2. Create assessment using gamification apps 3. Respond to students' answers

*Lecturers are encouraged to **conduct surveys** of students' internet access before sharing in order to plan for the development of virtual classes
*Please **check the internet bandwidth** on relevant apps like Ookla and speedtest.tm

BERILMU BERBAKTI
WITH KNOWLEDGE WE SERVE

by : Centre for Academic Development (CADe)

YOUR PLAN OF ACTION?

DO A SURVEY

Check the internet availability & speed

CHOOSE MODE OF TEACHING & LEARNING

This mode is based on the internet speed

CHOOSE SUITABLE PLATFORMS & MODE OF EXECUTION

Decide which online tools/apps to use

PREPARE THE CONTENT

Core concept, resources, assessments

EXAMPLE

Hi and assalamualaikum students. We will be conducting online class from 1st April-30th April 2020. I would like to do a survey on your internet availability and speed for choosing the right teaching and learning platform. Please give your answer based on the options below:

A: Good internet speed (Wifi or Data)

B: Medium internet speed (Wifi or Data)

C: Poor internet speed (Data)

Students
1. Azam -
2. Badrul -
3. Chuah Jia Yee -
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.

5:30 AM

Type a message

OTHER APPS FOR SURVEY
Google Form
Survey Monkey

ONLINE LEARNING DESIGN FOR COVID-19 PKP

Survey platform	Whatsapp
Internet speed	90% Low 10% Medium
Teaching & Learning Mode	90% asynchronous (Micro learning) 10% synchronous (Q&A session)
Apps	Whatsapp (Major platform) Loom (Screen recording) Clipchamputilities (Reduce size of video file)
Content	1 core concept video lecture (2-3 minutes) 2 complete notes (pdf) Multiple short audio lectures with a few important note screenshots (1-2 minutes) List of other resources (Websites, You Tube)
Assessments	• Quiz • Picture of mindmap (Handwritten or apps) • Find product in their house and relate with the topic (Picture & recorded audio) • Q&A and discussion in Whatsapp (1X synchronous – Ask ALL students to prepare with questions) • Case study (Submit via Whatsapp with students name as file name)

ONLINE LEARNING LESSON PLAN

TEACHING DATE	TOPIC	LESSON OUTCOME	BLOOM'S TAXANOMY (COGNITIVE, PSYCHOMOTOR, AFFECTIVE) & SOFT SKILLS	DELIVERY (Lecturer)	FACE-TO-FACE LEARNING HOURS	STUDENT LEARNING TIME	ASSESSMENT
6-12 April 2020	Introduction to International standards specification and Organization	1. Explain the International standards specification 2. Explain the International standards organization 3. Evaluate and recommend on causes of toxicant from diffent commodities	C2 C2 C5	Core concept mini lecture Notes Short audio lecture	0	2 h- Self Learning 30 min– Lecture	Quiz (LO1 & 2) Mind map (LO3)

Judith V. Boettcher · Rita-Marie Conrad

The Online Teaching

Survival Guide

SECOND EDITION

Simple and Practical Pedagogical Tips