Teaching the final-year Nursing students with Case-Based Learning (CBL)

Innovation and Effective Teaching during COVID_19

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Sharing Content

- Introduction of CBL
- CBL in N&HS
- How CBL is conducted?
  - CBL Process
  - Modifications during the pandemic
- Challenges & Students' feedback

Case Based Learning (CBL)

- A form of PBL
- Guided enquiry
- Designed to engage students in discussion of specific scenarios that resemble real clinical cases

(Moust, Bouhuijs & Schmidt, 2007; Srinivasan et al, 2007; Williams, 2005)

PBL vs CBL – an example

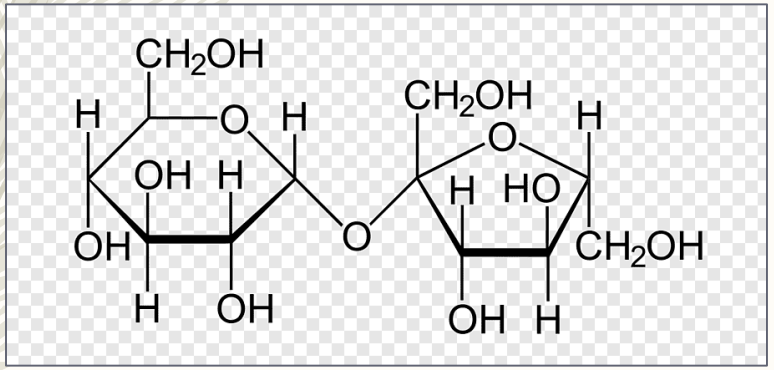
– POP cast

PBL VS CBL

In PBL

- "Problem" is presented
  - POP cast

- Students are allowed to have free flow of ideas & discussion



PBL vs CBL

In CBL

- A “case” is presented
- Discussion is guided, depends on your disciplines of study
  - Medical students
  - Physiotherapy students
  - Nursing students
  - …. etc

When & Why conducting CBL? School of N&HS

- Two BN final year courses
  - BN (Hon) General Health Care/ BN (Hon) Mental Health Care
- Goals:
  - Integrate theoretical knowledge & skills learnt in the past few years
    - *Bridge the gap between knowledge and practice*
  - Strengthen students' problem solving, clinical reasoning and decision making abilities
  - Prepare the students to become a registered nurse

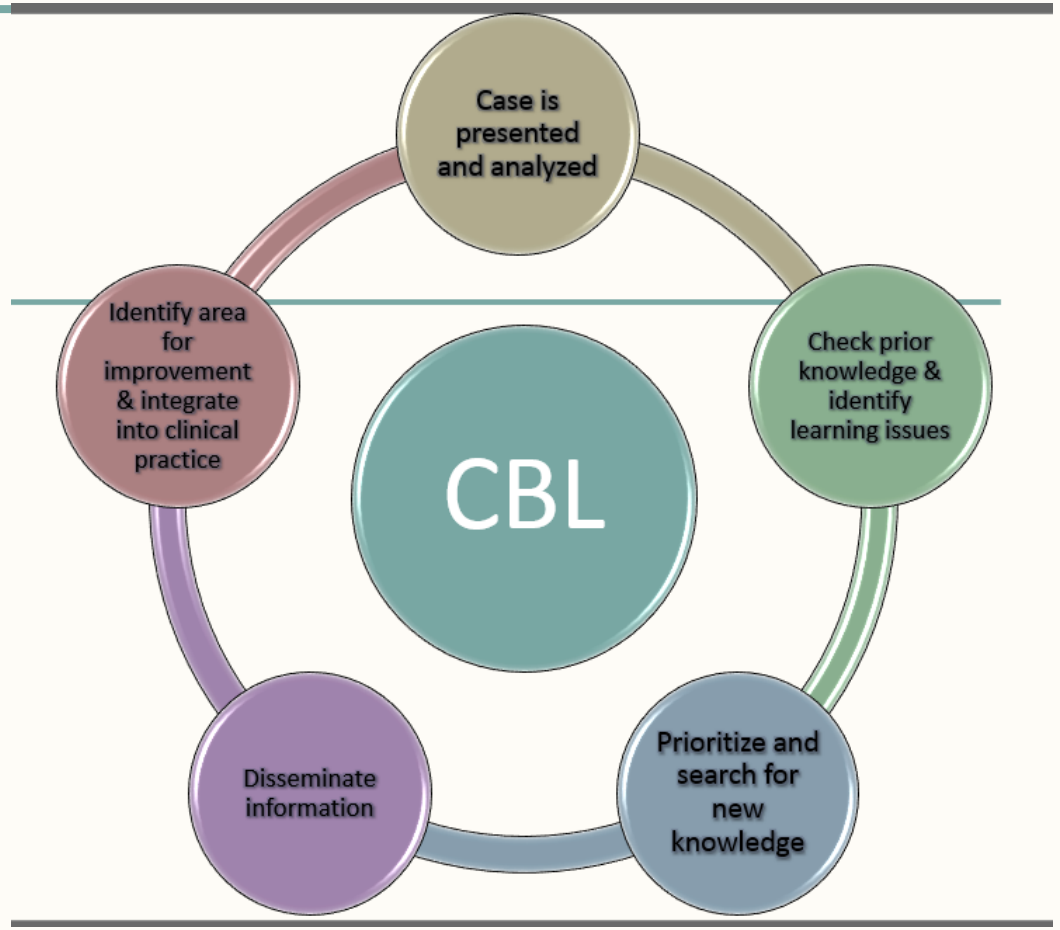
Who conduct CBL?

- Students
  - Leading roles
- Teachers

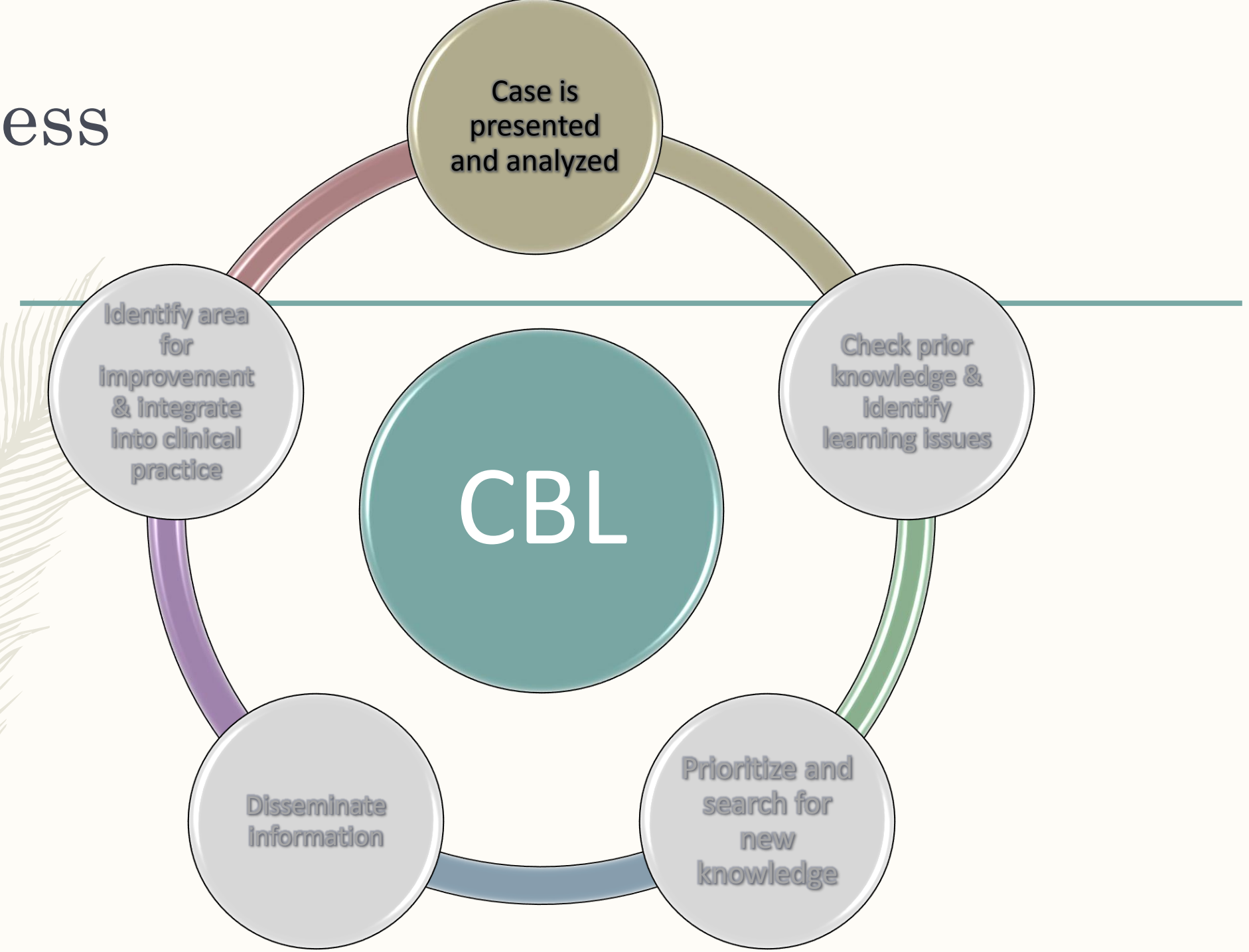
  Become facilitators

How to conduct CBL?

- Form small group with ~10 students/ group
- CBL process

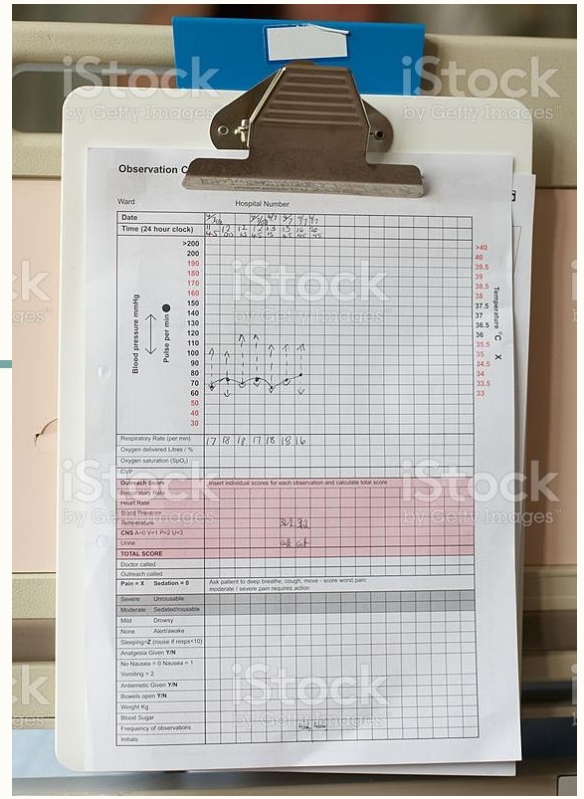


CBL Process

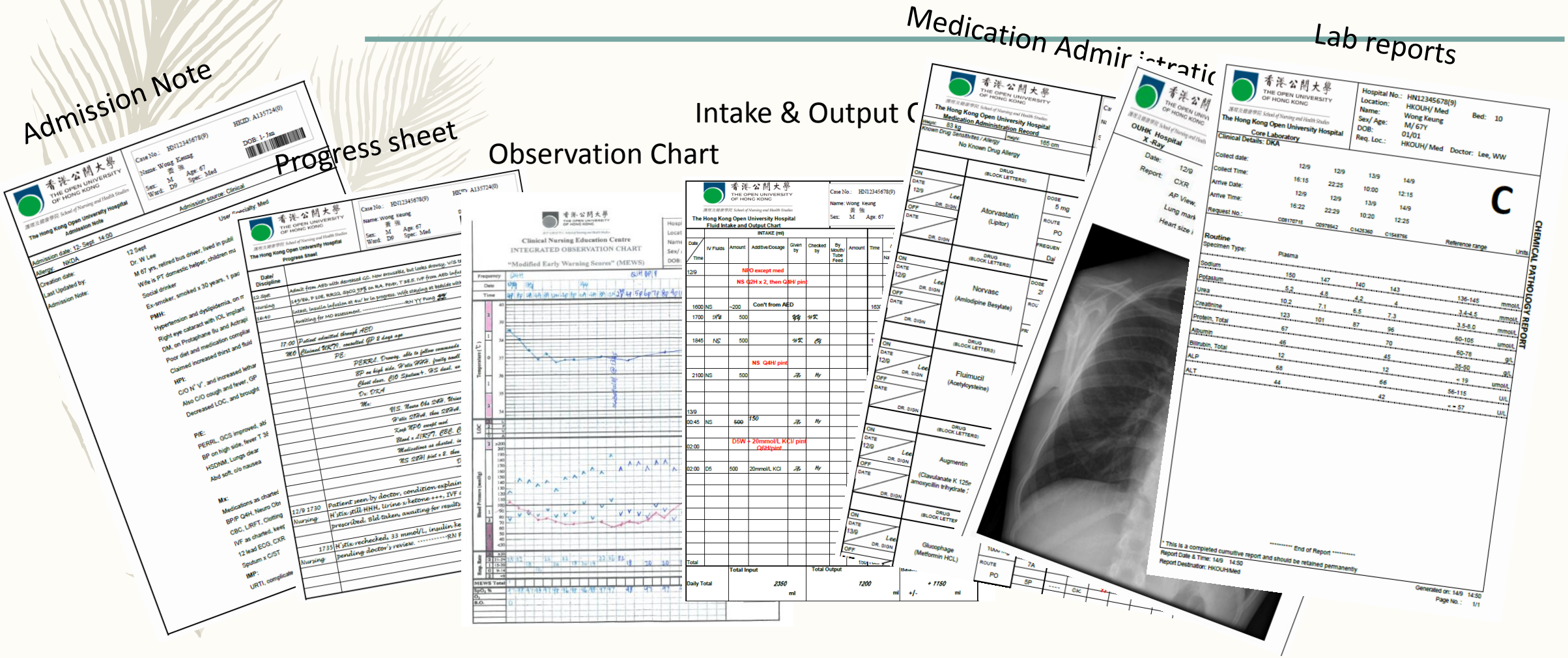

Case is presented and analyzed
Check prior knowledge & identify learning issues
Prioritize and search for new knowledge
Disseminate information
Identify area for improvement & integrate into clinical practice
CBL

Case

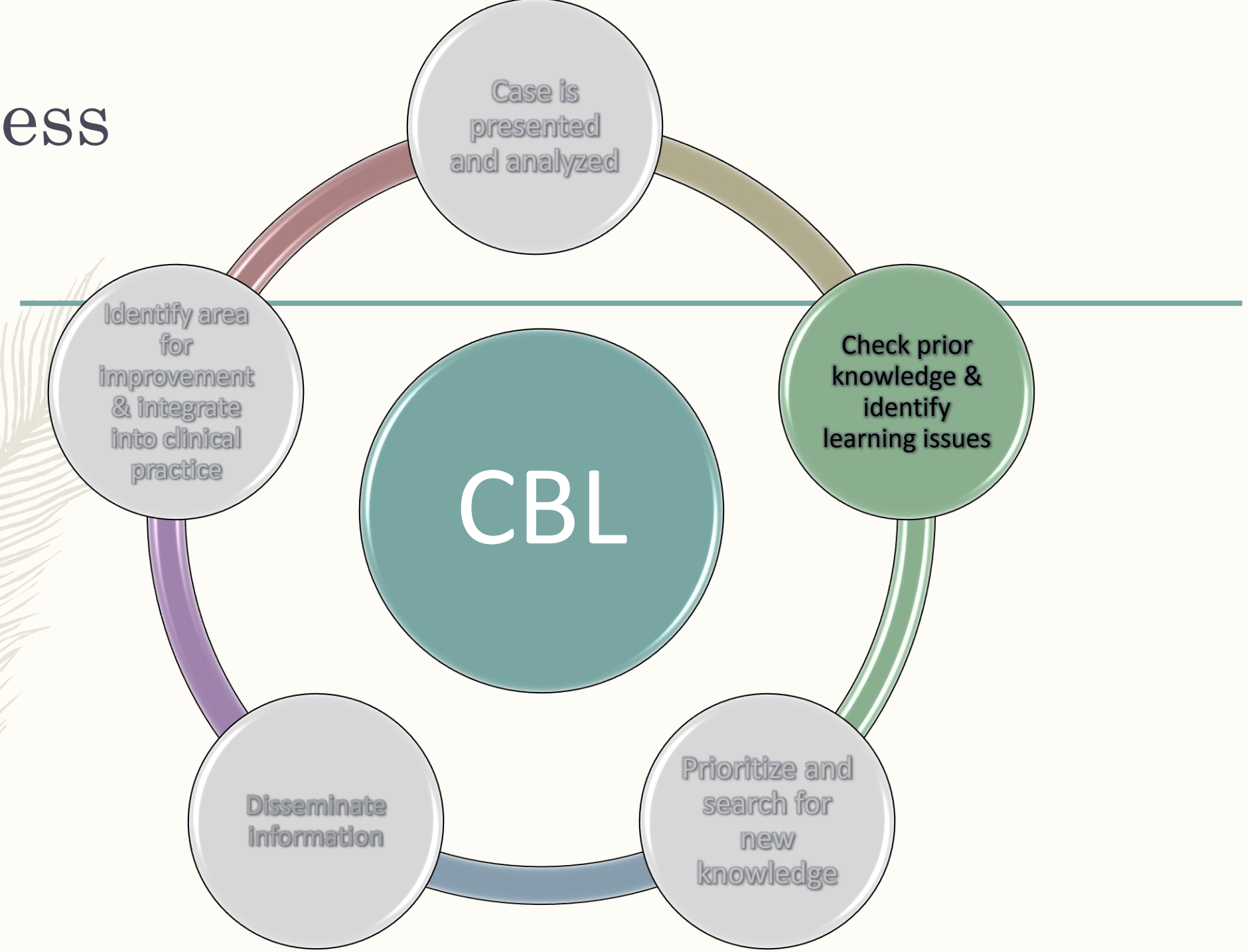
- Case is presented
  - In a form of scenario
  - Resemble a real clinical case as much as possible
    - *Patient's chart*



Authentic Case presented to students – in a form of patient's chart



CBL Process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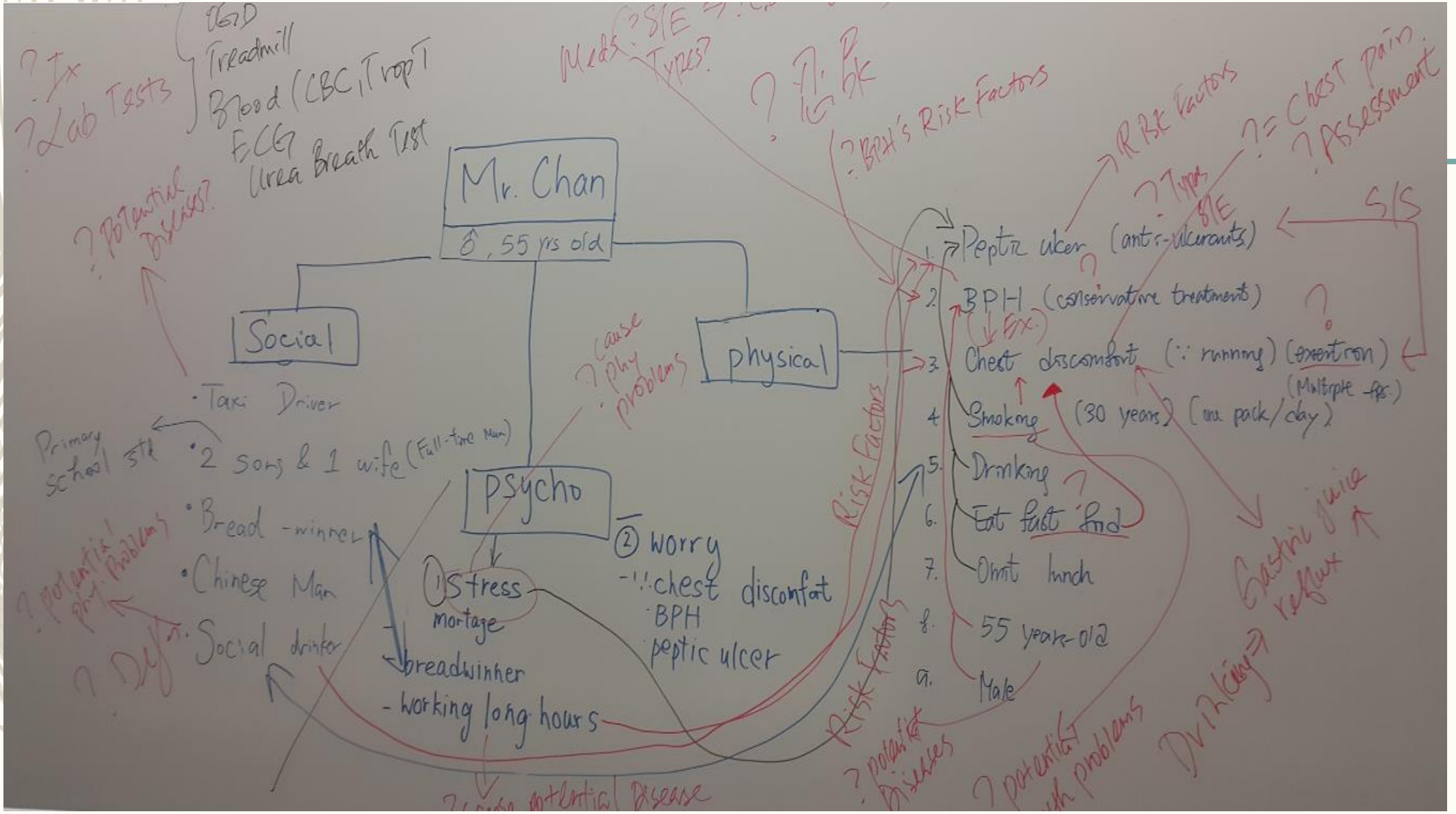
Guiding questions

- Prompt students for the discussion
  - Related to physical, psychological & social themes
- Provide guidance/ stimulations

- Allow the students to lead the discussions
- Drawing of mind maps are encouraged

Student Discussion

Students' sketch of the mind map

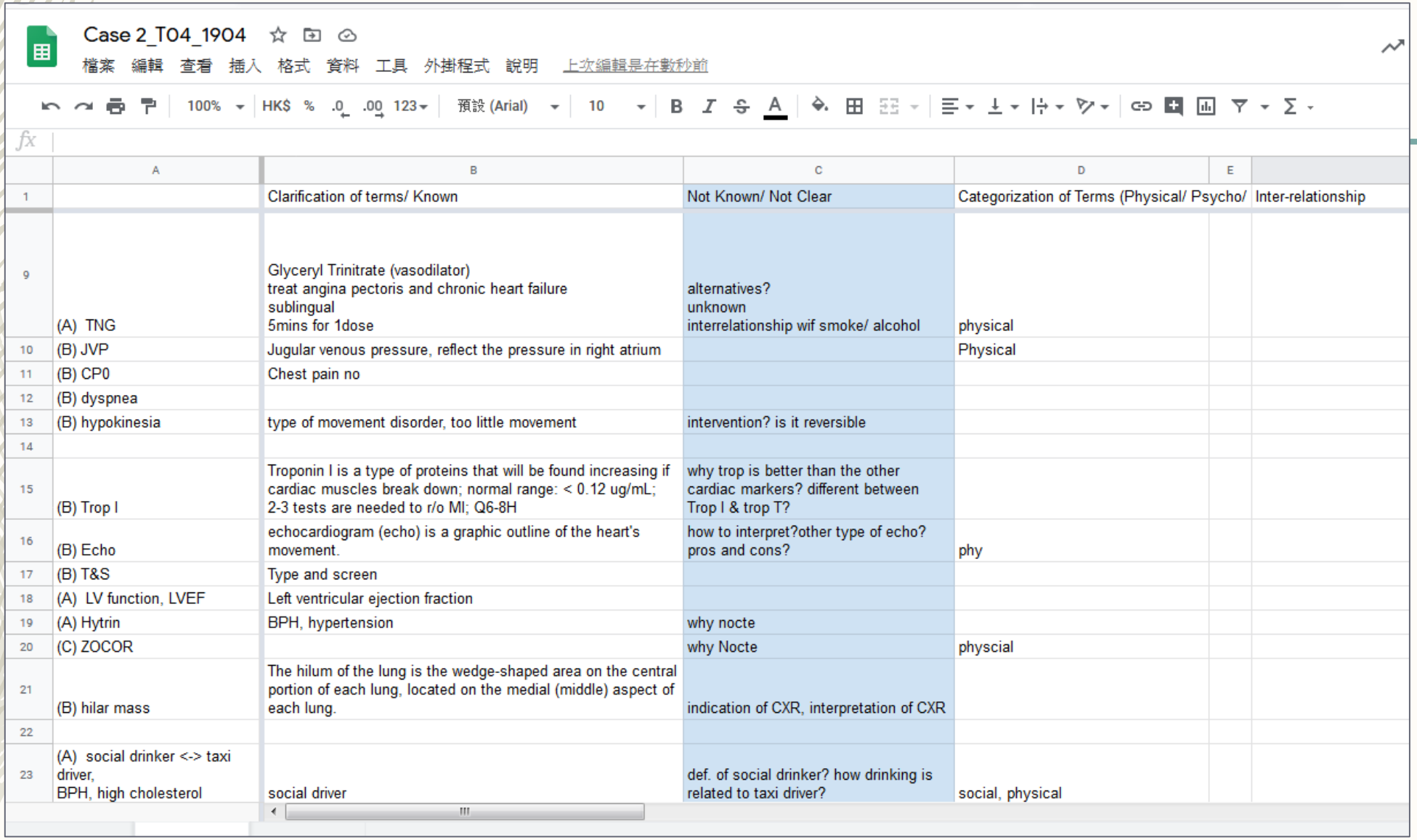


Challenges come……
during class suspension days

- Difficulties
  - How to engage students?
  - How to be interactive?

- Alternatives:
  - ZOOM
  - Student Response System (SRS)
  - Google Excel Spreadsheet

Use of Excel Spreadsheet in Google



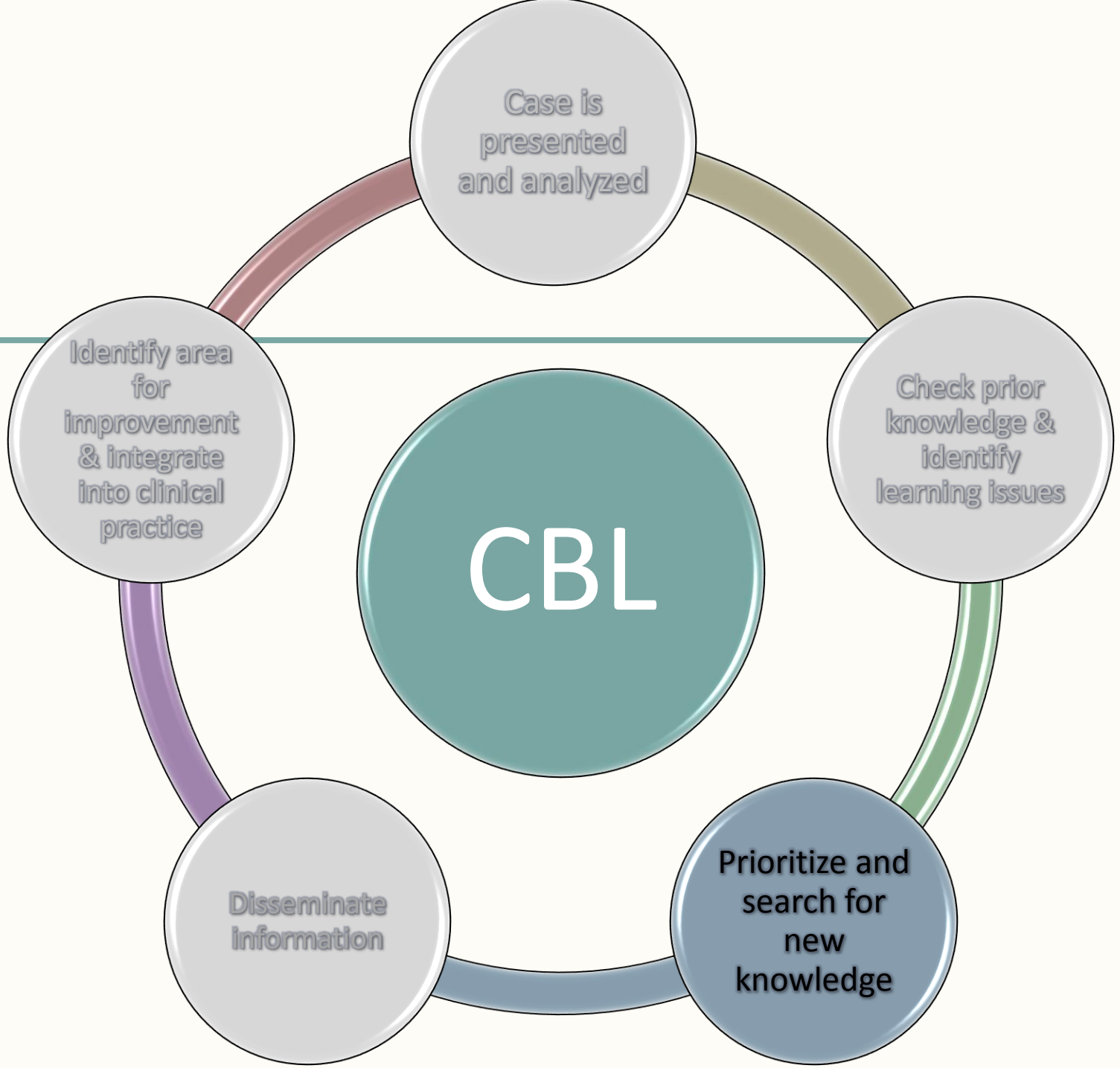
Case 2_T04_1904

檔案 編輯 查看 插入 格式 資料 工具 外掛程式 說明 上次編輯是在數秒前

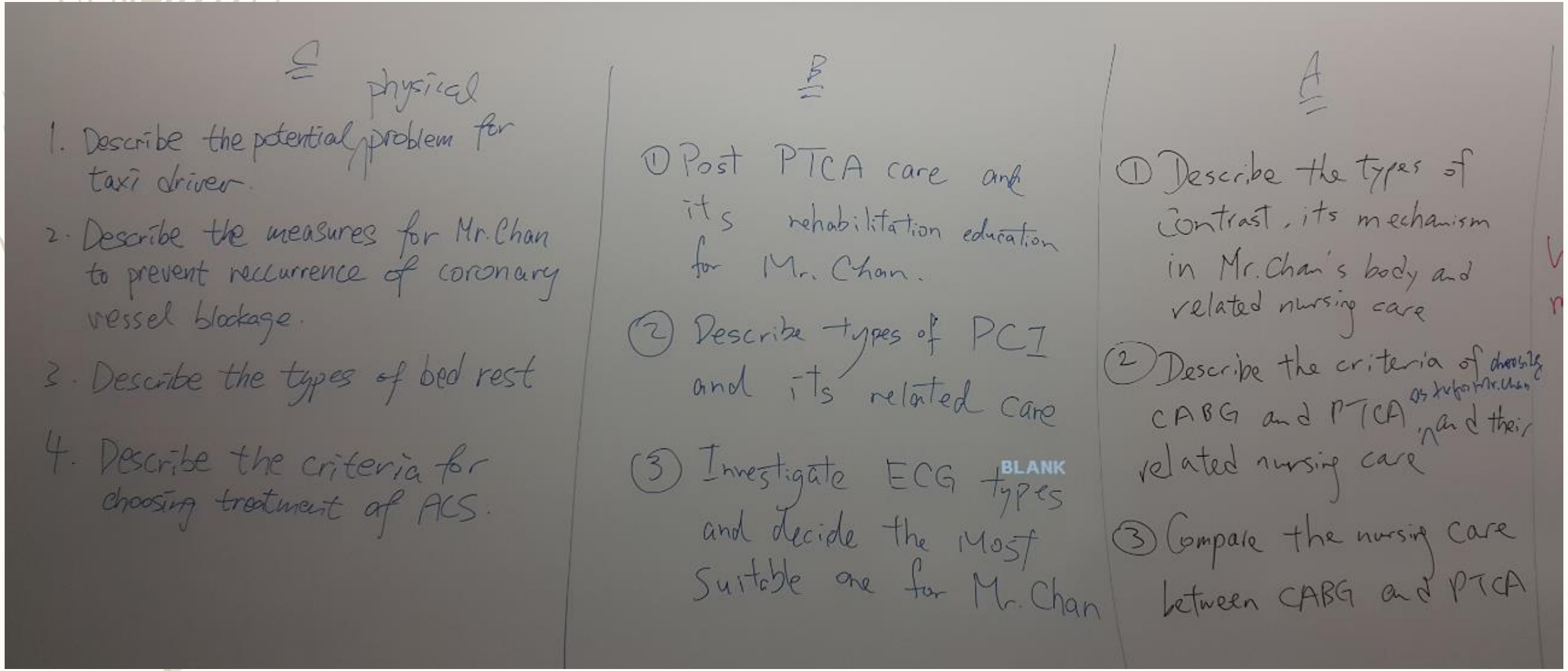
	A	B	C	D	E	
1		Clarification of terms/ Known	Not Known/ Not Clear	Categorization of Terms (Physical/ Psycho/		Inter-relationship
9	(A) TNG	Glyceryl Trinitrate (vasodilator) treat angina pectoris and chronic heart failure sublingual 5mins for 1dose	alternatives? unknown interrelationship wif smoke/ alcohol	physical		
10	(B) JVP	Jugular venous pressure, reflect the pressure in right atrium		Physical		
11	(B) CP0	Chest pain no				
12	(B) dyspnea					
13	(B) hypokinesia	type of movement disorder, too little movement	intervention? is it reversible			
14						
15	(B) Trop I	Troponin I is a type of proteins that will be found increasing if cardiac muscles break down; normal range: < 0.12 ug/mL; 2-3 tests are needed to r/o MI; Q6-8H	why trop is better than the other cardiac markers? different between Trop I & trop T?			
16	(B) Echo	echocardiogram (echo) is a graphic outline of the heart's movement.	how to interpret?other type of echo? pros and cons?	phy		
17	(B) T&S	Type and screen				
18	(A) LV function, LVEF	Left ventricular ejection fraction				
19	(A) Hytrin	BPH, hypertension	why nocte			
20	(C) ZOCOR		why Nocte	physcial		
21	(B) hilar mass	The hilum of the lung is the wedge-shaped area on the central portion of each lung, located on the medial (middle) aspect of each lung.	indication of CXR, interpretation of CXR			
22						
23	(A) social drinker <-> taxi driver, BPH, high cholesterol	social driver	def. of social drinker? how drinking is related to taxi driver?	social, physical		

CBL Process

- Student-directed Learning issues
  - Group based issues
  - Individual based issues
    - *Driven by student's own interest*



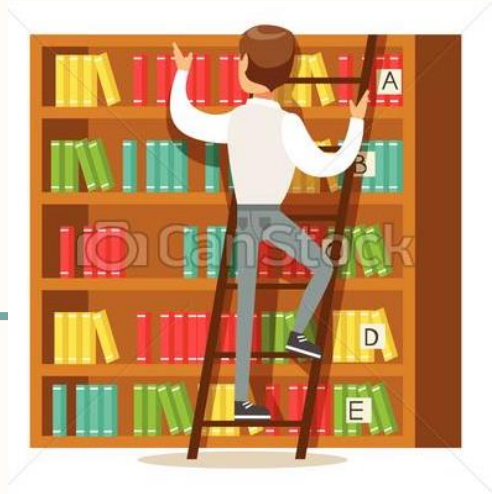
Learning Issues



During class suspension days Learning Issues

	I	J	K	
	Learning Issues			
	A	B	C	
	1. The relationship between smoking, alcohol consumption, fast food and Peptic Ulcer	Fast food eating and alcohol drinking are the main reasons for Mr. Chan combined hyperlipidemia	(C1) Aspirin is contradicted with Mr. Chan's condition of peptic ucler	
	2. The suitable intervention for Mr. Chan, PTCA/PTCS	Conservative treatment is suitable choice for Mr Chan to treat BPH	(C2) Transthoracic echocardiogram is suitable for Mr. Chan's case	
	3. TNG is more suitable than Imdur for relieving Mr. Chan's chest discomfort	PT, INR, APTT are not enough for assessing Mr. Chan clotting profile.	(C3) PTCA is suitable for Mr. Chan's situation	

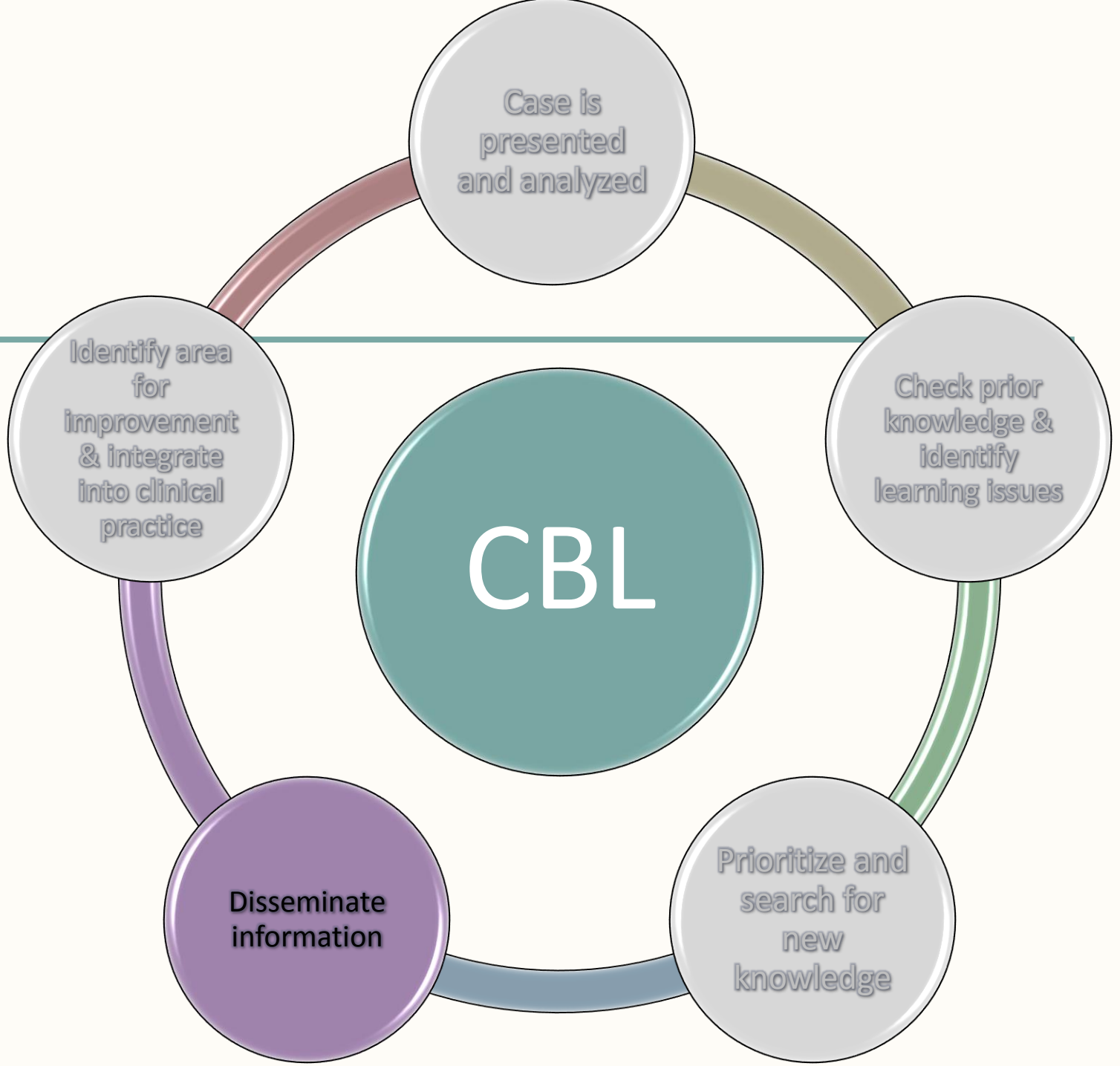
Information search



- Search during/ after class
- Via means of :
  - Library search/Internet search/Text books/Notes
- Immediate sharing is encouraged
- Allow challenging questions
  - Critical thinking

CBL Process

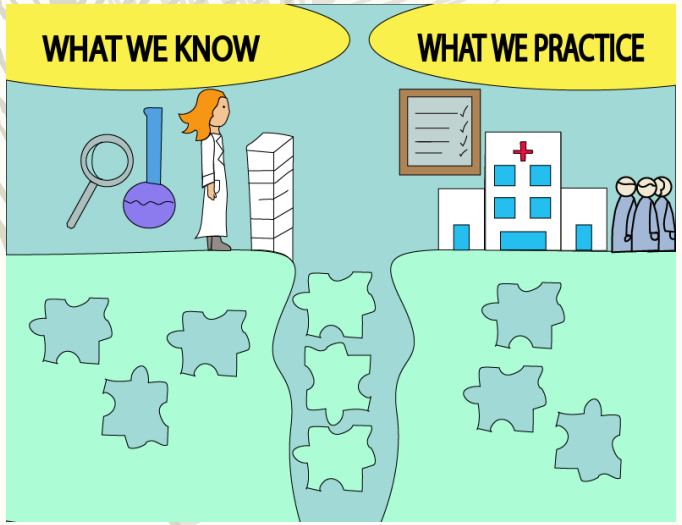
- Dissemination
  - In any format: PPT/ Role play/ Video …etc
- Presentation skills
- Cooperation/ collaboration

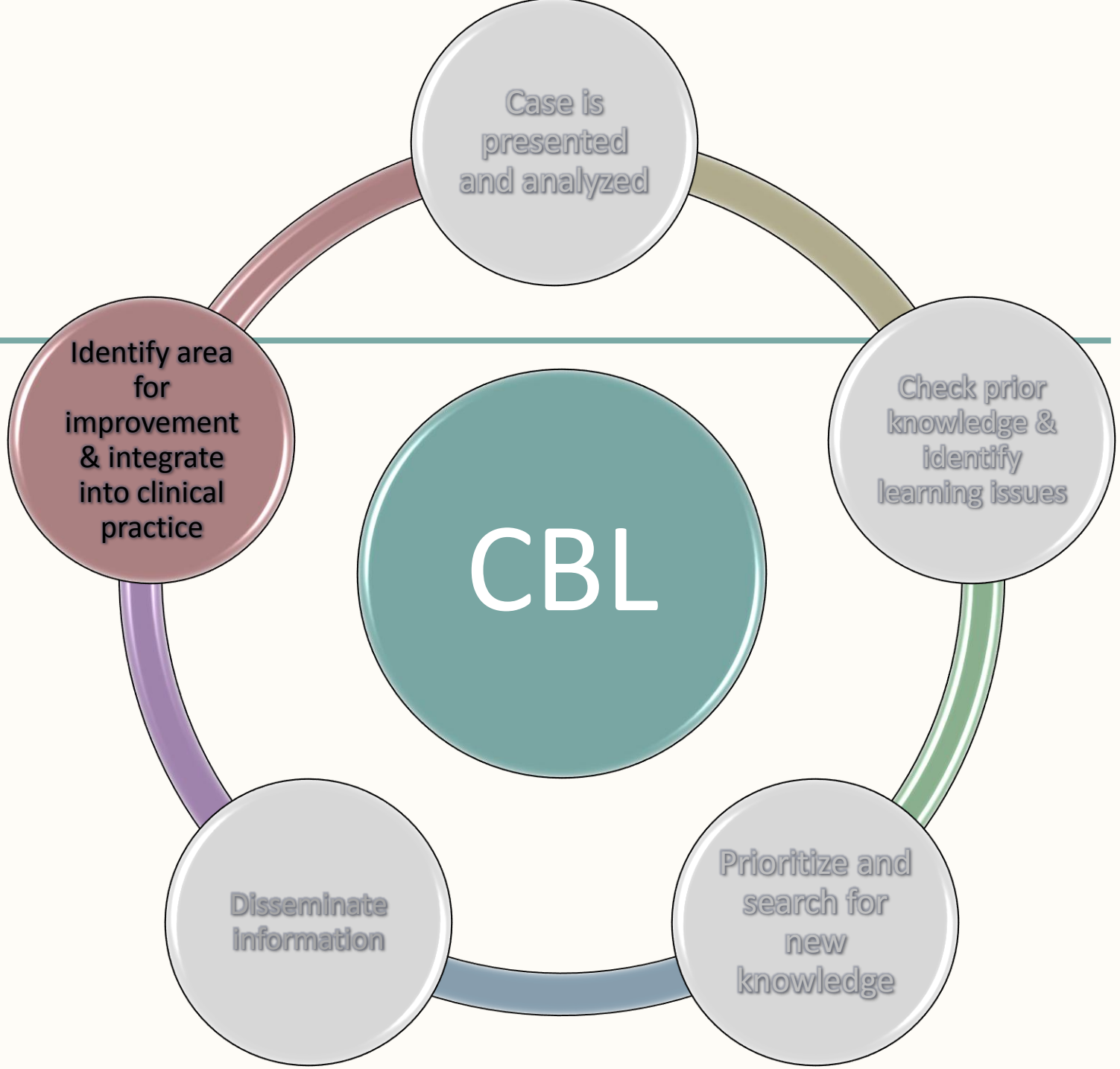


Information Dissemination (Sharing)

- F2F: In tutorial rooms
- Online mode: Via ZOOM
- Immediate Qs are encouraged from students
- Immediate feedback from facilitators

CBL Process


WHAT WE KNOW
WHAT WE PRACTICE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The advantages of using CBL

- Help learners to *focus on key points*
- Improves *skills*, such as
  - Communication & collaborations skills
  - Information searching skill
  - Critical thinking
  - Presentation skills…etc
- Better retain and consolidate knowledge learnt
- Allow individualized learning, thus promote motivation

Challenges of CBL

- Change of roles
  - Teachers ➔ facilitators
  - Students➔ from passive to active
- Preparation work
  - For teachers: before tutorial
- During F2F/class suspension
  - Interactive
  - Student engagement

Students' Feedback on CBL

- Enjoyed the discussion and sharing
- A good consolidation of the past knowledge
- Can train up communication skills and information searching skills
- Can learn more things that are beyond textbook
- Stimulate critical thinking
- It should be conducted in junior years

Thank You