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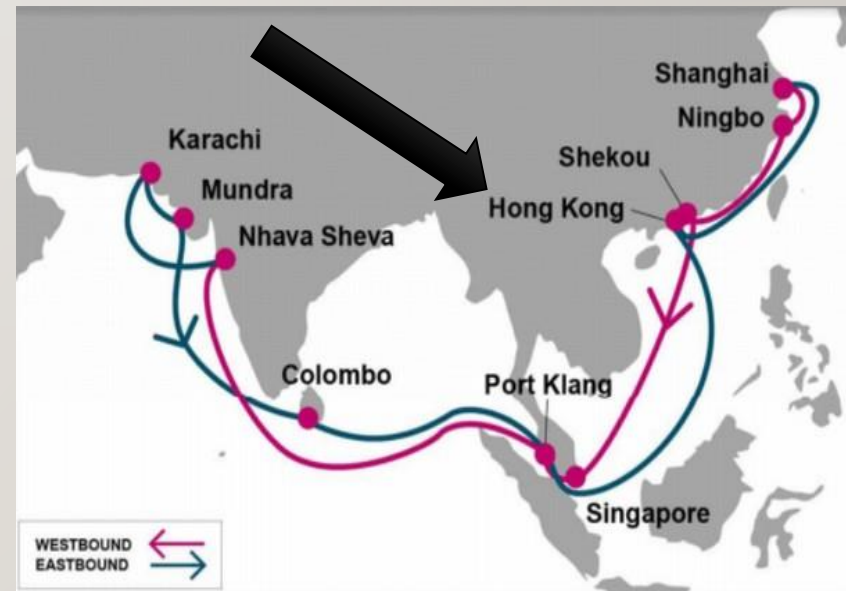
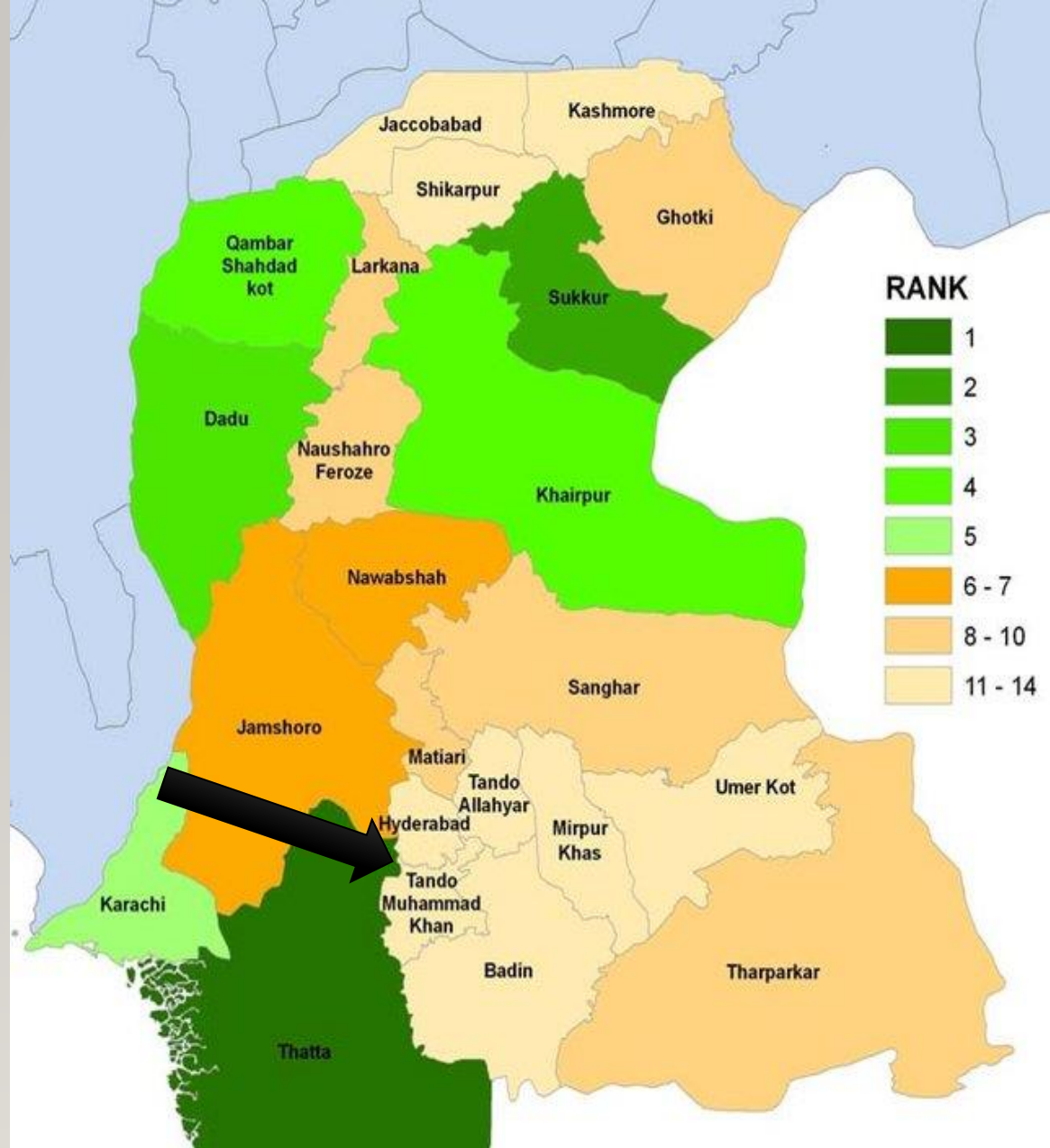
PGD BIOETHICS (CBEC, SIUT), MASTERS BIOETHICS (AKU)

PGDIP-TELEMEDICINE /E-HEALTH, JMHPE (MAASTRICHT-SUEZ CANAL)

**INDUS MEDICAL COLLEGE, T. M. KHAN,  
SINDH, PAKISTAN**









**EXPERT VS NONEXPERT-FACILITATED**

**P. B. LEARNING:**

**DOES THE EXPERT ENHANCE STUDENTS' PERFORMANCE**  
**IN RURAL INSTITUTIONS OF PAKISTAN?**

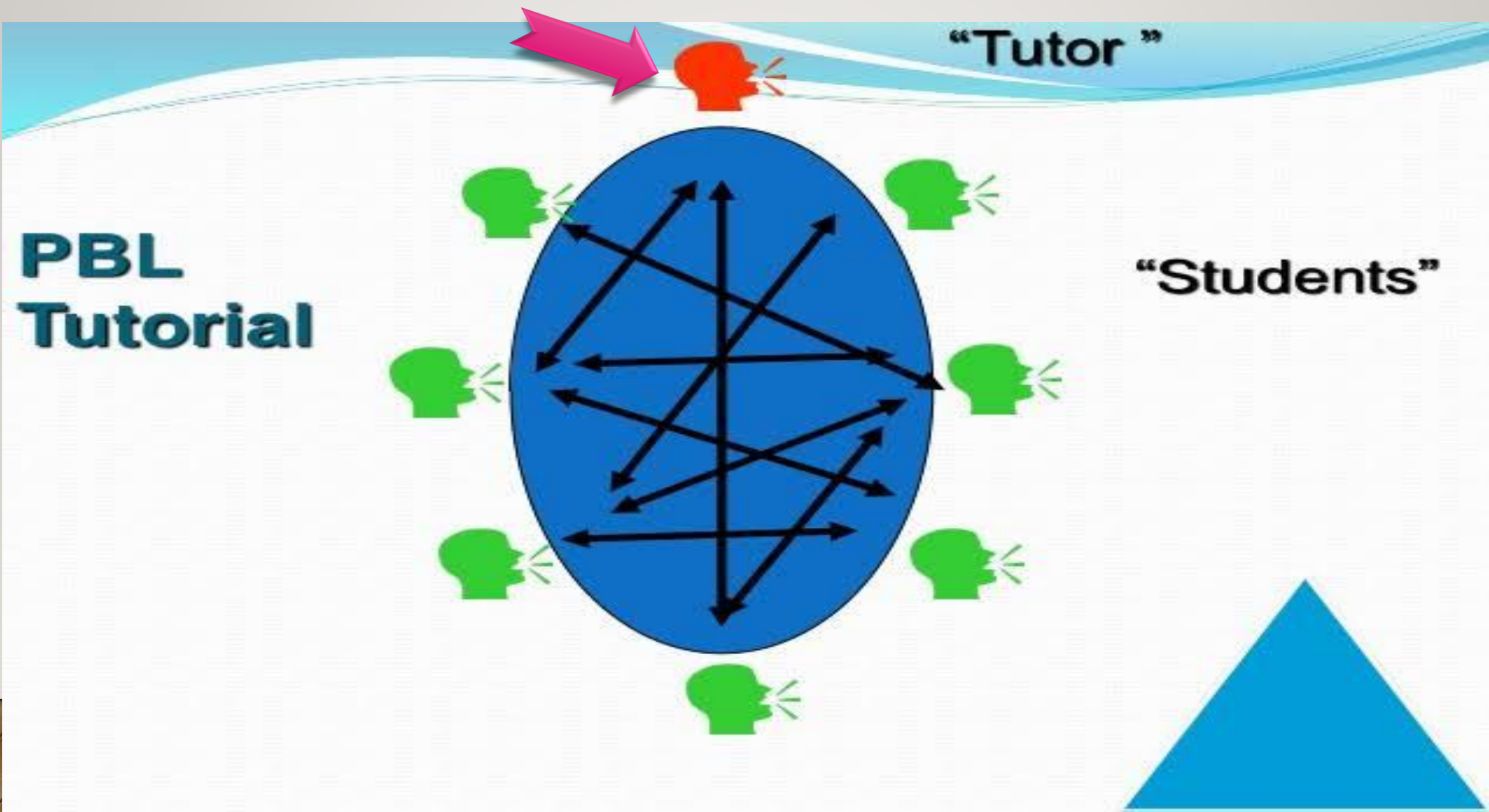


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## • Plan of Presentation

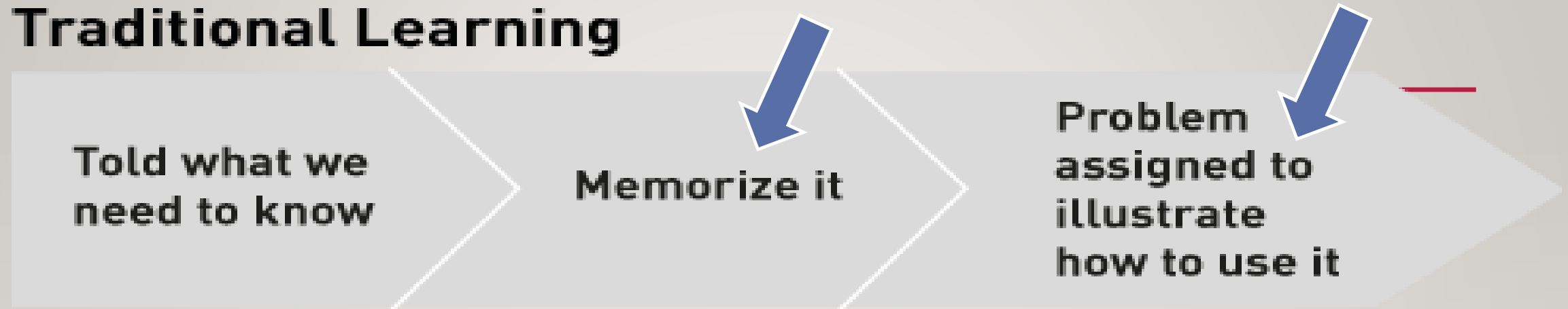
- Background and Introduction
- Methodology
- Findings
- Conclusion
- Take home message



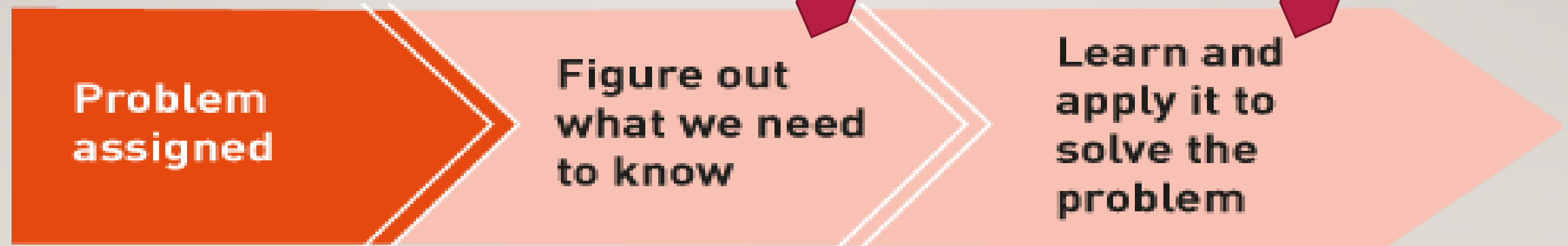


# TRADITIONAL AND PROBLEM BASED LEARNING: PBL STUDENT CENTERED LEARNING

## Traditional Learning



## Problem-Based Learning





- **BACKGROUND AND INTRODUCTION:**
- The innovative strategy of Problem Based Learning (PBL) is in practice in many medical institutions globally. Besides, its heterogenous structural models, there is **no consensus** regarding **attributes needed for facilitators**.
- Some educationists assert that facilitator shouldn't be a **subject expert**. While others contend that facilitators' responsibility should be **more than just facilitating the process**; i.e. one **should have expertise in the subject** particularly when working with junior medical students in developing countries.





## • BACKGROUND AND INTRODUCTION:

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- There is dire need to make consensus on this issue
- Studies have been carried out in developed countries but none in developing one in this regard, except Brazil, which has different cultural background & geographical location than Pakistan.
- **This study is earns worth as it would fill existing gap** and would help properly and productively conducting PBL sessions in less developed countries.
- We need to seek evidence; **what attributes are needed** to facilitate PBL sessions, **moreover does students' seniority have any impact on this issue?**



- **METHODOLOGY:**
- The purpose of study was to ascertain:
- Whether expert-facilitated (EF) PBL sessions enhance students' learning as compared with non-expert facilitated (NEF) sessions.
- To ascertain this, **160 students were selected from 2<sup>nd</sup> and 3<sup>rd</sup> year** MBBS (80 from each year) of IMC (Indus Med College), during Feb. 2020. **80 students of each year were divided in small groups of 10.** There were total **16 facilitators, 8 were expert in the subject (EF)** while **other 8 were non-expert (NEF).** 40 students of each year were either facilitated by EF or NEF.
- **A questionnaire of six Multiple Choice Questions (MCQs),** was administered, after students were given feedback at completion of PBL sessions.

**160 Total participating students of 2<sup>nd</sup> and 3<sup>rd</sup> Year MBBS**

**80 students of 2<sup>nd</sup> Year  
MBBS**

**80 students of 3<sup>rd</sup> Year  
MBBS**

**40 students,  
2<sup>nd</sup> year, NEF**

**40 students,  
2<sup>nd</sup> year, EF**

**40 students,  
3<sup>rd</sup> year NEF**

**40 students, 3<sup>rd</sup>  
year EF**

**80 students of 2<sup>nd</sup> & 3<sup>rd</sup> Year  
(40 of 2<sup>nd</sup> + 40 of 3<sup>rd</sup> year)  
facilitated by non-experts**

**80 students of 2<sup>nd</sup> & 3<sup>rd</sup> Year  
(40 of 1<sup>st</sup> year + 40 of 3<sup>rd</sup>  
year) facilitated by experts**



- **FINDINGS:**
- Each questionnaire was assessed for number of questions correctly answered, **individually** and **by each of the group**.
- Correct answers given by:
  - 2<sup>nd</sup> year students (40) of EF sessions: **172 (71%)**
  - 2<sup>nd</sup> year students (40) of NEF sessions: **128 (53%)**
  - 3<sup>rd</sup> year students (40) of EF sessions: **210 (87%)**
  - 3<sup>rd</sup> year students (40) of NEF sessions: **168 (70%)**
- Concluded that **senior students of EF sessions had secured maximum correct answers.**



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## • CONCLUSION:

- Based on the findings it can be concluded that both junior and senior students' performance increases with EF, while previous exposure to PBL sessions lessens the need of EF.
- To meet our needs depending upon available resources (financial and faculty strength) we may chose / formulate custom-based approach.





## Take-home message:

**To maximize the objects of implementing the PBL: we need to:**

- 1 Junior students**, less exposed to innovative learners' strategies may be facilitated by Experts (EF)
- 2 Senior students** having more exposure to innovative learners' strategies may be facilitated by Non-Experts (NEF)
- 3 Junior students**, before attending the PBL sessions may be orientated for such sessions, to achieve optimum benefit
- 4 Senior students** having good knowledge and skills of Problem Based Learning, may act as trainee facilitators in PBL sessions.

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# THANKS FOR PATIENT LISTENING

