

Structured oral examination(SOE)

-an assessment tool for medical students



Introduction of SOE in University of Dhaka

- In January 2005 University of Dhaka first introduced Structured Oral Examination(SOE) in Professional examination of MBBS students
- Before that Viva voce exam was in traditional method

The oral examination or viva has advantage over Written examination

- Face-to-face discussion
- Allows assessment of
 - Intellectual abilities
 - Professional attitude
 - Communication skill
 - Appearance
 - Confidence



Face to face discussion

- Professional attitude
- Appearance
- Confidence



Face to face discussion

Communication skills



Face to face discussion

- Intellectual abilities



Traditional Oral Examination (TOE)

- Subjective
- Non-structured
- Biased (impartial judgement may not be possible)
- Intimidating
- May not cover the syllabus
- Fails to assess the cognitive and problem solving skills properly



Objective

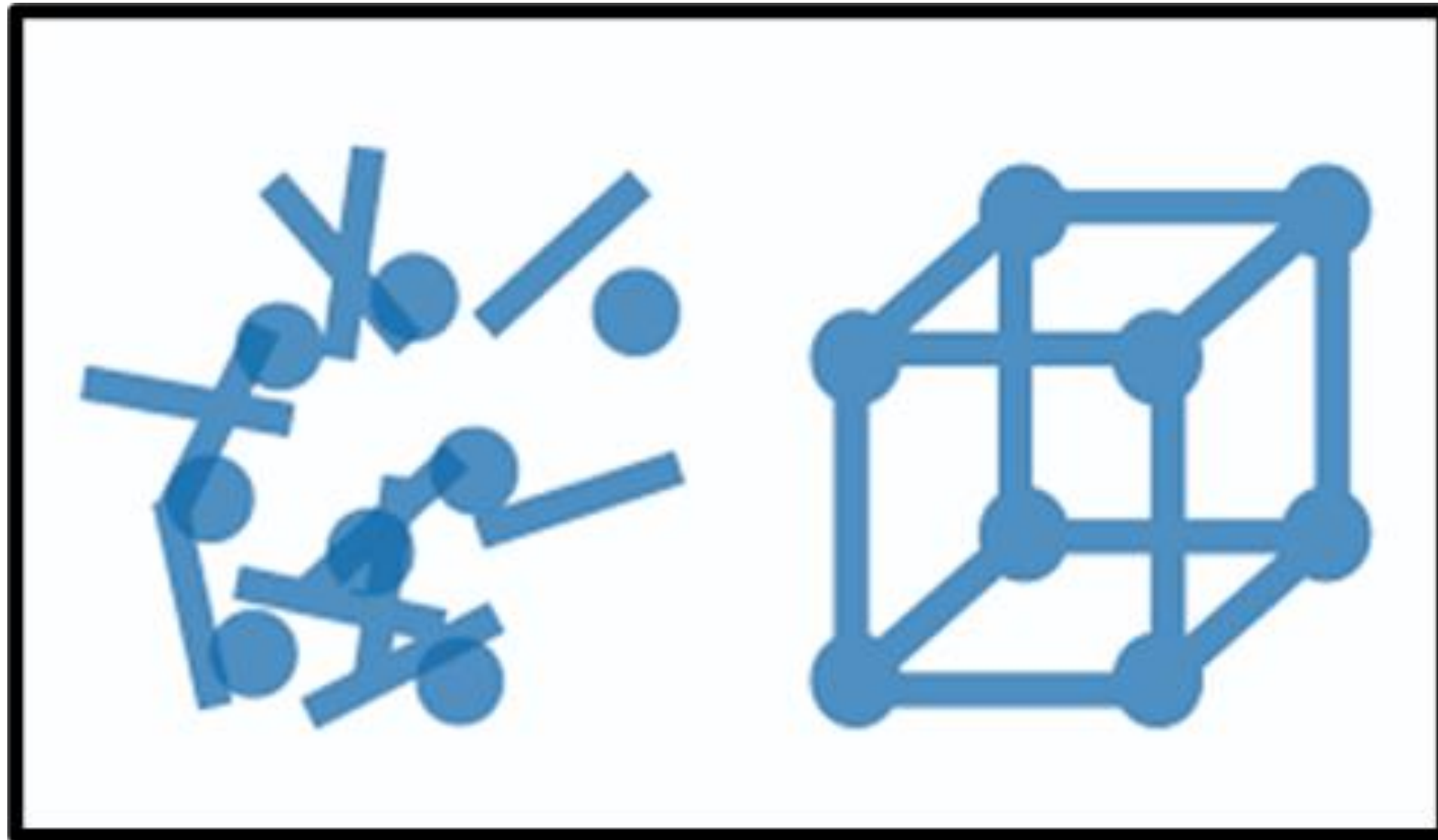
- Unbiased
- Impartial
- "Unmovable" opinion. Like an "object"

vs.

Subjective

- The opposite of objective
- "Subject" to your own personal opinion or bias

Structured Vs Unstructured



Biased



Intimidating



Fails to assess problem solving



Structured oral exam



Essentials of SOE

- Planned construction of structured questions
- Prepared model answer in consultation with other examiner
- Ensuring non-threatening environment.
- Careful selection of examiner
- Instruction to the examiner
- Equal time to each candidate using stop watch
- Recording of the questions & the answers
- Standardized Rating scale

Planned construction of structured questions

Operative surgery

O
Operative Surgery

5

a) Name different incisions of laparotomy. Why draping & painting are needed for any surgery ?
b) What are the operations can be done by midline incision (at least 5) ?
c) What are the advantages & disadvantages of midline incision .

O
Operative Surgery

a) Name 4 operations which can be performed by right upper paramedian incision.
b) What structures are cut down in laparotomy by this incision.?
c) What are the advantages and disadvantages of midline incision.

O
Operative Surgery

a) What are the steps of excision of sebaceous cyst ?
b) What are the complications of sebaceous cyst ?
c) How do you handle a case of infected sebaceous cyst ?

O
Operative Surgery

a) What are the indication of suprapubiccystostomy ?
b) Tell the steps of open cystostomyoperation .
c) Difference between open suprapubiccystostomy and suprapubic puncture.

O
Operative Surgery

a) What are the incisions of appendicectomy ?
b) Mention the steps of appendicectomyoperation .
c) How will you proceed for burst appendix ?

Breast

B
Breast

A 40 year old women presented with blood stained nipple discharge with a sub areolar lump for 3 months.
a) What are the possible causes?
b) How will you investigate her?
c) How will you treat her

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B
Breast

A 40 year old women presented with skin excoriation of & serosanguinous discharge from Rt nipple.
a) Tell me two common causes of such condition.
b) How will you differentiate them?
c) Outline the treatment of each.

B
Breast

A young stout 20 year old lady presented with a hard lump in her Rt breast after 3 weeks following a trauma
a) What is the most likely cause of this lump?
b) How will you confirm your diagnosis?
c) Outline a management plan of this patient.

B
Breast

A Lactating lady presented with a painful tender breast lump & with fever
a) What is the most possible cause ?
b) How will you investigate and manage her ? Tell me the pathogenesis of this condition .
c) What are the complications of operation in such patient ?

B
Breast

A 35 year old woman complains of cyclical pain with nodularity of her both breasts
a) What is your diagnosis
b) How will you counsel the patient?
c) How will you treat her?

Blood Transfusion

Principal & Surgery	
BT Blood Transfusion	<ul style="list-style-type: none">a) Define blood transfusionb) What are the tests to be done before blood transfusion ?c) What is autologous blood transfusion ?
BT Blood Transfusion	<ul style="list-style-type: none">a) What are the indications of blood transfusion ?b) Mention the components of blood ?c) What is transfusion trigger ?
BT Blood Transfusion	<ul style="list-style-type: none">a) Define Massive blood transfusion.b) What are the side effects of massive blood transfusion ?c) What are the investigations you will do before blood transfusion?
BT Blood Transfusion	<ul style="list-style-type: none">a) What are the immune mediate transfusion reaction?b) How febrile transfusion reaction occur ?c) Why blood grouping & cross matching is needed before infusion of dextran ?

Hepatobiliary

HBP Hepatobiliary & Pancreatic	<ul style="list-style-type: none">a) What are the routinely available liver function tests?b) Mention 3 important liver function tests of surgical significance.c) How coagulopathy is measured & corrected?
HBP Hepatobiliary & Pancreatic	<ul style="list-style-type: none">a) What are the common imaging of hepatobiliary & pancreatic lesion?b) Describe a normal USG imaging of hepatobiliary & pancreatic system.c) What are the advantages of USG?
HBP Hepatobiliary & Pancreatic	<ul style="list-style-type: none">a) What are the common infections of hepatobiliary system?b) What are the clinical feature of amoebic liver abscess?c) How will you manage hydatid cyst of liver?
HBP Hepatobiliary & Pancreatic	<ul style="list-style-type: none">a) What are the surgical causes of hepatomegaly?b) What are the common tumors that metastasize in liver?c) What are the common risk factors for primary hepatocellular carcinoma (HCC)?
HBP Hepatobiliary & Pancreatic	<ul style="list-style-type: none">a) What are the indications of splenectomy?b) How will you prepare a patient for elective splenectomy?c) What are complications of splenectomy?

Planned preparation of questions with consultation



Ensure non-threatening environment during exam



Good selection of examiner



Equal time to each candidate using stop watch



Recording the question and answers



Steps of Oral examination

- Phrase question clearly.
- Allow sec.....
- Encourage student to respond.
- Acknowledge correct answer.
- Ask lower to higher cognitive order questions.

Questions should be asked clearly and loudly



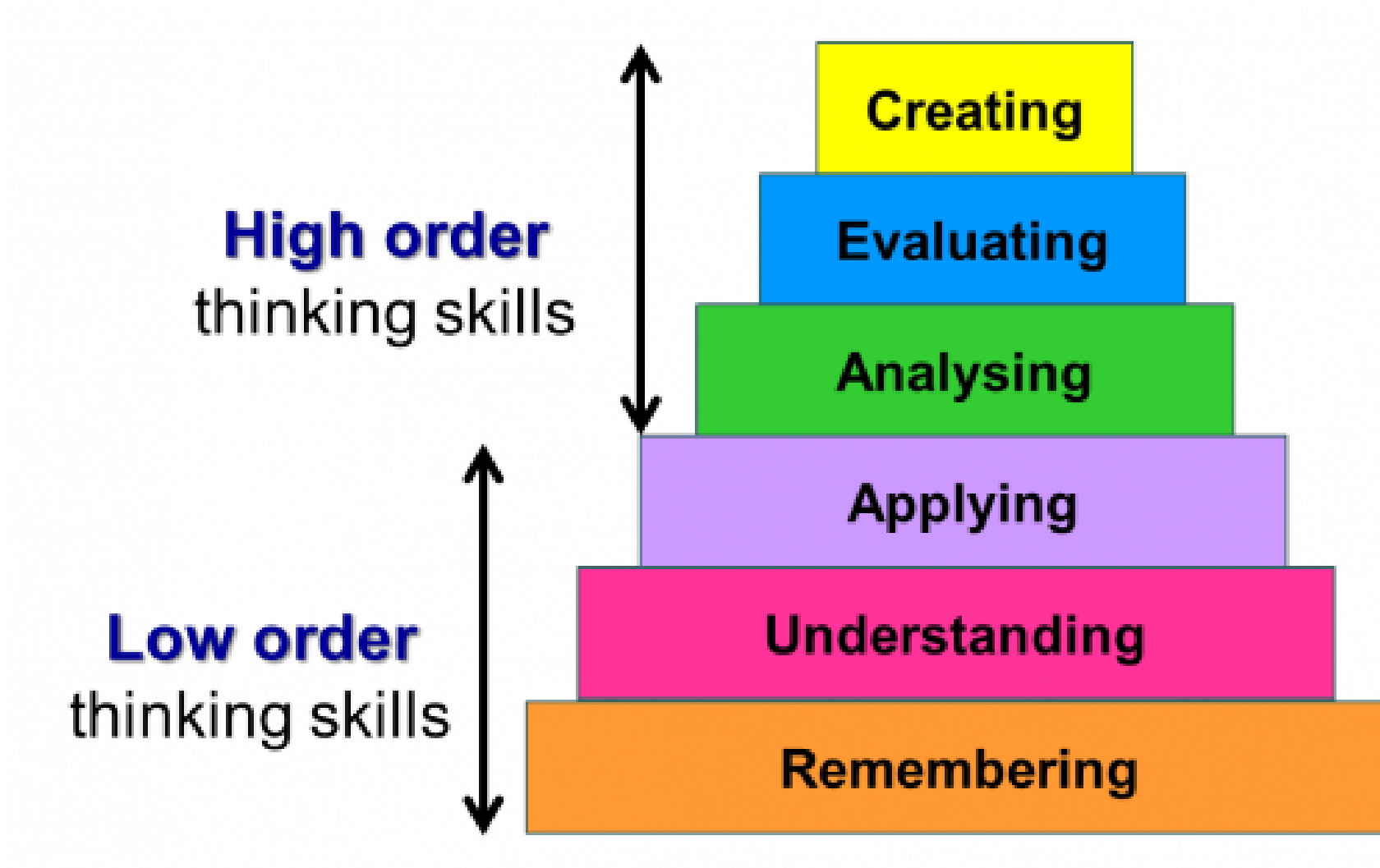
Encourage students to respond



Acknowledge correct answer



Questions



If still fails to answer Shift to the next question

- Student often cannot understand the question.
- Is the question clear to you?
- Do you want me to rephrase the question?
- Which part you did not understand?
- Is it too difficult?
- Studies have shown that even modest increase of wait time, the correctness improves.
- Allow time If still fails to answer
- Shift to the next question

Avoid

- Interruption
- Provide answer
- Criticize



Types of Questions

- Recall based-50-60%
- Interpretative -20%
- Analytical
- problem solving questions-10-20%
- May vary subject to subject

Recall based questions

O

Operative Surgery

- a) Name different incisions of laparotomy. Why draping & painting are needed for any surgery ?
- b) What are the operations can be done by midline incision (at least 5) ?
- c) What are the advantages & disadvantages of midline incision .

5

Problem solving

B

Breast

A 40 year old women presented with blood stained nipple discharge with a sub areolar lump for 3 months.

- a) What are the possible causes?
- b) How will you investigate her?
- c) How will you treat her

Interpretative

A 30Year old alcoholic man presented with sudden severe upper abdominal pain, retching and mild fever for 4 hour. Plain X-ray abdomen shows features of paralytic ileus but no free gas.

Laboratory findings show

Serum amylase- 1000 IU/L

Serum Lipase- 150 IU/L

TLC- 15000/ml³

1. What is your most probable diagnosis?
2. Mention 3 important causes of this condition.
3. Write 2 imaging studies essential to establish the diagnosis.
4. Write 2 scoring systems to predict the severity of the disease.
5. Write 2 local & 2 systemic complications of this condition.

Scoring out of 10

- Outstanding = 9
- Excellent = 8
- Good = 7
- Satisfactory = 6
- Bare fail = 5
- Not adequate = 4
- Unsatisfactory = 3
- Poor = 2
- Dangerous = 1



TOE vs SOE

A comparative study of traditional oral examination (TOE) and structured oral examination, found that the SOE is

- more effective,
- skillful technique
- superior than TOE in assessing student's competency and cognitive ability.



Traditional versus Structural Viva Voce, a Better Tool of Oral Assessment in Biochemistry: An Educational Interventional Study

Preeti Gupta¹

.No.	Student's perception	Frequency in percentage	
		strongly agreed	agreed
1.	Experienced stress during traditional viva voce.	78%	18%
2.	Experienced stress during Structured viva voce.	26%	2%
3.	Traditional viva voce was comprehensive & covers all topics	4%	8%
4.	Structural viva voce was comprehensive & covers all topics	83%	3%
5.	Structural viva voce is a convenient method compared to traditional viva voce.	48%	5%
6.	The structural viva voce pattern of examination was uniform.	79%	3%
7.	Examiner mainly focused on one topic of his/her interest during traditional viva voce.	64%	18%

	viva voce.	
11.	Structural viva voce is a beneficial tool for scoring marks in an oral examination.	93%
12.	Overall satisfaction in traditional viva voce.	22%
13.	Overall satisfaction in structural viva voce.	92%
14.	Structural viva voce is a satisfactory and helpful initiative.	90%

Table 1. Comparison of marks obtained in the structured viva voce and traditional viva voce

Oral examination	No. of students	Mean of marks obtained out of 20	Standard deviation	value	pValue
Structured viva voce	146	13.0411	1.830307	8.2372	<0.00001
Traditional viva voce	146	11.03425	2.305658		

RESEARCH

Open Access

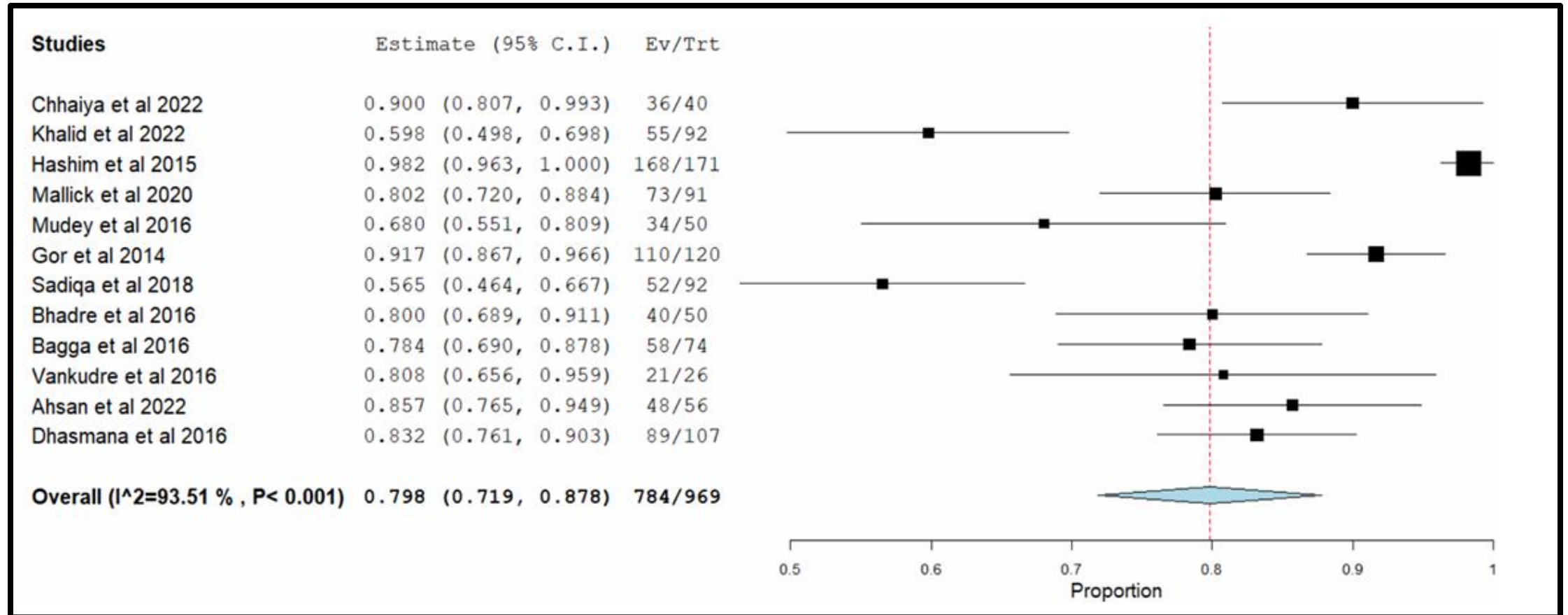


Structured viva validity, reliability, and acceptability as an assessment tool in health professions education: a systematic review and meta-analysis

Abdelhamid Ibrahim Hassan Abuzied^{1*} and Wisal Omer Mohamed Nabag²

was low $\alpha = 0.50$ for the traditional viva. In the meta-analysis, structured viva was found to be acceptable by overall acceptability of (79.8%, $P < 0.001$) out of all learners who participated in structured viva as examinees at different levels in health professions education using the available numeric data of 12 studies. The heterogeneity of the data was high ($I^2 = 93.506$, $P < 0.001$) thus the analysis was done using the binary random-effects model.

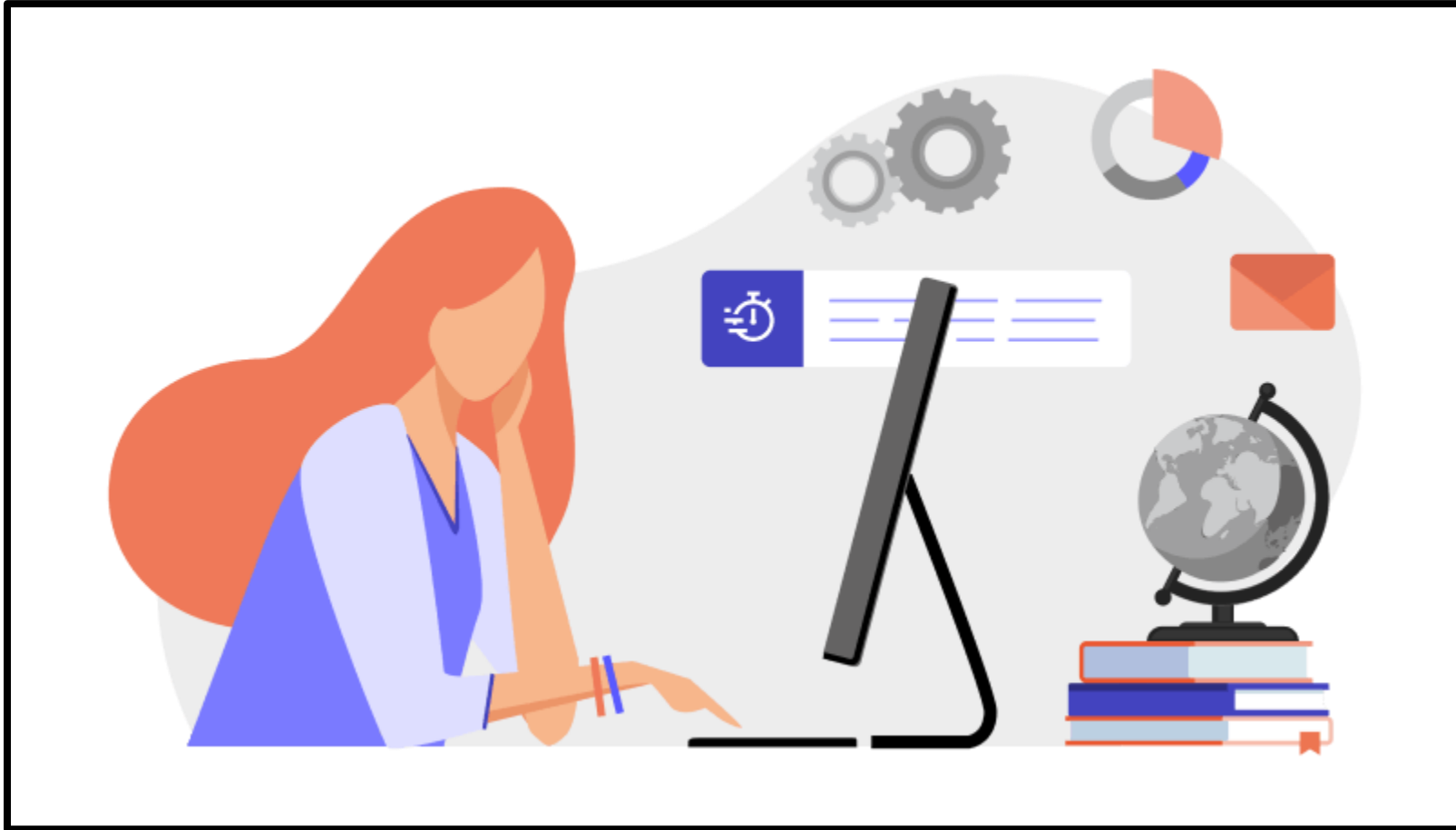
Forrest pool analysis



How to improve?

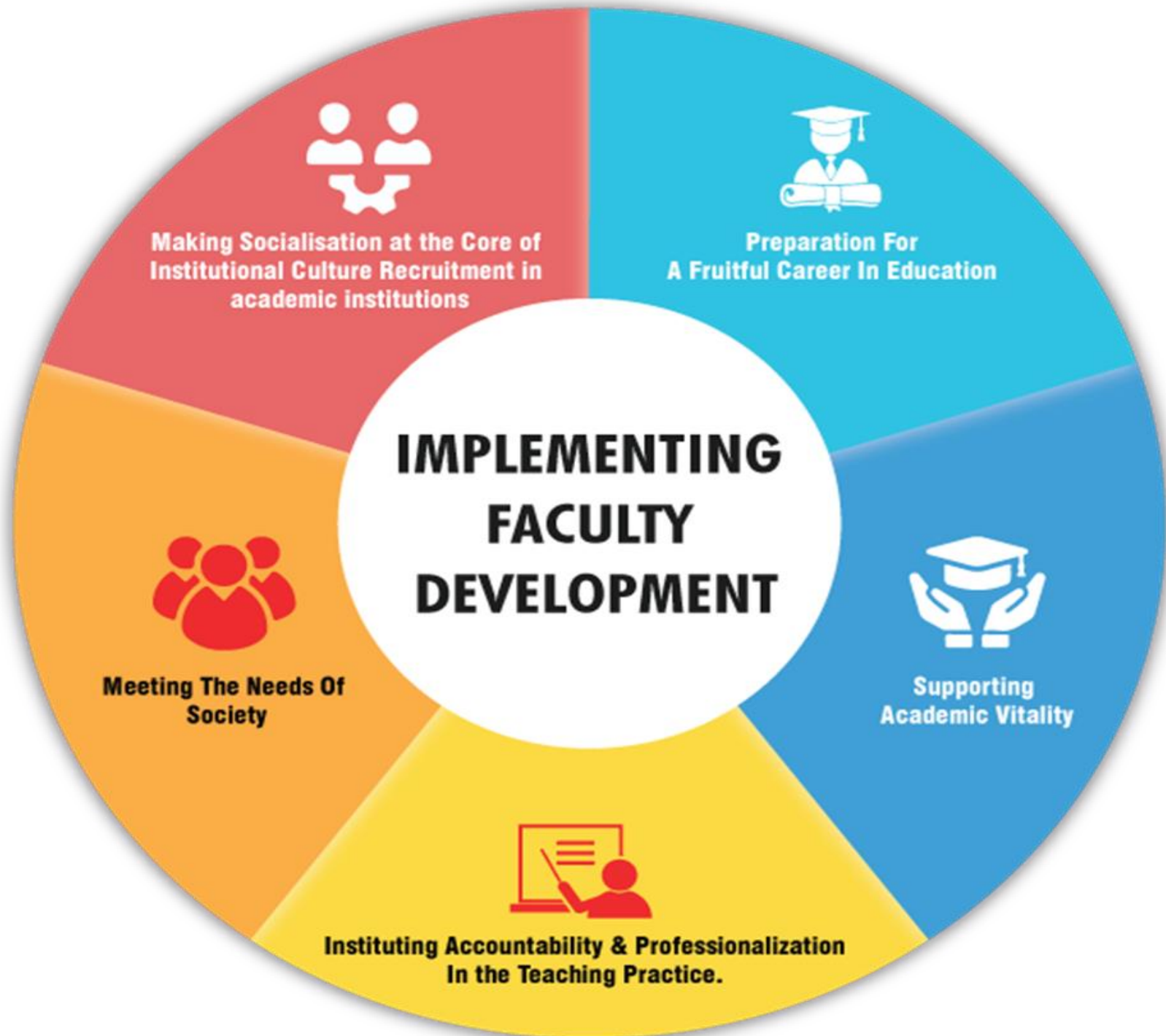
- Continuous studies
- Determine the reason(s) its suitability in our medical curriculum
- Redesigning the SOE as an assessment tool
- For faculty development

Continuous study



Redesign





THANK
YOU

The image features the words "THANK YOU" in a playful, colorful font. The word "THANK" is on the top line, with letters in red, blue, purple, green, and red. The word "YOU" is on the bottom line, with a green 'Y', a yellow smiley face as the 'O', and a red 'U'. A faint "dreamstime" watermark is visible in the background.