Supporting clinical skills learning online and in–class

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Scope

• What? - clinical skills

• Why? – clinical transition gap & Ethics

• How? – OVED and SCE
What?
Clinical skills

Hard skills
- Psychomotor skills
- Performance skills
- Holistic patient care

Soft skills
Clinical skills

Hard skills
- Psychomotor skills
- Performance skills
- Holistic patient care

Soft skills
- Patient related HOTS
  - Critical thinking
  - Problem solving
  - Communication
  - Professionalism/ethics
  - Reflection
  - Interpersonal
  - Empathy/Integrity
  - Teamwork

Non-Technical skills – NOTTS.org
Why? - A significant clinical learning gap

“The pre-clinical to clinical transition is a recognized matter in dental education”
Why? A significant clinical learning gap

Challenges in the transition to clinical training in dentistry: An ADEE special interest group initial report

C. M. Serrano, M. G. Botelho, P. R. Wesselink, J. M. Vervoorn

First published: 03 February 2018 | https://doi.org/10.1111/eje
Why? - A significant clinical learning gap

European Journal of Dental Education

An analysis of clinical transition stresses experienced by dental students: A qualitative methods approach

M. Botelho, X. Gao, S. Y. Bhuyan

First published: 17 April 2018 | https://doi-org.eproxy.lib.hku.hk/10.1111/eje.12353 | Citations: 3

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Why? A significant clinical learning gap

An analysis of clinical transition gap: A qualitative study

M. Botelho, X. Gao, S. Y. Bhuyan

First published: 17 April 2018 | https://

FIND@HKUL
Students deserve to be better prepared for clinical practice

Patients deserve to have healthcare providers who are appropriately prepared/trained
How? Millers assessment/learning pyramid

- KNOWS
- KNOWS HOW
- SHOWS HOW
- DOES
A significant clinical learning gap

Clinics

Does

Shows how

Knows how

Knows
A revised learning pyramid to close the gap

Clinics

Does

Shows how

Knows how

Knows

Procedural understanding and " Competence" in Sim lab
A revised learning pyramid to close the gap

Clinics

Does

Shows how

Knows how

Knows

Real world problems with cognitive/psychomotor overload

Procedural understanding and “Competence” in Sim lab
A revised learning pyramid to close the gap

Clinics

Does

Shows how

Knows how

Knows

“Experience” of clinical/cognitive skills
A revised learning pyramid to close the gap

- Knows
- Knows how
- Shows how
- Observes how
- Manages how
- Does

“Experience” of clinical/cognitive skills
A revised learning pyramid to close the gap

- Knows
- Knows how
- Shows how
- Observes how
- Manages how
- Does

Clinical HOTS

Clinics

“Classroom”
A revised learning pyramid to close the gap

Clinics

Does

Manages how

Oberves how

Shows how

Knows how

Knows

“Classroom”

Clinical HOTS

Diagnosis/DD, Problem solving, Clinical decision making, reflection...
A revised learning pyramid to close the gap

- Knows
- Knows how
- Shows how
- Manages how
- Does

Observation of Videoed Expert-student Dialogue & Synthetic Clinical Experience – Flipped class
Observation of expert-student dialogue - OVED

• Treatment planning

The communal consultation video—Enhancing learning and broadening experience through observing dialogue

M. G. Botelho
Observation of expert-student dialogue - OVED

- Treatment planning
- Q and A
Observation of expert-student dialogue - OVED

- Treatment planning
- Q and A
- Competence assessment

**Original Article**

Mixed-methods analysis of videoed expert-student dialogue supporting clinical competence assessments

Michael Botelho, Xiaoli Gao, Sangeeta Y. Bhuyan

First published: 19 February 2020 | https://doi.org/10.1111/eje.12515
Observation of expert-student dialogue - OVED

- Treatment planning
- Q and A
- Competence assessment

- Case presentation – 8 mins
- Patient treatment – 2 hours
- Self-evaluation and feedback – 8 mins
Observation of expert-student dialogue - OVED

- Treatment planning
- Q and A
- Competence assessment
Observation of expert-student dialogue - OVED

- Treatment planning
- Q and A
- Competence assessment
- Flipped class
Observation of expert-student dialogue - OVED

• Treatment planning
• Q and A
• Competence assessment
• Flipped class
• Clinical problem scenarios
Flipped class – Synthetic clinical experience
COMPONENTS & TYPES OF BRIDGES

Course Introduction

To be completed by the first Sim lab session.

Components of bridges
1. What is an abutment?
2. What is a connector?
Flipped class – worksheets

Why is the minor retainer different to the major retainer in design?
### Flipped class – worksheets

#### COMPC Course Int

**Components**

1. What is
2. What is
3. The pre
4. What a
5. What w
6. premok

#### WORKSHEET 2C

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Create
Evaluate
Analyze
Apply
Understand
Remember
Flipped class – worksheet *Synthetic clinical experience*

The premolar is root treated, what are the options for this edentulous span
Summary

• We need to support students clinical transition to the high stakes, complex world of clinical care.

• We are educationally bound to better prepare students for clinical teaching session in the care of their patients.