“JDEC”

JUNIOR DOCTOR EDUCATION COMMITTEE

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NEAR-PEER TEACHING - CONTEXT

- First described in late 1980s and early 1990s — ‘Peer teaching’ within higher education. Now Peer-Assisted Learning (PAL)

- Umbrella term encompassing a range of teaching methods:
  - 1-1 or 1-2 tutoring, discussion seminars, private study groups, parrainage, counselling, large/small group learning

- Definition
  - Process of ‘moving beyond independent to interdependent or mutual learning’ (Boud, 1988)

- Expansion within medical education
  - GMCs — ‘Tomorrows Doctors’ (2009) Outcomes for graduates include “Function effectively as a mentor and teacher.”
NEAR-PEER TEACHING - THE EVIDENCE

Medical students as peer tutors: a systematic review
Annette Burgess*, Deborah McGregor and Craig Mellis

Peer teaching in medical education: twelve reasons to move from theory to practice.
Tan Catin C1, Durnin S.

Medical students-as-teachers: a systematic review of peer-assisted teaching during medical school

Student teaching: views of student near-peer teachers and learners.
Bulte G1, Bette A, Garner K, Durning S.

A near-peer teaching program designed, developed and delivered exclusively by recent medical graduates for final year medical students sitting the final objective structured clinical examination (OSCE)
Mustafa S Rashid1,2, Oluwole Obowale3, David Gore3

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Rashid et al. BMC Medical Education 2011; 11:11
http://www.biomedcentral.com/1472-6920/11/11
ADVANTAGES

- **Student based**
  - Offer education to students on their own cognitive level
  - Comfortable and safe educational environment
  - Role Modelling
  - Additional educational opportunities

- **Teacher based**
  - Enhance intrinsic motivation in teachers
  - Enhance leadership, organisational and teaching skills
  - Help junior doctors achieve portfolio core-competencies
AIM

1. Ease the transition from medical student to junior doctor through mentorship and tutoring

2. Simultaneously equip junior doctors with transferrable skills in medical education
PRE-TEACHING PREPARATION

• Crash course in lesson planning
• Learning objectives
• Body: ALIVE
  • A – Accentuate the important
  • L – Less is more
  • I – Interaction
  • V – Vary the stimulus
  • E – Use examples
• Feedback
  • Content, structure, teaching
• Self evaluation
  • Strengths, weaknesses, changes next time
• Peer observation
  • Teaching Faculty

OSCE Teaching Self Evaluation Form

- TOPIC:
- Date:
- Teacher name(s):
- Aim(s) and objective(s):

- How did you feel the session went?
  1. Time adequate time to prepare for the session
  2. The timing of the session went according to plan
  3. The session was interactive
  4. There was plenty of opportunity for questions
  5. Overall the students benefited from the session

- What were the particular strengths of the session?

- What were the weaknesses identified?

- What would you do differently next time?

OSCE Teaching Feedback Form

- TOPIC:
- Date:
- Teacher name(s):

- Please indicate which response best fits your experience of the teaching you have received
  1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = Neutral (N); 4 = Agree (A); 5 = Strongly Agree (SA)

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The content was at an appropriate level</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. The content was relevant to my learning</td>
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<td></td>
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<tr>
<td>STRUCTURE</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Clear introduction, content and summary</td>
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<td></td>
<td></td>
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<tr>
<td>4. The teaching was well organized</td>
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<tr>
<td>TEACHER</td>
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<tr>
<td>5. The teacher had good relevant knowledge</td>
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<tr>
<td>6. The ability to ask the speaker to clarify things I did not understand</td>
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</tr>
<tr>
<td>GLOBAL IMPRESSION</td>
<td></td>
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</tr>
<tr>
<td>7. The teaching was beneficial to my learning</td>
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</tr>
</tbody>
</table>

Specifics/Points

Points for improvement:
1. BEDSIDE TEACHING

- Emailed all FY1s and FY2s for volunteers
- Paired students to teachers based on contact details
- Flexible content: outline provided (find patients → history → examine → discuss)

- Problems:
  - Not meeting up: annual leave, varying timetables, other commitments

- Changes:
  - Allocated dates for bedside teaching and asked FY1s and FY2s to sign up for different sessions
  - So far this has been more successful to ensure sessions take place
BEDSIDE TEACHING — FEEDBACK

Example session:

- The content was at an appropriate level
- The content was relevant to my learning
- Clear introduction, content and summary
- The teaching was well organised
- The teacher had good relevant knowledge
- I felt able to ask the speaker to clarify things I did not understand
- The teaching was beneficial to my learning

N=5
## BEDSIDE TEACHING — FEEDBACK

<table>
<thead>
<tr>
<th>Good points</th>
<th>Points for improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case study was useful to talk through. Good to learn difference in management between upper GI bleed caused by alcoholic liver disease and other causes. Explained management in great detail. Broke down everything well. Structured all the differentials and the different signs to look for.</td>
<td>Refreshments</td>
</tr>
<tr>
<td>Shockingly good examples (shocked patients). Good pointers especially body language tips.</td>
<td></td>
</tr>
<tr>
<td>Very thorough, broke down information well. Good use of questioning and participation.</td>
<td></td>
</tr>
<tr>
<td>Very thorough, broke down information well, so easy to understand. Good use of questioning and participation.</td>
<td>Continue being awesome!</td>
</tr>
</tbody>
</table>
## 2. OSCE Teaching — Medical

<table>
<thead>
<tr>
<th>Date</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>21/10/2015</td>
<td>Respiratory</td>
</tr>
<tr>
<td>28/10/2015</td>
<td>Abdominal</td>
</tr>
<tr>
<td>04/11/2015</td>
<td>Med Surg histories</td>
</tr>
<tr>
<td>11/11/2015</td>
<td>Psychiatry histories</td>
</tr>
<tr>
<td>18/11/2015</td>
<td>Ortho and rheum</td>
</tr>
<tr>
<td>25/11/2015</td>
<td>Interpreting CxR, AxR, ECG</td>
</tr>
<tr>
<td>02/12/2015</td>
<td>Neuro and opthalm</td>
</tr>
</tbody>
</table>
OSCE TEACHING — MEDICAL

Objectives:

To teach core presentations that commonly come up in finals

To enable students to receive feedback on their examination skills in preparation for finals

To enable students to practice presenting findings, and providing a differential diagnosis and a management plan

To include all students in the teaching session
OSCE TEACHING — FEEDBACK

Pooled data: Feedback from Medical OSCE teaching sessions

N=71
OSCE TEACHING — FEEDBACK THEMES

1. Teacher
   - Enthusiastic
   - Approachable
   - Easy to understand

- “Good use of student participation”
- “Not intimidating”
- “Easy to ask questions and talk throughout”
OSCE TEACHING — FEEDBACK THEMES

2. Content

- Fun and interactive activities
- Opportunity to practice
- Case studies
- Top tips

- “Quiz was useful and fun”
- “Really liked the interactive game”
- “Gave us a chance to present again”
- “Please get us to present”
- “Not just a listing exercise”
- “More case studies to talk through examination findings, investigations etc”
OSCE TEACHING — FEEDBACK THEMES

3. Style

- Not didactic
- Challenging

INTERACTION

- “More interactive”
- “Engaging”
- “Breakout session with scenarios that involved anyone”
- “Well paced”
- “Challenging with cases and thinking about differentials”
- “Handouts, mnemonics and key signs”
OSCE TEACHING – SELF EVALUATION

Figure 1

<table>
<thead>
<tr>
<th>Aspect</th>
<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had adequate time to prepare for the session</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td></td>
</tr>
<tr>
<td>The timing of the session went according to plan</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td></td>
</tr>
<tr>
<td>The session was interactive</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td></td>
</tr>
<tr>
<td>There was plenty of opportunity for questions</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td></td>
</tr>
<tr>
<td>Overall the students benefited from the session</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td></td>
</tr>
</tbody>
</table>

SD: Slightly Dissatisfied; D: Dissatisfied; N: Neutral; A: Agree; SA: Slightly Agree
OSCE TEACHING — MEDICAL

• Problems:
  • Consistency of sessions
  • Timing: clashing timetables, or amount of allocated content e.g. CXR, AXR, ECG in 1 hour
  • Lots of form filling for volunteers (lesson plan, self evaluation, feedback, peer observation)

• Changes:
  • Emphasise common learning objectives and key cases
  • Limit topics per session
  • Fixed time for weekly teaching Wed 1230-1330
  • Emphasise benefits of self-evaluation
3. SURGICAL SEMINARS

- Student Centred Approach
- Sent out questionnaires for topics and course design to block 1 students
- Implemented a non-compulsory Surgical Seminar series specific to their learning needs

![Chart showing preferences for teaching times]

- Lunch breaks 12:30-13:00: 100.00%
- Twilight teaching 5pm-6pm: 0.00%

N=20
What areas would you like to develop further/improve to prepare yourself as a surgical FY1?
# Surgical Seminars

<table>
<thead>
<tr>
<th>Date</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/01/2016</td>
<td>Vascular surgery</td>
</tr>
<tr>
<td>12/02/2016</td>
<td>Colorectal surgery</td>
</tr>
<tr>
<td>19/02/2016</td>
<td>Upper GI surgery</td>
</tr>
<tr>
<td>02/02/2016</td>
<td>Breast Surgery</td>
</tr>
<tr>
<td>09/02/2016</td>
<td>Lumps and bumps</td>
</tr>
<tr>
<td>16/02/2016</td>
<td>Orthopaedic surgery</td>
</tr>
<tr>
<td>23/02/2016</td>
<td>Urology</td>
</tr>
<tr>
<td>01/03/2016</td>
<td>Electrolytes and fluids</td>
</tr>
<tr>
<td>08/03/2016</td>
<td>Perioperative care and ITU</td>
</tr>
</tbody>
</table>
**SURGICAL SEMINARS FEEDBACK**

- Overall excellent quantitative feedback for teachers
- Qualitative Feedback:

<table>
<thead>
<tr>
<th>Content</th>
<th>Structure</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>High yield facts</td>
<td>More interaction</td>
<td>Good questions</td>
</tr>
<tr>
<td>Good clear explanations</td>
<td>More quizzes</td>
<td>Pitched at the right level</td>
</tr>
<tr>
<td>More X rays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handouts</td>
<td></td>
<td></td>
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</tbody>
</table>
3. SEMINAR TEACHING — WIWIK

• A teaching course aimed at topics not currently covered in an undergraduate medical course, but common for junior doctors

• This allows new doctors to adjust to their job faster, make less mistakes and ultimately improve patient care

• Initial work up: survey of >60 foundation year trainees at PRUH on topics they wish they had been taught prior to starting F1. The most common topics were selected for the teaching programme

• Topics: effective handover, presenting to a radiologist, gentamicin / vancomycin prescribing, prioritizing bleeps
SEMINAR TEACHING — WIWIK FEEDBACK

Figure 2

- How well did the training session meet with your curriculum?
- How well did it match your own teaching needs?
- How interesting did you find it?
- How would you rate the style of the tutors / facilitators?
- How would you rate your overall level of satisfaction with the training session?

N=12
“Great teaching style. Good brief insight into important things we should all know as an F1. Thank you!”

“Good way of discussing important things for F1. Many thanks for this. Perhaps a bit more structure would help although at the last minute it was good”

“Even though it was last minute for the presenter it was useful, information and tips. A structured / planned session would be even better”

“Engaging and entertaining (in a helpful educational way!)”

“Very useful tips. Thank you. Liked the didactic style and how it was pitched at the right level”

“A bit more prepared material”
SEMINAR TEACHING — WIWIK

- Problems:
  - Structure
  - More market research
  - Timing: closer to starting F1?
  - Argument that this should be learnt from apprenticeship?

- Changes:
  - Integration with ‘transition to medicine’ — Curriculum 2017
  - Running more sessions in run up to F1
4. NEAR-PEER MENTORING

- Two:Two Doctor-student ratio
- Aim to meet at least twice per rotation
- Usually pastoral care, teaching gaps
NEAR-Peer Mentoring

• Problems
  • Mentors enthusiastic to volunteer initially
  • Some students like the idea, others find it hard to meet with mentors due to scheduling conflicts

• Changes
  • Mentors must show evidence of having met with students twice → certificate
  • Aim for one meeting at start and one at end of rotation
  • Student worksheet: career goals, medical student life etc.
**NEAR-PEER MENTORING**

### NEAR-PEER MENTORING GOALS

<table>
<thead>
<tr>
<th>Clinical (e.g. blood taking skills, clerking, examination skills etc)</th>
<th>AT END OF NPM PROGRAMME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td>How these will be achieved</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal/professional (e.g. teamwork, communication, presentation skills, audit etc)</td>
<td></td>
</tr>
<tr>
<td>Goals</td>
<td>How these will be achieved</td>
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</tbody>
</table>

### Career (e.g. talking to relevant specialty trainees, courses, workshops etc)

<table>
<thead>
<tr>
<th>Goals</th>
<th>How these will be achieved</th>
<th>Time-frame to achieve these</th>
</tr>
</thead>
<tbody>
<tr>
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</table>
CONCLUSIONS...

• Positives:
  • 4 arms of JDEC successfully delivered varied teaching and mentoring that has the capacity to be rolled out in both DGH and teaching hospitals
  • Emphasis on educational theory with reflection
  • “Teaching to learn.”
  • Easing the medical student → Junior Doctor transition – Providing pastoral support, mentoring, WIWIK

• Pitfalls
  • Only functions with lots of enthusiastic volunteers!
  • ‘Student-Centred’ - Finding out what students want vs. meeting curriculum requirements
  • Financial/administrative requirements - feasibility maintained by backing from senior education team
  • ‘Saturation’ of student timetables
THANK YOU!!

• Special thanks to the team:

  • Esha Abrol
  • Wing Kin Liu
  • Aarthi Ravishankar
  • Emma Cook
  • Sonja Foo
  • Lucia Chen

  • Sam Thenabadu
  • Charlotte Davis
  • Bandana Uprety
  • Chrissie Richardson
  • Kat Smith
  • Hamid Khwaja
  • April Andrews
  • Ife Oni
  • All those who have taught!
REFERENCES


FURTHER READING

peer learning in higher education
learning from & with each other

EDITED BY DAVID BOUD, RUTH COHEN & JANE SAMPSION