

Upskilling International Medical Graduate Specialists in Anaesthesia using videoconferencing

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Background

- Fellowship of Australian and New Zealand College of Anaesthetists (ANZCA) is required for registration as an Anaesthetist in Australia
- Pass rate of Fellowship examinations are of particular concern for International Medical Graduate Specialists (IMGS)

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Aim

To investigate if an education system using videoconferencing will successfully support IMGS at a distance to meet the standards set by the anaesthetic college.

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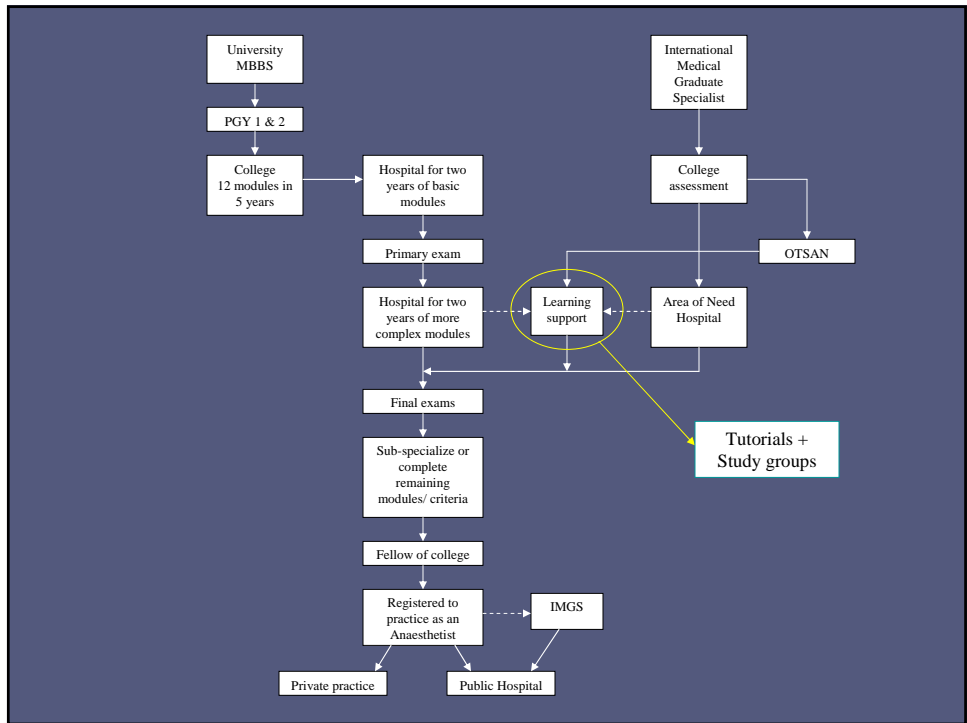
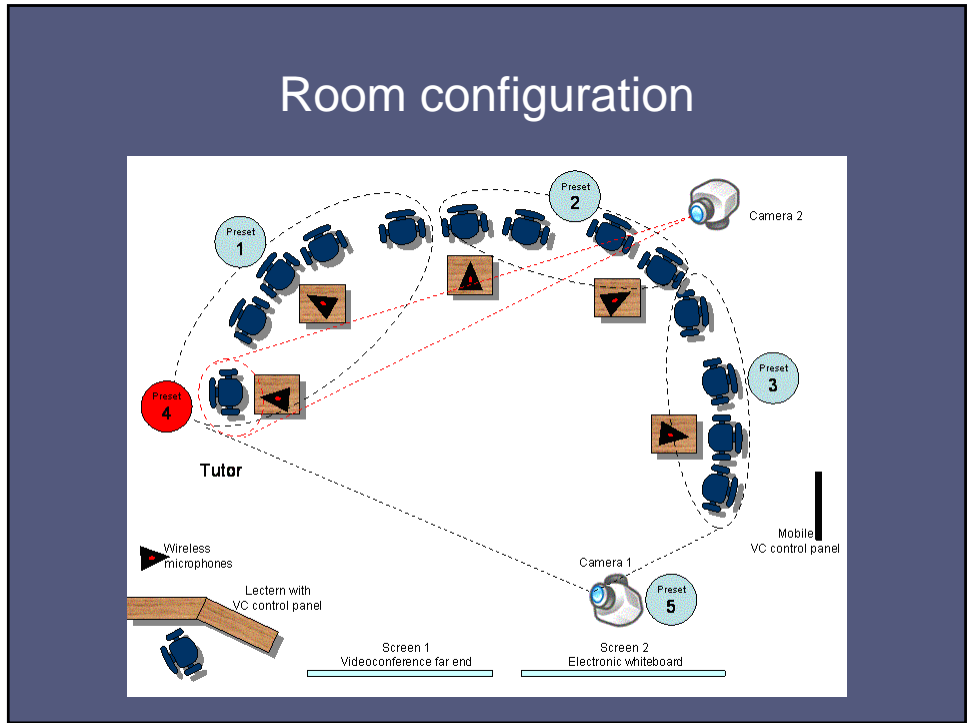
Method

- Weekly discussion groups
 - conducted by a past examiner of the college
- Education system developed
 - address knowledge deficit
 - improve understanding of exam process
 - reduce social isolation
- Biggs SOLO partnered with Dreyfus model
 - Previous success in Face-to-Face setting
- Videoconferencing used for delivering tutorials

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Assessment tools

- Survey
 - to understand education issues
- Biggs: Study Process Questionnaire
 - to assess the motivation and study strategies

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Tutorial format

- Short Answer Question
 - 8 minutes to answer
 - Answers not explicitly divulged
- Case presentation
 - 2 hours of guided discussion

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Sites and participants

State	Number of sites	Number of candidates
Australian Capital Territory	1	2
New South Wales	5	12
Northern Territory	1	6
South Australia	5	14
Tasmania	3	11
Victoria	6	9
Western Australia	2	2
Queensland distant sites	20	51
Queensland local site	1	61
TOTAL	44	165

Learning needs

IMGS

- Spend 2hrs per day studying
- Have multiple constraints in studying
 - Isolation, lack of study partner
 - Find it difficult to learn new material
 - Feel they can use their knowledge
 - Mainly remember in images

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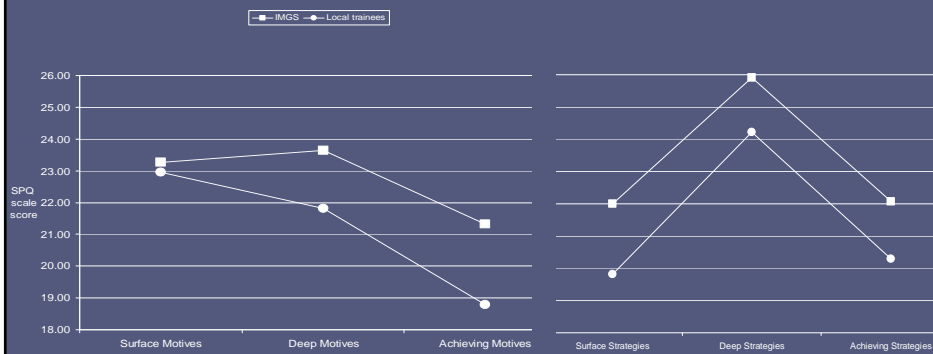
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Learning needs

Survey question	% Agree	% Disagree	% Undecided
I have no trouble remembering facts required for the exam	18.6	50.0	31.4
I tend to remember facts and studies to pass the exam	47.1	21.4	31.4
I remember material in picture format or images	74.6	7.0	18.3
I am able to apply my knowledge to the context	60.0	12.9	27.1
I can easily relate theory to practice	57.7	14.1	28.2
I can easily apply theoretical knowledge to solving problems	66.2	11.8	22.1
I tend to avoid reading about difficult material	12.7	73.2	14.1

Study Process Questionnaire (SPQ) scores IMGS compared to local trainees



IMGS pass rate ANZCA finals

September 2007 (n=32) 19 pass – 57%

	Number	Pass	Pass rate %
OTSAN	16	13	81.2
➤OTSAN and participated in videoconferences	5	5	100
Non-OTSAN	16	6	37.5

April 2008 (n=28) 13 pass – 46%

Candidate	Number	Pass	Pass rate %
OTSAN	11	8	73
➤OTSAN and participated in videoconferences	7	6	86
Non-OTSAN	17	5	29

Discussion

- Visa, employment and registration linked to rural hospital
- Lack of supervision
 - Current anaesthetic outlook, thinking
 - Skills taught in Australia not usual in other countries
 - situation awareness, decision making, leadership, professional negotiation and being a health and patient advocate.

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Successes

- Final ANZCA Fellowship examinations
 - Verbal activities, structured decision making, justification of opinions
- Videoconferenced education system
 - Developed over time
 - Apparent high success rate

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Failures

- Initial assumptions incorrect
 - High level of study motives and effective strategies for studying already exist
 - SPQ scores higher than locals
- Group size
 - Difficult to manage large numbers
 - Judging shortfalls less rapid than FTF
 - Interaction with distant participants needs to improve

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Conclusion

- IMG may not know what is pertinent in a foreign system
- Have suitable study strategies and motivation
- Medical education system tested using videoconferencing
 - Learners aided to construct meaning from critical reflection
 - Improved examination results

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