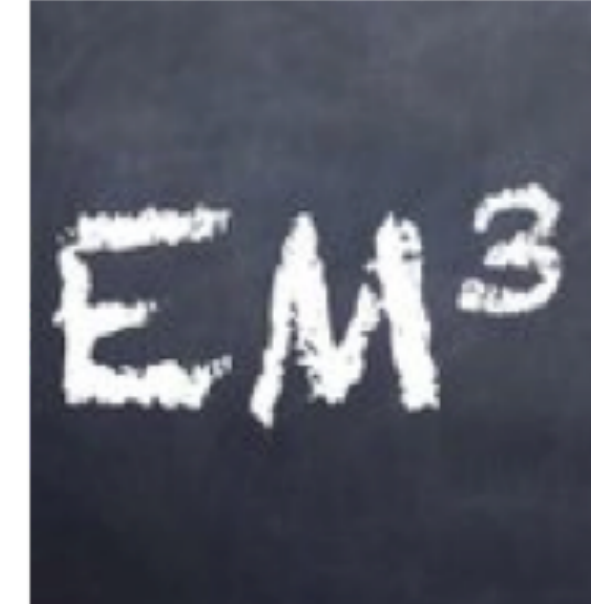


Flipping the classroom: Turning ED education on its head



@EM3FOAMed

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OBJECTIVES & BACKGROUND

- Delivering education within an Emergency Department (ED) is challenging.
- Formal teaching sessions often default to didactic lectures imparting core knowledge. As adult learners this is not the most effective way to learn¹.
- We aimed to improve on this practice for our CT3 trainees by introducing the "flipped classroom" model in which the classroom and homework elements of a course are reversed². The completion of lectures/core material beforehand enables more active learning in face-to-face sessions¹.

METHODS

- In August 2013 we introduced a new educational programme for the eight CT3 trainees within the ED.
- This consisted of monthly modules with learning outcomes mapped to the CEM curriculum. We created a blended approach to learning with each session including an online learning component via the Moodle learning platform, prior to a face-to-face teaching session.
- For the online component trainees completed tasks including external e-learning modules, reading papers/guidelines, watching videos and listening to podcasts; they then contributed to interactive case studies in the form of collaborative wikis.
- An additional resources page was included to encourage trainees to undertake further reading around the subject.
- Following completion of the online module trainees attended a half-day face-to-face teaching session. A CT3 trainee led this session with an assigned ED consultant facilitator.
- Online feedback forms were completed by trainees for each learning module and nine months into the programme a focus group was held to gain their views on the programme as a whole.

Table 1: Results from the Focus Group Feedback

Online Learning & Wikis	Face to Face Sessions	The Programme Overall
"The online learning gets the core knowledge out of the way"	"Completion of the VLE beforehand means the sessions are much more of a discussion"	"I would definitely recommend this programme"
"The VLE is a good resource bank for quality websites that have already been assessed"	"We have more control over the sessions"	"Nice to have some teaching, very different to my previous jobs!"
"The additional resources were especially useful when preparing to lead the face to face sessions"	"The sessions are more discussions now, nice change from power point!"	"Much better than other teaching programmes I've had in the past"
"I like the wikis they challenge your thought process"	"These sessions should be trainee led, consultants can chime in when appropriate"	"It covers the curriculum well"
"The wikis make you look up other stuff related to the module"	"Would like more simulation and OSCEs in these sessions"	
"The wikis are great revision for MCEM part B"	"Good to have teaching practice"	
"The wikis are more realistic than many case studies and help to relate what you learn to real life situations"	"Teaching is a common competency – not really any other opportunities to have observed teaching in the department"	

RESULTS

- The results from the focus group can be seen in table 1.
- Trainees valued the programme for both exam preparation and for continuing their professional development.
- The online component consolidated the core knowledge enabling the face-to-face sessions to be more dynamic and interactive. The wiki cases enabled a smooth transition between these two elements.
- Trainees requested increased use of simulation and mock OSCEs-within the programme.

CONCLUSIONS

1. Actively involving trainees in delivery of teaching created a sense of ownership and control regarding their education.
2. This blended programme supports Kolb's learning cycle³ by gaining core knowledge, reflecting on this and starting to apply it to abstract cases.
3. The addition of regular simulation/OSCE cases for each module would further reinforce active experimentation by putting knowledge and skills into practice.

REFERENCES

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