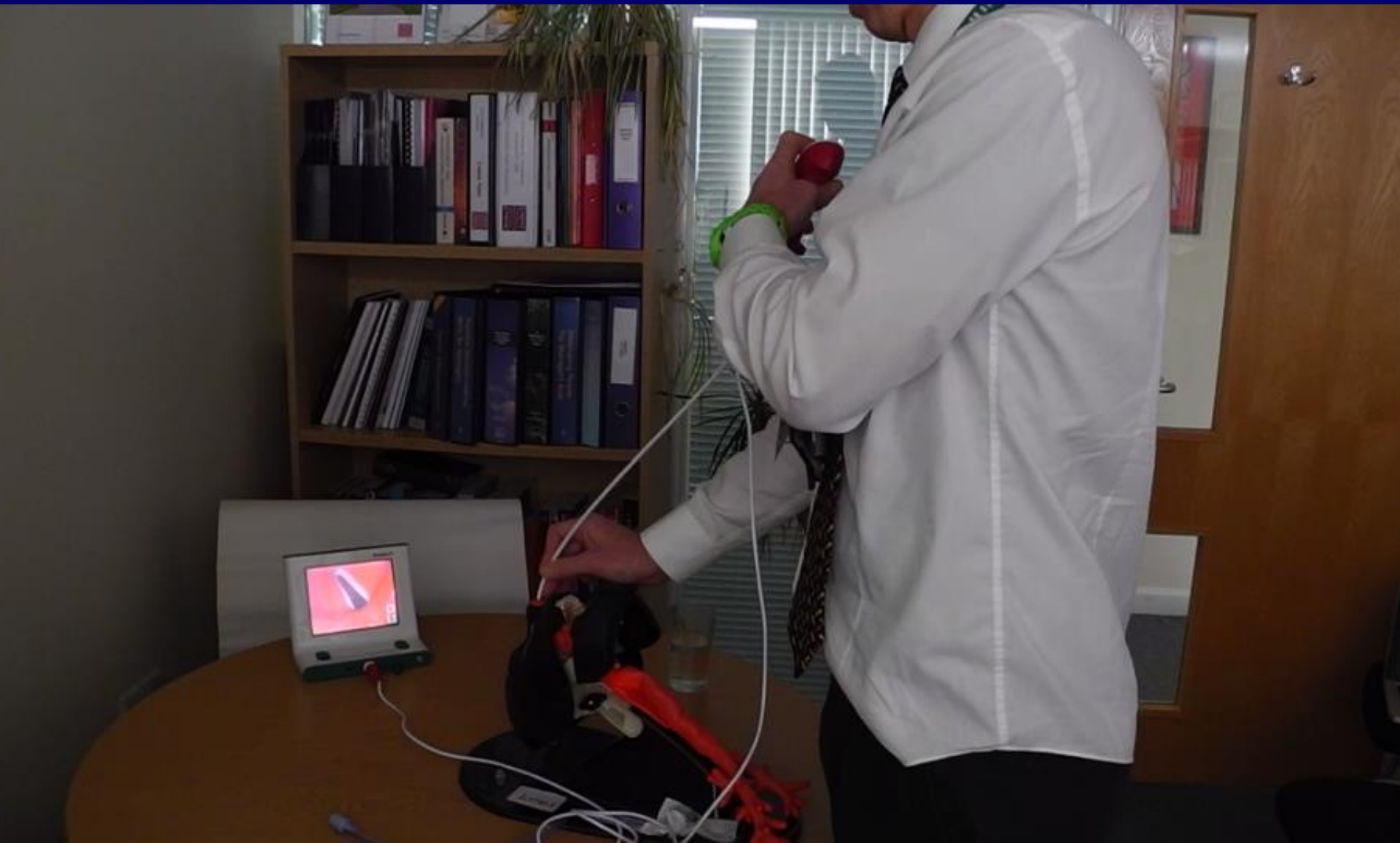


JISC June 2013

Does both didactic teaching and video feedback improve the FOI skills of an anaesthetist?

**Dr A Babic, Dr L Jackson, Dr M Stacey
UHW**





Fibreoptic intubation (FOI)

- Essential skill: knowledge and practical skills
- NAP 4 findings
- No national training and EWTD
- Trainees and developing techniques

NAP 4

NAP4:

- Exec summary 3 pages
- Report 216 pages
- Over 160 recommendations



Aim

- Assess this teaching process: use of didactic, use of checklist and video feedback (each have individual benefits)
- Video data accumulation
- Encourage learner reflection
- Improve skills of learner
- Improve patient safety!

Methods

- Ethical approval
- Questionnaires (pre and post)
- Equipment
- Primary outcome measurement
- Checklist
- Teaching and feedback
- Practice
- Re-video

Checklists

- Cognitive tools
- Based on best practice
- Reduce variability
- Reduce error
- Improve performance

FOI teaching checklist

Have you done the following?

1. Considers ergonomics
2. Position: **in front** of patient
3. Holds lever of scope in **left** hand
4. Lever between eyebrows of patient
5. Scope kept straight throughout
6. Oral - measures distance from tragus of ear to angle of jaw

Deliberate practice

- Focused, well-structured, deliberate
- Feedback
- Setting goals beyond current level of performance
- Hours (10000)
- Maintenance

- *Ericsson*



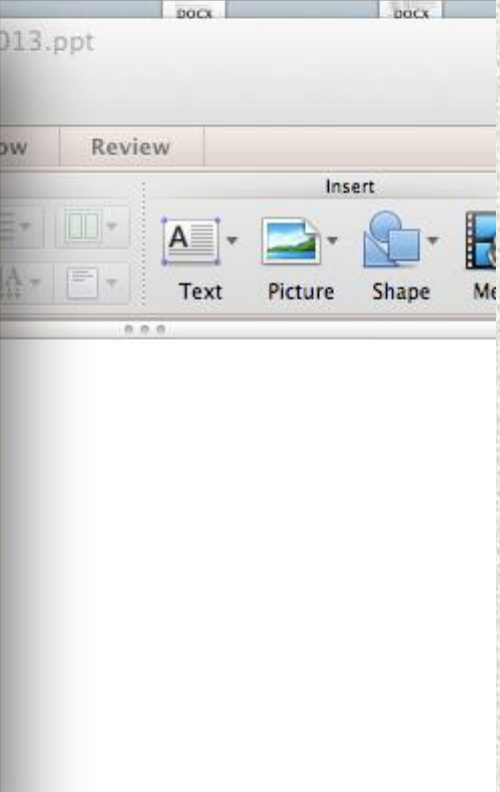
Video and software: healthcare can benefit from development elsewhere

Video analysis has potential to improve teaching and learning practical procedures





jenni post train, 80 MB, 640 x 360



Control bar for Studiocode with various editing options:

- merge rows
- Make movie
- Append slow
- Static text
- Text tracks
- Overlay text
- lines 2
- Find
- Database
- Matrix
- Text
- New row
- New row +
- Organizer

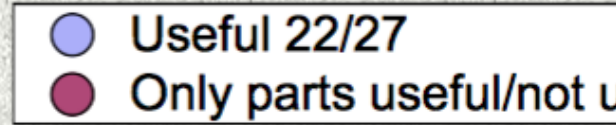
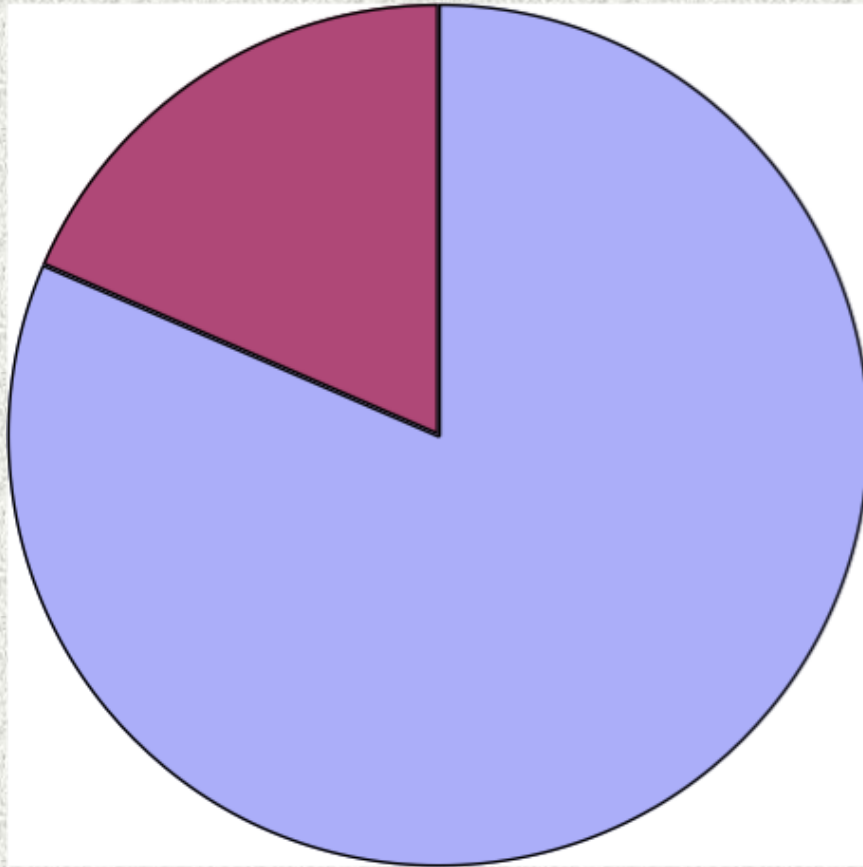
Timeline: 00:01:11.09

1	code 001	
2	Position	1 Pos- Front
3	Ergonomics at St	1 Ergo- Good
4	Scope Straight	1
5	Time- Nose to Ca	1
6	Time- Lips to Car	1

Results

- Preliminary!
- Analysis and video coding on going
- Total: 27 candidates

Results



Results

- 5 candidates did not find the teaching/feedback useful
- 4/5 were male
- All above ST6
- **Despite this, video analysis has shown the time to intubation was quicker and reduced number of collisions**

Discussion

- Future of teaching
- This model may be developed
- Across specialities
- Kit

Limitations

- Acceptance of the use and sharing of video footage
- Dislike of checklists
- Kit (IPD)
- Time (despite what James Clay says!)

Summary

- Didactic checklist - useful
- Video footage - very useful (feedback)
- Analysis for further improvement- short term and long term
- Further developments and funding?



Acknowledgement

- I would like to acknowledge and thank JISC for providing the funding for the hardware to perform this innovative educational study.
- <http://www.jisc.ac.uk/aboutus.aspx>

References

- Cook TM, Woodall N, Frerk C; Fourth National Audit Project. Major complications of airway management in the UK: results of the Fourth National Audit Project of the Royal College of Anaesthetists and the Difficult Airway Society. Part 1: anaesthesia. Br J Anaesth 2011;106:617-631
- Ericsson, K. A., Krampe, R. Th., & Tesch-Roemer, C. (1993). The role of deliberate practice in the acquisition of expert performance. Psychological Review, 100, 363-406.
- Williams DJ, Byrne AJ, Bodger O. Validation of a novel fiberoptic intubation trainer. Anaesthesia. 2010 Jan;65(1):18-22 4
- Ovassapian A, Yelich SJ, Dykes MH, Golman ME. Learning fiberoptic intubation: use of simulators v. traditional teaching. Br J Anaesth. 1988 Aug;61(2):217-20