

HEALTH'S GOT
★ TALENT



CITY
UNIVERSITY OF LONDON
— EST 1894 —

Academic excellence for
business and the professions

Peer-to-peer learning in the virtual radiotherapy training (VERT) room for undergraduate radiography students

Chris O'Sullivan – *Senior radiographer and seconded lecturer*
Liam Mannion – *Lecturer*
Aisha Moolla – *Student radiography student*

Contents

- What is radiotherapy & VERT?
- Rationale for creating the event
- Evidence base for peer-to-peer learning
- The event
- The student perspective
- Conclusion

Courses

Undergraduate | Postgraduate | Research Degrees | CPD | Short Courses

Radiography - Radiotherapy and Oncology 2019 | 2018



Radiography (Radiotherapy and Oncology)

Applying for September 2018?

If you are interested in starting this programme in September 2018, places may be available through Clearing and Adjustment this summer.

- BSc (Hons) Radiography (Radiotherapy & Oncology)
- Full time, pre-registration, undergraduate degree
- Specialist academic knowledge and clinical training
- Blended approach

Therapeutic Radiographers use doses of x-rays and other ionising radiation to treat medical conditions – mainly cancer and tumours

Highly sophisticated technology

Positioning of the patient
Movement of the patient couch
Manoeuvring of the treatment machine

Highly tuned technical, motor and communication skills

Millimeter accuracy

High risk procedure

- Historically, therapeutic radiographers have been trained with a mixture of didactic lecturing and ‘on the job’ clinical training
- Shift to a blended approach in the last decade
- In essence, in clinical observations, we tend to show students the ‘correct procedure’ and rely on them to understand the process and its rationale learning ‘by rote’
 - Impact on the learner
 - Impact on the clinical staff
 - Impact on the patient

(Beavis, 2017)



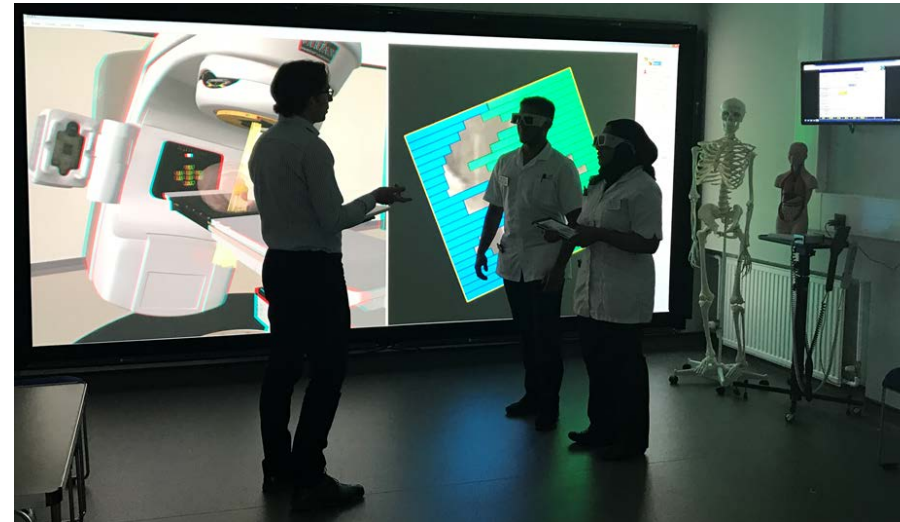
“...a clear role for VERT... because of its ability to visualise conceptual information within a simulated clinical environment...” (Leong et al., 2018)

Rationale for creating the event

hcpc health & care
professions
council

Your duties as an education provider

Standards of
education
and training



**Student
feedback**

- “...need for **learner involvement** in the their programme of study...”
(HCPC, 2017)
- Student feedback

Peer to peer learning

- Well established in healthcare education
- Broadly defined as “*students learning from and with each other in both formal and informal ways*” (Boud, 2014)
- Effective educational intervention at improving preclinical educational outcomes (Secomb, 2008)
- Empower students and help them retain more information; it can also help students with learning difficulties utilise different skills, increasing engagement (Hardin and Hardin, 2002)



The event



- 15 minute tutorial aimed at pre-clinical year 1 students
- Proforma of activities – flexible to the needs of individual students – designed by the academic team
- Year 2 volunteers received VERT training and facilitated the event as peer mentors
- Lecturer assistance available on the day

The event

- Content focused on:
- **Personal and patient safety**
- **Patient positioning**
- **Accuracy in treatment delivery**
- Increasing awareness, skill, accuracy and confidence (of both cohorts of students)
- Professional relationships – another opportunity for Year 1 students to meet their senior peers prior to attending their first clinical placement



Enhancing the student experience

- My experience of training and on the event day



Enhancing the student experience

- **Advantages**

- Confidence building – volunteers and learners
- Individual ‘pacing’ – ability to cater the session for the learner
- Ability to provide tuition and feedback – technical and pastoral
- Team work – essential skills for my profession

- **Considerations feeding forward**

- Two peer volunteers – potential drawbacks



Facilitator's issues

- Timing of the session – demands of the programme
- Engagement
- There is concern that while students can successfully learn clinical skills using simulation techniques, there is a risk that the patient is not fully considered; in a sense, simulation risks generating a false sense of security (Kane, 2018)
- This may be of increased risk in a peer to peer learning environment

Conclusion

- Pilot well received
- Improved confidence of both year groups
- Feedback can be acted on
- Engagement needs to be considered
- Opportunities for the future to gather data



References

- Beavis, A.W. (2017). The opportunities of computer simulation training in radiation therapy. *Journal of Medical Radiation Sciences*, 65 (1) pp 77-79
- Boud D, Cohen R, Sampson J, editors. *Peer learning in higher education: learning from and with each other*. Abingdon: Routledge; 2014
- Hardin, B & Hardin, M (2002). Into the Mainstream: Practical Strategies for Teaching in Inclusive Environments, *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 75:4, 175-178, DOI: 10.1080/00098650209604925
- HCPC (2017). Standards of Education and Training. <https://www.hcpc-uk.org/education/standards/> Accessed June 10th 2018.
- Kane, P. (2018) Simulation based education: a narrative review of the use of VERT in radiation therapy education. *Journal of Medical Radiation Sciences*, 65 (1) pp 131-136
- Leong, A., Herst P., Kane P. (2018). VERT, a virtual clinical environment, enhances understanding of radiation therapy planning concepts. *Journal of Medical Radiation Sciences*, 65 (1) pp 97-105
- Secomb, J. A systematic review of peer teaching and learning in clinical education. *Journal of clinical nursing* (0962-1067), 17 (6), p. 703.

City, University of London
Northampton Square
London
EC1V 0HB
United Kingdom

T: +44 (0)20 7040 5060

E: department@city.ac.uk

www.city.ac.uk/department

