Integrating research-informed teaching into radiography education

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Integrating Research-informed Teaching into Radiography Education

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E-mail: r.n.higgins@salford.ac.uk
Achieving Excellence in Radiography Education and Research Conference, December 1st 2018, Leeds
○ **Research-informed Teaching (RiT)** links research with teaching.

○ Focuses on the processes through which knowledge is produced, places emphasis on developing skills of research and enquiry.

○ We developed and integrated the **Research-informed Teaching experience (RiTe)** within our UG curriculum in 2009 [1-5].
RiTe develops student research skills from year 1 and links theory with their area of practice.

Work in collaborative enquiry based learning groups (6 students per group).

Explore the relationship of image quality and radiation dose optimisation (links to a key area of practice).
The student’s perspective in how they experience learning is an important area in contemporary teaching and learning research [6,7].

We evaluated the student experience and learning process of RiTe in years 1 and 2.

Perceptions of RiTe by academic tutors and clinical placement educators also explored.
Exploring the process of learning is complex!

- Mixed methods research
  - Focus group & survey
  - (Produced data on the same topic from different angles)

- Also interested in the academic tutor and clinical placement educator perspectives of RiTe
  - Online focus group
“I learnt a lot from the peers in my group … it was great to share ideas and learning.”

“Although we are taught about it [kVp], we never really knew what difference an additional 5 [kVp] would make.”

“One thing that I did learn from the RiTe was that there is little research in radiography.”

“I have to confess I did come out of it [RiTe] feeling a load more confident”
Student Survey

- Strong agreement that RiTe was a valuable learning experience.
- Strong agreement that enquiry-based collaborative group working process helped with learning and skills development within RiTe.
- Agreed RiTe helped to link theory with practice (image quality and dose optimisation).
- Agreed RiTe raised their awareness of research and helped developed their research skills.
Students felt that they gained a greater awareness of how research could inform their practice and developed their own research skills.

Supported the development of cognitive and psychomotor competencies through trial and error (Enquiry-based learning).

Group working a key element of the learning process and experience.

Supported the cross-proliferation of ideas by students and knowledge acquisition.
“... Provides a unique opportunity to develop theoretical understanding and to see the differences to their x-ray images and dose to the patient.” (Clinical Placement Educator)

“... It makes them question clinical practice and to look at evidence based research.” (Academic Tutor)

“... Promotes the culture of research within the radiography profession.” (Clinical Placement Educator)
RiTe seen as important learning intervention.

Supported students into entering into discipline related research and developed their research skills.

Supported student understanding of dose optimisation and image quality (linking theory with practice).

Supported the development of key employability skills (communication and team working).

RiTe: Academic and Clinical Perspective
Further Work

- Evaluate the resulting increase in knowledge and capability before and after RiTe.  
  *(Learning Evaluation)*

- Is the knowledge and research skills development from RiTe maintained following qualification in practice?  
  *(Behaviour Evaluation)*
Further Work

- Findings also suggested that students did not feel they could challenge practice or influence change:

- Student FG: “No way would you say to a qualified radiographer, ‘Well in our RiTe week…’

- How can we provide the impetus for students to have these requisite skills?
References


Questions?

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Second RiTe II student presentation researching image quality and dose with pelvis imaging 😊

ELVIS WITH A ‘P’

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