

Enquiry Based Learning (EBL) For Science Of Imaging Technology

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Introduction

Diagnostic Radiography is a science based health course. The imaging science modules provide a foundation for practice and for future study. They have had the highest rate of referrals and failure over a number of years and as such are a source of anxiety and reduced confidence at level 4. A move to a more active form of learning more closely aligned to the world of work will engage students more effectively in the learning process.

Students also have difficulty relating science knowledge to practice. Partnership with placement staff should reinforce the message that imaging science is relevant to their work and that it is seen as important by their future employers.

Students enter with a broad variation of science knowledge, so some students fail to engage in the learning because it is pitched too low, whilst others lack the scaffolding on which to build. Guided enquiry based learning in small groups should encourage students to be more self-directing and provide a learning environment suitable to their needs.



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Aim

The aim of this project is to promote learner autonomy by applying enquiry based learning approaches to the Science of Imaging Technology 2 module at level 4

The Project

The students were organised into 8 groups of 4-5. They were asked to devise an exhibit for a science fair based on one of the module learning outcomes. Their work could take any form that allowed observers to walk round and view their work in an exhibition.

The Science Event

The students were very innovative in the work they produced. These included a quiz, a film a model and a game. On the day the first year and second year students viewed the exhibits and commented on them. They were also asked to indicate which they thought were the best. Prizes were awarded for 1st to 3rd place..



Evaluation

Evaluation of the project was undertaken via a questionnaire containing both open and closed questions which provided quantitative and qualitative data. Thematic analysis of the open questions and descriptive analysis of the closed questions was undertaken.

Themes

- o The positive impact of working as a team
- o Conflict resolution and collaboration skills
- o The supportive nature of the group
- o Learner autonomy and transferable skills

Conclusion

The value of enquiry based learning is clear. This teaching strategy promotes learner autonomy and transferable skills. However, it is not 'one size fits all'. A minority find this method of learning particularly challenging and stressful. This highlights the need for effective facilitation, particularly regarding group work.

