**College of Radiographers Industrial Partnership Research Awards**  
**Final Report Form**

<table>
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<tr>
<th>1. Principal Investigator</th>
<th>Angela Eddy</th>
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<tr>
<td>2. Project Title</td>
<td>Work based learning and role extension – a match made in heaven?</td>
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<td>3. Amount of Award</td>
<td>£2760</td>
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| 4. Did you spend the money as indicated in your proposal (if not why)? |
|---|---|
| Yes – although more money was taken up with transcribing costs than initially anticipated, however this was balanced by the reduction in travel costs as some telephone interviews were undertaken when it was difficult to get a mutually convenient time to conduct the interview. |

| 5. Did you reach your intended project outcomes (if not why)? |
|---|---|
| Overall the project did meet the outcomes. However, two of the objectives (outlined below) although met, could have been strengthened by interviewing a greater number of individuals with different scopes of practice to see if there was any further links identified between role and potential issues with work based learning. Exploring student experiences from other HEI who offer this kind of training for role extension could have possibly enriched the data, and enhance the trustworthiness of the findings further. |

1. **Draw conclusions regarding the validity and efficacy of work based learning as an educational vehicle to support role extension.**
2. **To make recommendations regarding the support mechanisms and development needs of individuals who engage with work based learning to facilitate role extension.**

| 6. What are your significant findings? |
|---|---|
| Please see attached executive summary. |

| 7. Have you submitted the work for publication (if so where)? |
|---|---|
| **Presentations:**  
Society and College of Radiographers conference Feb 2008 Brighton  
IIRT conference - Sligo Ireland November 2008  
Toronto Radiation Medicine and Oncology conference 2009  
**Publication:**  
Draft publication for Radiography – To submit April 2009 |

| 8. Please provide an executive summary of your work (two sides of A4 maximum)  
N.B. If you already have a draft or final version of the proposed publication can you please attach. |

| 9. Return of application form |
Please return this form to:

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Or by email at ValerieA@sor.org
Executive Summary

Introduction:
The aim of this exploratory study was to examine postgraduate radiotherapy student’s experiences of undertaking work based learning modules to support role extension and development.

Research questions:

1. How effective is work-based learning at enabling the acquisition and development of skills and competencies needed to support role extension and role development?
2. How are skills and competencies enabled, and supported in the workplace?
3. What are the barriers (personal professional and organisational) to skill and competence development in the workplace?

Objectives.

1. Conduct semi structured interviews with individual’s that have, or are studying work-based modules to support role extension with Sheffield Hallam University (SHU).
2. To explore the experiences of students undertaking work based learning.
3. Identify the key factors that impact upon the quality of the learning experience by exploring with practitioners the mechanisms and effectiveness of support available to develop skills and competencies in the workplace.

Method

Purposive sampling
- 70% of participants on the program agreed to be interviewed.
- Based at 6 different Hospital.

Semi structured interviews
- 2 Breast mark up
- 2 Palliative mark up
- 1 Gynaecological specialist.
- 1 imaging radiographer (portal image review)
- 1 patient assessment and review

Results

Interview transcripts were analysed using thematic analysis. The following themes emerged:

1. Organisational Resources:
   - Staffing
   - Time.
2. Role and practice issues related to competence development.
   - Skill acquisition.
   - Support and mutual respect.
   - Practice differences and tensions.
   - Role definition (learner and mentors)
   - Power balance and medical dominance.
   - The scope of practice.
3. The Individual.
   - Previous experience.
   - Evolving autonomy in practice
   - Perceived value of the study.

Discussion and links to the literature:
Organisational themes emerged that were related to how staff shortages had a deleterious impact on acquiring clinical competences and getting access to previously agreed study time. Some students talked about a lack of peer support, and how staff shortages exacerbated this further. The literature suggests that when individuals perceive there is organisational support, and commitment, it has a positive impact on their job satisfaction. This is often results in an increased individual commitment to their work and the employer (1, 2, 3, 4). Protected study time and overt
organisational support maybe a consideration in departments, where recruitment and retention of staff in these roles is an issue.

The role and practice issues related to competence development covered multiple issues. Competing with registrars for the Oncologists time, in terms of mentoring and peer review, was problematical in some departments. In some instances limited clinical guidelines combined with conflicting and inconsistent practice by Oncologists, made it difficult for the student to assimilate what practice was deemed acceptable. Medical dominance was not an issue, and mutual trust and respect did exist. The level of this varied from total trust in what the radiographers were doing (to not checking work in detail) to what was described as “nit picking” over tiny issues. Once radiographers were perceived to be performing well in the role, the scope of practice often expanded beyond what was initially envisaged, and this proved difficult to manage. These experiences resonate with the literature, where ambiguity in defining the roles and unrealistic expectations of one person’s level of work capacity meant the scope of practice was too big and unmanageable by the post-holders (5, 7, 8, 9, 10, and 11). The literature also indicates that conflicts between personal practice developments and the custom and practice of the service can compound any difficulties experienced by individuals (1).

The personal, professional and educational experiences an individual brings to the role naturally impacted on their perceptions. Working academically at level seven was perceived to be a concern for some individuals, for many this was their first master’s level module. They wanted clear guidance and support from the University regarding evidencing clinical competencies whilst demonstrating master’s level skills. In the clinical environment strategies that worked well included the use of problem based learning (often utilised by Oncologists), and supportive mentorship. Providing a coherent link between academic work and clinical practice seemed to be effectively facilitated through using case studies. This approach was well received by all students and deemed to be a valuable learning tool. There was a perception that undertaking the module validated, and gave credence to individuals practice, especially within the multidisciplinary team. Undertaking the module was valued by the individual when it was linked to a tangible and transparent career structure within their department. Conversely, where a career progression framework was not transparent to the individual this caused discontent. Some individuals commented on the negative effect Agenda for Change had on their motivation to undertake the modules.

The literature suggests that development of practice expertise is a liberating and empowering experience, and increased job satisfaction leads to improved recruitment and retention (5, 8). Personal characteristics were identified as key enablers; confidence, adaptability, stamina, assertiveness and negotiating skills. Supporting the development of these skills will help with conflict resolution and enable roles to work effectively. Conversely, a lack of confidence by the post holder was perceived to be a barrier (14) but good clinical supervision helps overcome this (1).

Conclusions/recommendations

Work based learning can be used as an appropriate vehicle to support role extension in practice. However, for it to be successful, consideration of the following educational and organisational strategies maybe prudent: Departments need to deliberate how they can effectively introduce and support individuals, with due consideration for appropriate staffing levels and skill mix. Study time need to be agreed in advance and wherever possible protected to ensure students progress. Increased numbers of trainees at higher practice levels can have a negative impact on the student learning experience and their progression. In larger teaching hospitals, individual’s maybe competing with registrars for “cases” in certain patient groups, and oncologists may have conflicting demands placed on them for their mentorship and support. Extended roles such as breast mark up and palliative mark up seemed to be affected the most.

The importance of good clinical supervision and mentorship cannot be underestimated and effective and timely systems need to be in place. Establishing effective models of support for mentorship and supervision at this level of practice should be encouraged, and collaboration between educational institutes and departments could facilitate this. Careful recruitment of staff to these training roles is vital. How robust the person is in terms of “emotional intelligence” seems to impact on how successful the training is and perhaps how effective they are in the training role. Academic institutes need to work collaboratively with departments to develop tripartite agreements between the university, the departmental manager and the student. Learning should, as far as possible be tailored to meet the needs of the individual, the department and be congruent with the scope of practice.

References
5. GIBSON. F.Focus group interviews to examine the role and development of the clinical nurse specialist. Journal of Nursing Management. 2001 9 331-342