

Angela Eddy

CoR Research Award – £2,760.77

Role extension and work-based training, a match made in heaven?

Aim

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. What skills and competencies are developed? 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?
4. How does clinical practice change or evolve as a result of undertaking work-based learning to support role extension? Is the impact on the service and patient care measurable?

Objectives

1. To undertake a critical literature review of the issues associated with utilising work based learning to support education and training.
2. To undertake a critical literature review around the development of skills and competences associated with role extension and role development.
3. Conduct semi structured interviews with individual's that have, or are studying work-based modules to support role extension with Sheffield Hallam University (SHU).
4. To explore the attitudes, expectations and experiences of students undertaking work based learning with SHU.
5. 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.
6. Identify the skills and competencies that have been enabled and facilitated through work-based learning and explore the impact of that on clinical and professional practice, including patient care.
7. Draw conclusions regarding the validity and efficacy of work based learning as an educational vehicle to support role extension.
8. To make recommendations regarding the support mechanisms and development needs of individuals who engage with work based learning to facilitate role extension.

Background

The concept of advanced practice was introduced into the career structure for therapy radiographers in 2000 with the Educational and Professional Development Strategy (1), which supported and followed numerous government initiatives to improve the service to patients (2,3,4). Changes to traditional patterns of service delivery and the emergence of new roles is seen as key to improving the patient experience and streamlining services, making it seamless and reducing patient waiting times (5, 6,7). Roles have now emerged that involve therapy radiographers working outside their traditional scope of practice, and across professional boundaries (6,8). This has necessitated the acquisition of a different set of clinical skills and competencies requiring a new professional knowledge base, but also created tensions and dilemmas regarding the blurring of professional boundaries (9,10). Potentially this compounds problems experienced in the work environment and highlights the necessity for effective mechanisms to support the education, training and development of these individuals. Models of education, training and support for role extension vary with no acknowledged standard model, and range from “in house training”, to traditional MSc modules, and Masters level work-based learning modules, delivered entirely in departments (11). This research would focus on investigating and exploring the experiences of those therapy radiographers who are undertaking one model of work based learning to support role extension and development.

Previous research

For some time there has been a degree of apprehension centred on finding the most effective ways to facilitate the learning and development of adults and professionals. One approach adopted is work-based learning, which is derived from the premise that learning must be of value to the individual and relevant to practice, plus all the education and training is placed in the work environment rather than an academic institution. It moves abstract classroom hypothesis into practice and utilises real life situations, which are crucially linked to contemporary theory, facilitating the empowerment of individuals to make informed judgements (12). Professional development for role extension needs to facilitate the evolution of the expert practitioner, by enhancing and developing clinical knowledge, and by the acquisition of skills and competencies through learning grounded in problem solving (13). Arguably this can only realistically be delivered in the clinical environment where the clinical expertise, equipment, and patients are located. Does this make work based learning an ideal vehicle to drive the development of these practitioners?

Although there is evidence of utilising work-based learning to support professional development in the workplace some authors have highlighted significant conflicts and demands on these learners (12,14). Time management, self-discipline, collaboration difficulties, and the need to take responsibility for own learning whilst

managing a high workload are all problematic. Nursing research also identified key themes that emerged from new and developing roles, which highlighted good education and support, and professional development strategies as being vital to successful role implementation (15). In areas where this has not happened, recruitment and retention have become an issue (16).

Evidence shows other significant issues such as lack of clinical supervision, and conflicts between personal practice developments and the custom and practice of the service can compound difficulties experienced by individuals (12).

This raises questions about how role extension in the workplace can be delivered, supported and facilitated?

It is recognised that new educational models must emerge to support those individuals who demonstrate the skills and ability to progress to advanced and consultant levels (17). These models need to be grounded in practice, be reflective and responsive to the dynamic changes of the service environment, yet mindful of the legal and ethical issues associated with role development (18, 19). Potentially learning focussed on and based in the workplace can meet these requirements. Modules have been developed to support local service and individual needs in developing extended roles for therapy radiographers (20). However, the question remains as to how effective this is at supporting role extension and personal development especially in context of issues highlighted, (12,14), and whether individuals actually gain the required skills and competencies that are expected and needed in these roles?

Why is this research timely?

The importance and significance of role extension and advanced practice to the profession is recognised widely and has been highlighted in many CoR documents (1,6,7,11). The contribution these individuals can make to the service, and the profession is potentially immense, and new roles are constantly developing and emerging (6). Therapy radiographers working at this level now are being expected to work outside their “traditional” scope of practice (6,8,11), and in a constantly changing and challenging environment.

Despite these pressures, this period in time is a very exciting one, not only for the profession but importantly, for individuals who want to embrace the opportunities the Educational and Professional Development Strategy (1) offers, and embark on a life long career in radiotherapy. However, to enable the effective development of individuals along the career pathway envisaged in the strategy, to the advanced practice level, we need to acquire knowledge regarding how we successfully affect and enable the “expert” practitioner within the clinical environment.

This information currently is not available, and the facts have yet to be gathered and acquired by the therapy profession. The lack of published research available only exacerbates this further.

This research would fill this void, and be timely, because the findings will augment the successful implementation and integration of role extension, and advanced practice, into departments. This could only have a positive impact on the recruitment and retention of individuals and the development and delivery of radiotherapy services in the future.

Significance of the research and outcomes

This study will be the first that has researched the experiences of individuals undertaking education and training for role extension in therapy radiography. It is anticipated the outcomes of this research activity may inform the future development of alternative approaches to enable and support role extension in the workplace. Although this research would specifically be exploring the experiences of therapy radiographers undertaking one particular model of support (outlined in appendix 1), it is anticipated that the phenomenological approach taken will generate concepts and theories that can be further tested by other research methods in the future and on other models of educational support (21). It is also anticipated that the outcomes from the study will provide information that will be of value to both the therapeutic and diagnostic arms of the profession.

The research will identify the barriers to skill development and learning in the workplace, which will be useful to individual practitioners and managers. The researcher will attempt to extract from the research evidence that will inform the development of a “toolkit” for managers and individuals to utilise as a checklist when undertaking role extension in the workplace utilising work based learning.

It is also anticipated that the research will enable conclusions to be drawn regarding how skills and competencies are developed and evolve through the process of work-based learning. It will also be a valuable source of information for academic institutions that are engaged in module and curriculum design.

Research design and data collection method

A phenomenological approach will be taken, so that the data gathered reflects the experiences from the subject’s viewpoint. This will be achieved by undertaking semi structured interviews, where individuals will be asked to talk about their role, their learning and development, and the perceived obstacles encountered, thus enabling complex but enlightening data to emerge. Data from the interviews will then be considered as texts open to a form of discourse analysis allowing the relation of the local experience to the wider profession, and lead to a greater understanding of the professional issues. A basic understanding of this discourse will enable the development of a critical and analytical approach to the understanding of issues (22). Interview was selected as it can potentially overcome the poor response rate associated with questionnaires, and allow a more in depth exploration of attitudes, beliefs and opinions, which are central to the ethos of this research. Comparability of data can be assured by ensuring respondents answer all the questions, and face-to-face contact motivates respondents to participate who may not have done so by questionnaire (23). The semi-structured interview will also allow the opportunity to explore and probe for more information and ensure clarification, again not possible by questionnaire (23,24,25,26).

The author of this proposal has considered the use of telephone interviews, but believes face-to-face interviews will be more appropriate in building a rapport and

allowing the observation of body language (noting non verbal indicators) to evaluate and assess the validity of the respondent's answers.

References

1. College of Radiographers. *A Strategy for the Education and Professional Development of Therapy Radiographers*. 2000. College of Radiographers. London
2. Department of Health. *The Calman-Hine Report. A Policy Framework for the Commissioning of Cancer Services*. 1995. Ref type: Report.
3. Department of Health .*The National Health Service Plan, a plan for Investment, A plan for Reform 2000* Ref Type: Report
4. The NHS Cancer Plan. *A plan for Investment, A plan for reform 2000* DoH Crown Copyright.
5. The Department of Health. *The NHS Cancer Plan and the New NHS: Providing a Patient centred service* 2004. Ref Type: Report
6. The College of Radiographers: *Positioning the Therapeutic radiographer within cancer services: Delivering patient centred services*. London 2005
7. The College of Radiographers. *Radiographic staffing: Short Term Guidance*; 2005 Benchmark for Standard Core Functions within Radiotherapy. 2005
8. Colyer H *The role of the radiotherapy treatment review radiographer* *Radiography* 2000 6 253-260
9. Ruchmer R, Pallis G. *Inter-Professional Working: The Wisdom of Integrated Working and the Disaster of Blurred Boundaries*. *Public Money and Management* 2002; 23(1): 59-66
10. Colyer H. *The construction and development of Health Professions : Where will it end?* *Nursing and Health care management and Policy – Journal of Advanced Nursing* 2004 48 (4) 406-412.
11. College of Radiographers: *Role Development Revisited, The Research Evidence* 2003. CoR of Radiographers. London
12. Clarke DJ, Copeland L. *Developing nursing practice through work-based learning*. *Nurse Education in Practice* 2003/12; 3(4): 236-244.
13. Benner P *From Novice to Expert Excellence and Power in Clinical Nursing Practice*. 1984 Addison-Wesley, Menlo Park, California.
14. Spouse J. *Work-based learning_in health care environments*. *Nurse Education in Practice* 2001/3;1(1):12-18.
15. Gibson. F. *Focus group interviews to examine the role and development of the clinical nurse specialist*. *Journal of Nursing Management*. 2001 9 331-342
16. Carnwell R Daly W *Advanced nursing practitioners in primary care settings: an exploration of the developing roles*. 2003. *Journal of Clinical nursing* 12 630-642
17. Price R Paterson A. *Consultant Practitioners in Radiography – a discussion paper* *Radiography* 2002 8 97-106
18. Royal College of Radiologists. *Advice on the delegation of tasks in clinical radiology*. 1996. London.
19. White P McKay J *Guidelines and legal requirements, which inform role expansion in radiography*. *Radiography* 2002 8 71-78
20. Eddy A. *Supporting Advanced Practice for Therapy Radiographers through work based learning*. *Synergy* November 2005 p13-17
21. Jasper M.A. *Issues in phenomenology for researchers of nursing*. *Journal of Advanced Nursing*, 1994.19, 309-314.
22. Boyes C. *Discourse Analysis and personal/professional development*. *Radiography*, 2004. 10,109-117
23. Barriball K.L. *Collecting data using semi-structured interviews: a discussion paper*. *Journal of Advanced Nursing*, 1994 19, 328-335.
24. Polgar.S. Thomas S.A. *Introduction to research the health sciences*. 1995 Churchill Livingstone
25. Patton M.Q. *How to use Qualitative Methods in Evaluation*. 1987 Newbury Park, C.A. Sage.
26. Silverman D. *Qualitative research: Theory, method and practice* (2nd Edn) 2004 Thousand Oakes, Sage. London.
27. Yin R.K. *Case study Research: Design and Methods* (3rd Edn) 2003. Thousand Oakes, Sage, London
28. Clark E, McCann T. *Researching students: an ethical dilemma*. *Nurse Researcher* 2005.12, 3 42-51

29. Lavis J, Ross S, M^oLeod C, Gildiner A *Measuring the Impact of Health Research*. Journal of Health Services Research and Policy 2003. 8 (3) 165-170.