

# 'Doing the Portfolio' – Pre-registration training for biomedical scientists and developing the capable practitioner

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### Introduction

Biomedical scientists (BMS) carry out a range of laboratory based tests and techniques essential for patient care.



The activities of the BMS workforce inform medical decisions and interventions - from patient

diagnosis to monitoring treatments (NHS Careers, 2013)

Pre-registration training forms the basis for development of professional capability and entry onto the professional register.

## The Capable Practitioner

Capability can be defined as an ability to demonstrate adaptability, flexibility and apply knowledge to develop 'contextually sensitive practical judgement' (Halliday & Hager, 2002)

## Research Issue

- There is an abundance of research in a range of professions into the development of capability and the pedagogical approaches employed to support work based learning.
- ➤ Guidance and Standards exist to direct practice.
- ➤ But.....what actually happens in practice for BMS. Policies alone do not necessarily ensure the construction of meaningful action.

#### **Research Aims**

To generate a substantive grounded theory to rationalise stakeholders' approaches (students, laboratory training officers, laboratory managers and academics) to preregistration training and the development of the capable Biomedical Scientist.

## **Research Questions**

- □ What are the main factors that stakeholders perceive as barriers or opportunities for delivery of the current programme?
   □ How is the approach to
- ☐ How is the approach to curriculum delivery influenced by these factors?
- What impact do the approaches adopted by stakeholders have on the development of practitioner capability?

# Methodology

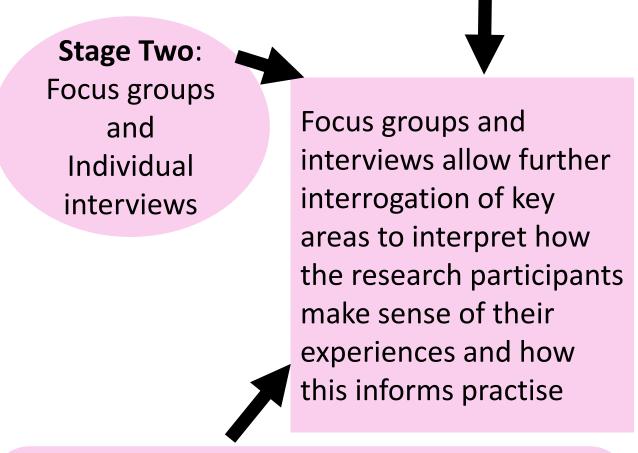
The study utilises a constructivist grounded theory approach to explore the perceptions and experiences of the key stakeholders of the BSc Applied Biomedical Science award. The processes of data gathering, analysis and interpretation occur concurrently, directing the research journey

## Methods

Stage One:
Document
review and
questionnaire

Professional documents = an insight into current accounts and discourses around BMS training (shared definitions)

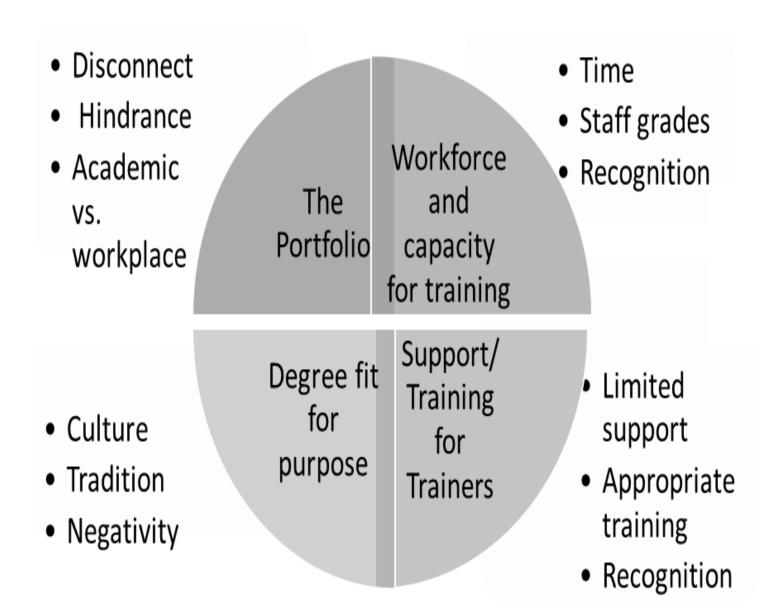
- Thematic analysis to identify key areas which then direct questionnaire development
- -Questionnaire = perceptions and experiences of a range of stakeholders gathered in key areas.
- Outcomes frame initial discussions in stage 2



The use of initial and focused coding allows analytic sense to be made of research participants' meanings and actions whilst also providing analytical direction to the study as leads emerge during data collection – guiding each stage of data collection

#### **Findings**

**Stage One** – Four key areas identified from document review – questionnaire responses were mapped to these areas to assist in the development of analytical direction (fig 1).



**Fig. 1 –** Key areas identified by document review (circle) and questionnaire analysis (outer – lists)

**Stage two** - initial coding of transcripts provided an abundance of codes(figure 2).

Too-much-expected-from-the-degree
Why-should-we-teach-them-how-to-appy-knowledge-to-the-workplace
Limited-understanding-of-professional-requirements
Performance-driven
Focus-on-delivery-of-material
Not-our-role-to-support-conceptualisation-to-practice
Whose-role-or-responsibility-is-it?
Resource-implications
Modular-programme-limited-linkage-of-concepts
Expectations-of-degree-programme-too-high
Its-the-labs-role-to-support-application-of-knowledge-to-practice
Lack-of-awareness-and-support-for-role-on-a-professional-programme

Fig 2. Example of Initial coding of focus groups

- Codes were compared within and between focus groups and interviews
- Focused coding was used to identify categories.
- Three main categories were identified recognising three major factors providing barriers for delivery of the current programme:

Role Conflict — embracing the range of daily struggles emerging from time pressures, workload and range of responsibilities.

Expectations - disconnect of expectations of stakeholders for the award, students and of those involved in the award

Ownership — who is the 'gatekeeper to the profession'? Lack of shared vision

Interactions and intersections of these 3 factors results in 'doing the portfolio' and 'gaining BMS currency' being identified as emergent themes of current practise.

#### **Discussion**

Pedagogical approaches adopted in response to these factors:

- role of the BMS unambiguously packaged into the *registration portfolio*.
- The portfolio has assumed an apparent dominance; an objective measure of training undertaken, supported by the adoption of a task orientated approach.

The portfolio, rather than the capable student,

has become the only serious measure for entry onto the professional register - the practice of the individual student and their progress during the award – 'gaining BMS currency' has become lost, resulting in barriers and challenges to supporting capability development.

Development of stakeholder identity and ownership within the programme to direct it away from the current performative *culde-sac* is suggested as the key driver for positive change.

#### References

Halliday, J and Hager P (2002) Context, Judgement and Learning Educational Theory 52(4) p 429 – 443 NHS Careers (2013) Biomedical science Available at: http://www.nhscareers.nhs.uk/explore-by-career/healthcarescience/careers-in-healthcare-science/careers-in-life-sciences/biomedical-science/ (accessed May 2015)