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**Swansea University**

**Long-Case Observation in Undergraduate  
Medical Education  
A case study**

**A dissertation submitted to  
the College of Human & Health Sciences  
in candidacy for the degree of  
Master of Arts  
(Professional Education in Clinical Settings)**

**by  
Clive F M Weston**

Student number: 502037

Word count:

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**Student's Name: CLIVE FRANK MANTELL WESTON**

**Student No: 502037**

**Course\Module: Professional Education in Clinical Settings**

**Start Date\Cohort: Sept 2008**

**Finish Date: March 2012**

**Education Centre: Swansea University**

**Course Leader\Assignment Supervisor: Professor Gary Rolfe**

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## Preamble

*I was excited, vainglorious, knowing I had far to go; but not, as yet, how far.*

Laurie Lee (1969,p.14)

*What gives value to travel is fear...There is no pleasure in travel, and I look on it more as ... spiritual testing.*

Albert Camus (1963,p.7)

Preparation over, I set off. Later, I may claim that I was phlegmatic from the start – my dissertation charting a stately passage, a purposeful travelogue without alarms. Yet to profit from this research I must be changed through it; for, “*What I knew and who I was at the start of the journey was very different from what I knew and who I was at the end*” (Mackenzie & Ling 2009,p.51). “On the other side of certain divides the traveller senses a new identity” (Frank 1995,p.4). So here, before the last interview is transcribed, I testify to uncertainty and anxiety – lest I forget myself.

I don't feel Lee's (1969) agreeable excitement. Rather, as Camus (1963) confessed, there is fear, not pleasure, at this departure – an “instinctive desire to go back to the protection of old habits”(p.7). I am already adrift – uncertain of direction, destination, capability and commitment. Am I going the right way? Have I packed the right equipment in the right bags? Do I have what it takes or will my primary discovery be my own imperfection? For, “travel brings us back [to ourselves]” (Camus 1963,p.7).

This is unsurprising, for a research journey is “full of [personal] risk... without risk there is no creativity” and learning “is stunted” (Fish 2009,p.141). An “educational expedition” contains dangers, but if it is to achieve anything “the space [where it occurs] must...be charged”; the learner “must not feel safe...they need to feel the risks” (Palmer 2007,p.78). Nonetheless I embark, reassured that others fruitfully have made similar journeys, guided by my teachers and supervisors – pedagogues who have walked with me this far.

# Chapter 1

## Introduction

### Research-as-Journey

*“To arrive at general decisions and theories one needs to travel in order to gain experience”*

John Berger (1997,p.103)

I will explore long-case observation within medical undergraduate education using a metaphor of research as a journey that, as suggested by Berger (above), is necessary in order to arrive at reasonable conclusions.

Metaphor is everywhere, inescapable, illuminating thoughts and reasoning (Lakoff 1993). Specifically, the familiarity of the journey helps conceptualize many things – from business and management (Milne *et al.* 2006) to love and life (Lakoff 1993; Psomadakis 2007). So, in expressing *research-as-journey*, I tread a well-worn path; the metaphor, though hackneyed, remains apt. For while, in a formal academic sense, few have researched, all have travelled, and the formulaic *Introduction, Methods, Results* and *Conclusions* structure becomes more accessible when considered as planning, preparing, travelling, exploring, returning and reflecting on an adventure.

Further, by remembering cogently to explain the purposes of my journey – what I took with me; what I discovered (and how); what I brought back – I will ensure that I present a full account of the research. This is particularly important in a Case Study – an approach that does not set out to prove or disprove hypotheses, but rather, through rich descriptions (Kemmis 1980), to justify conclusions and to allow others to determine the relevance to their own practices. If the metaphorical device is distracting, or appears an affectation, excuse me; as this work’s author and one of its few readers, I indulge myself.

## Where I'm coming from

*"However reasonably we oppose  
That unquiet integer, our self, we lose"*

From: *Our Self*, Robert Graves (1978,p.165)

My previous clinical researches inhabited a 'value-free', fact-laden, positivistic paradigm. As dispassionate observer and detached author, I would paint myself out of the picture, hiding behind the screen of *scientific objectivity* – where objectivity is the search for a truth or reality that exists independent of the observer, rather than a strategy to reduce error (Paley & Lilford 2011) or an "open attempt to check the interpretation...against the evidence (Pring 2004,p.137) – providing 'the view from nowhere' (Nagel 1986). But the reader of *this* travelogue should know something of the narrator's personhood. For practical, moral and scholarly purposes I will acknowledge my subjectivity. Let me explain.

Consider Venice – subject of many guidebooks. Some reports are glowing, others damning; some emphasise architecture, others history. The vicarious traveller would best consult one by an art historian when researching a gallery and by a food critic when selecting a restaurant. The subjectivity of the author, their explicit or implicit perspective, affects the reliability, trustworthiness and practical utility of their findings.

Concerning educational research, Nixon *et al.* (2003) raise questions about the evidence used to inform practitioners and policymakers:

"What is deemed to be evidence? Who deems it relevant or otherwise? From whom and by whom is it gathered? And by what means? To what ends is it used? And by whom?"(p.87).

This demands moral deliberation. Because, in this study, I am the moral agent, the choices are mine. I must articulate a "self-knowledge...[of the]

unquestioned beliefs and unstated assumptions” which sustain my practice – equivalent to a *critical educational enquiry* (Carr 1995,pp.117-118).

Golby and Parrott (1999) contend that researchers should “*At the outset...* interrogate [their]...reasons for the study” and “Give an account of [their] interests”. They should review “the starting points in the biography, values and interests of the researcher” (p.72) and should, through examining these concepts and interests, inspect “the lens through which we look” (p.73). A consideration of *how* we observe is inseparable from *what* we observe in making the case study “*intelligible*” and its findings explicable. Observations using binoculars may fail to discern something under one’s very nose, while a microscopic examination forfeits a broad view.

Simons (2009) advocates “Writing in the Self” in Case Study research (not just initially, but) *throughout* the process, so that the interactions of predilections and values in and with the case can be declared and observed. Textual evidence of reflexivity – a purposeful and prospective thinking of how “actions, values, beliefs, preferences and biases influence the research – makes the author’s personal learning easier to recognise and allows the reader to form a view as to the justification of the author’s inferences”(p.91).

Is this desirable and is it feasible? Frank (1995) points out that knowing something of the frailty of the storyteller adds to the power and persuasiveness of their story (p.xi), but also that *reliability* – “getting the same answer to the same question” – does not fit when telling the “stories of our lives” (p.22). Stories change with retelling – not due to evasiveness, but because of a desire for what is being retold. We constantly “construct and reconstruct our selves” in a way that may be “so well concealed that even the teller knows not what ax [*sic*] he may be grinding” (Bruner 2002,pp.5-6). Pointing to the human tendency to confabulate to make good gaps in memory, and so provide unreliable guides to opinions, preferences or views, and faulty explanations of past motives, intentions and decision-making, Paley and Lilford (2011) caution that: “It is impossible, without further inquiry, to rely

on what people say about themselves, their experience, or their interpretations of what has happened to them” (p.957).

Even if the author could produce a reliable record – and I have endeavoured to do so through reflection on my educational practice and its underlying values – would the reader want to follow their footsteps? Professional practitioners may be convinced of the sincerity of a researcher, yet resist acting upon their findings unless they detect similarities between the author and themselves with respect to the context of their practices (including their values and beliefs) (Bourner *et al.* 2000,pp.226-237). The reader may feel more able to find their way if they possess a similar moral compass.

Finally, this work cannot avoid an examination of ‘self’ for it’s purpose is not self-less. Through it I will develop and advance my own educational practice. It contains elements of practitioner-centred research – “*systematic self-critical enquiry made public*” – characterised by an “introspective, subjective perspective” (Rolfe 1998,p.75). As Stenhouse (1975) stated, research in the classroom strives for such a “sensitive self-critical” subjectivity rather than an “unattainable objectivity”; “The problem is one of awareness” (p.158).

## **This traveller**

This Gulliver is in his early fifties, of British/Iranian parents. They were thrifty people who met in England during that post-war era when food was rationed but idealism was not. To their children, they promoted support of social order and consciousness of *social class*. They valued academic success and entry into the professions; extolling values of status above wealth, the established above the modern, and altruism above overt self-interest.

From them I learned deference, becoming an obliging child who readily developed trusting, respectful, relationships with my teachers. This accepting



and non-confrontational nature, coupled with some aptitude, a '*work ethic*' and a readiness to please – sometimes eschewing honesty for popularity – was well suited to advancement in a profession where the paternalistic influence of senior clinicians counted more than the development of personal theories of medical practice. I became a consultant physician. Outwardly confident and gregarious, I have latterly recognised self-doubt and misanthropy, ready to see the best in an individual but expect the worst of a group.

My progress in undergraduate medical education largely has been serendipitous, with roles assigned according to availability (rather than expertise) and then discarded, as a snake sheds its skin; most recently becoming sub-Dean for Professional Development on a graduate-entry medicine programme. Yet recently, catalysed by the postgraduate programme of which this dissertation forms part, I have considered more deeply, and attempted to articulate more clearly, my philosophy of educational practice. Within this, I value:

- The personal identities of teacher and learner (Tiberius *et al.* 2002), and their educational relationship within a *community of learners* (Rogers 1983,p.120) or *community of practice* (Lave and Wenger 1991,p.29), through which their developing professional identities can be nurtured;
- Opportunities for the learner to be “in conversation with his teachers, his fellows and himself” without confusing “education with training for a profession” or pursuing “learning for the power it may bring” but allowing teachers to be “interested in the pupil himself, in what he is thinking, in the quality of his mind” (Oakeshott 1989,p.101);
- Education occurring in clinical settings with practising clinicians (as close to authentic practice as possible), above simulation;
- Formative assessment that assists individual learning, above summative, *high-stakes*, assessment;

- Recognition of the uncertainty of medicine and the fallibility and variability of clinicians and patients, above the acquisition of facts.

I also accept my obligation as a clinical teacher to be a researcher of my practice: “It is not enough that teachers’ work should be studied: they need to study it themselves” (Stenhouse 1975,p.143). I can claim new knowledge, wisdom even, through critical reflection upon my own educational activities (where *criticality* is an ordered approach that ensures that one does not always see what one wants to see, nor what one has always seen). And admitting my subjectivity allows the reader to understand the origins of my interests and form a view as to the veracity of my observations.

## Chapter 2

### Defining *The Case*

#### Where to and why?

My belief in the centrality, within medical education, of the teacher-learner relationship – a transaction through which deeper insights and understandings of educational practice are generated, and through which the learner’s view of the world changes (for the better) (Pring 2004,pp.8-30) – parallels a belief in the centrality of the doctor-patient relationship within medical practice. Both require commitment to the negotiation of rights and obligations between the two parties, yet both easily can be lost – the former “in a confusing web of rules, limits and required *objectives*” (Rogers 1983,p.12), the latter through political or institutional constraints and legal rulings. Given this, and my educational values, it is unsurprising that I should choose to explore an educational interaction in a setting that approximates closely to the future practice of medical students, and that requires interaction between teacher and learner. My choice of topic – the territory to explore – is a place where the two relationships may coexist, an observation of the learner during the medical consultation; “The dialogue...which constitutes the area of common ground between doctor and patient...and which is able to breakdown the distance which lies between them” (Gadamer 1996,p.120).

Despite doctors’ changing professional and societal identities (e.g. their re-branding as ‘Medical Citizens’ (Bleakley *et al.* 2011,pp.81-91)) others attest to the essential nature of the medical consultation at the core of medicine. It is a human “activity... [that] constitutes medicine” (Puustinen 2004,p.26), the face-to-face encounter that is “the root of its [*medicine*’s] internal morality” (Pellegrino 2008). “The abilities to interview examine and observe a patient constitute the methods on which the entire structure of general medicine rests”; “The first and most basic clinical skill is the clinical interview” (Cassell

1997,p.148). “History-taking is the most important aspect of doctoring” (Lown 1999,p.61).

So education at the cornerstone of clinical practice provides the subject for this journey. But other factors explain my choice of case and inform both *foreshadowed issues* (Simons 2009,pp.32-33) – ideas I hold at the point of departure about some of the places I mean to visit – and *a priori* assumptions (notwithstanding concerns about such assumptions in qualitative research - see Thomas 2007,pp.117-141) – influences on my interpretations of what I will find. These include my feeling of responsibility for promoting, against a prevailing trend in medical education, long-case observation within the curriculum, based on my suspicion that medical students lose something when they are not offered such opportunities.

However, before proceeding further, I must make an important diversion to define *the case* – the “real-life phenomenon” that justifies the use of a case study design (Yin 2009,p.32).

## **The Case**

This is a Case Study of long-case observation within the Swansea University Graduate-Entry Medicine Programme.

By *long-case observation*, I refer to a three-part process:

- *attentive witnessing*, by a senior clinician, of a medical student clerking – interviewing, observing and examining – an authentic (as opposed to a simulated) patient, in a hospital ward, in its entirety;
- *discussion* between student and clinician regarding clinical aspects of the case and, particularly, the clinical method employed;

- later *exchange of correspondence* – the student providing ‘learning points’, generated through reflection, and the teacher sending a detailed summary of the discussion.

To be clear, at its heart, long-case observation is uninterrupted directly-observed clerking immediately followed by discussion. It differs from the traditional ‘long-case’, where candidates spend up to an hour clerking a patient, *unobserved*, before presenting their findings to two examiners as part of a summative assessment (Wass and van der Vleuten 2004).

## **To what end?**

There is no ‘burning’ problem, nor specific hypothesis to test – I set out neither to lift a siege, nor to prove the earth round. I have a simple intrinsic interest in and sense of responsibility for (perhaps a need to justify) an aspect of my own practice as a clinical teacher. (How) is it educationally worthwhile?

Following her long-case observation one student wrote, “Tuesday was a...turning point for me” (Appendix 1). This heady description suggests that something important had happened. I seek a deeper understanding of an educational activity that might effect such a change, through insight into its effects on learner and teacher, and on their relationship. A successful journey would allow me to achieve this and return equipped for wiser educational practice. It truly would be Educational Research – as defined above by Golby and Parrott (1999), Bassey (1999) and Pring (2004).

While the small number of interactions considered here are not ‘stand alone’ cases, but part of a larger domain (Swanborn 2010,pp.38-41), my conclusions, hopefully understandable and interesting when accompanied by contextual descriptions, may be of limited immediate usefulness to others (Paechter 2003). I will not go out of my way to signpost utility in other contexts – *generalisability* is largely in the eyes of the beholder, who must ask, “am I allowed to generalise these results to my situation?” (Firestone 1993).

## **The context – defining the boundaries**

During the four-year Swansea University Graduate Entry Medicine Programme, pairs of students undertake nine, five-week long, 'Clinical Apprenticeships', with a senior clinician. These periods allow opportunities to learn in clinical settings without the 'distraction' of formal lectures or other timetabled activities. The students are required to witness, discuss and critique clinical practice and reflect upon their roles as medical students and their future roles as doctors.

Clinical teachers are asked to perform one long-case observation of each student during their apprenticeship, as a formative assessment. The importance of immediate 'individualised' feedback is emphasised and they are encouraged, though not required, to provide further written feedback to the student. I provide them with examples of my own written feedback to students in order to illustrate the sorts of issues I would like them to discuss with their learners.

For pragmatic reasons I restrict my research to those long-case observations in which I have participated, during the last four years, while engaged in this postgraduate degree course. A few of these were with students pursuing the Cardiff University curriculum, during a short Cardiology placement, but most were with students pursuing the Swansea University Programme.

Now I move on to discuss the means by which I intend to, morally and ethically, rigorously and critically, generate this new knowledge and deeper insight.

## Chapter 3

### Methods – Case Study Research

*“...knowledge is everywhere...we should feel unconstrained in its collection, use and analysis. A preoccupation with method...makes us almost more concerned with the method than the message”*

Gary Thomas (2007,p.140)

#### **Modes of Transport; Ways of Seeing**

While supporting the inclusion of a *Methods* section in an educational research dissertation, Thomas (2007) argues that a preoccupation with strict methodology limits creativity and detracts from research (pp.90-96). Like the traveller who packs enough provisions to avoid eating local food, adhering to a specific method may serve to exclude significant experiences. The inclusion of a *Methods* section also suggests to me a distinct beginning, a disconnection from previous journeys. Yet some of the evidence used to reach and support conclusions predates the decision to perform the research.

So this section does not contain a detailed description of a formal design – there was no constrained route to follow. Rather, it is an account of what I did, where I went, of “decisions taken *en-route* and the *actual* course of the research” (Rolfe 2006,p.309), a reassurance that the journey was authentic, that I “speak with the authority of having been there” (Frank 1995,p.140). So readers can make judgements about my conclusions and imagine following my footsteps – even though they would inevitably have different experiences.

#### **Why Case Study?**

Long-case observation could be explored quantitatively. For example, using randomised interventional design, Hasnain *et al.* (2004) tested the hypothesis that (a form of) long-case observation leads to better examination results. But this is simplistic. Notwithstanding the validity of examination marks as measures of competence, if long-case observation leads to improved grades do we truly understand the intervention? *Why* did it ‘work’? What was the effective component? As an interaction between two people, can it be anything other than unique? Should its educational value be judged on something as transient as exam grades when it seeks to nurture qualities that are “inevitably unquantifiable” (Lantos 1999)?

I appreciated that it was inappropriate to ‘shoe-horn’ this research into such scientific methodology when I realised that I couldn’t express the research question as a series of testable hypotheses. Interestingly, Golby and Parrott (1999) promote Case Study when producing a research question proves difficult – where the “right questions” are not clear (p.71).

Rather than being, as Yin (2009,pp.3-23) suggests, a method, Case Study is an approach that utilises differing methods. Its design is “emergent not preordinate” (Simons 2009,p.38) – the route taken being “circuitous” with unexpected twists and turns and opportunities to ponder afresh during the research (Fish 2009). It is largely empirical – deriving knowledge from sensory observations rather than the logical application of pre-conceived theory. Empirical studies in educational research are not without their critics (on political and ideological grounds – see Phillips 2009). For example, Carr suggests that, “the forms of human association characteristic of educational engagement are not really apt for scientific or empirical study at all” (2003,pp.54-55). However, in Case Study the researcher must make the journey, and with open eyes, rather than construct an imaginary travelogue from the comfort of the armchair.

Yin (2009) promotes case study as suitable to answer those explanatory questions prefixed: ‘*why*’ and ‘*how*’; particularly when the events under investigation are beyond the control of the researcher (p.8).



Paraphrasing his definition (p.18), case study is inquiry whose scope is deep exploration of a contemporary phenomenon (though Swanborn (2010,p.13) disputes this) within its real-life context. It requires the collection and interpretation of data from multiple sources, the use of different data sources to investigate similar interpretations. Some prior understanding, to guide data collection, is useful. It allows exploration rather than confirmation. Simons defines case study as “an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project...in a ‘real-life’ context” (p21), referring to Barry MacDonald’s concept of the *authenticated anecdote* to emphasise the idiosyncrasy of the case and the story-like nature of the approach.

While Gerring (2007) suggests that the aim of case study research is exclusively to generalise from an intensive study of a single case, or small number of cases, Swanborn (2010,pp.38-43) counters that this ambition may not exist in applied research by practitioners who wish to intensively study ‘stand-alone cases’. Rolfe (1998), considering clinical practice, had earlier noted that the weaknesses of traditional case study research, particularly the distorting effect of the observer on the case being studied, were less problematic – valuable even – when the approach was used by a practitioner as “*reflective case-study*”, to focus on their own work, their relationships with patients, the effectiveness of their interventions and strategies of practice (pp.127-169).

Case study therefore appears a reasonable choice for this research proposal. My earlier personal history and contextual account – redundant in scientific study – become essential. The reflexive investigator considers and makes explicit their values, prejudices, influences and associated actions during the research – leaving “a ‘super’ audit trail” (Rolfe 2006) – as a way of monitoring subjectivity and of allowing others to judge the validity of the findings (Simons 2009,pp81-95).

Further, case study sits comfortably with clinicians who may recognise within it an approach they use to manage the complexities of their everyday

practice; a practice that is “inescapably particular and interpretable; applicable only to a small set of more richly detailed circumstances” (Montgomery 2006,p.44). Clinicians are also familiar with learning through reading and discussing case studies – while every case is unique it is not unique in every way (Pring 2004,p.109) and when “studied in all its particularity, there is potential both for discovering something unique and for recognising a universal truth” (Simons 2009,p.167) – albeit the perceived anecdotal nature results in their relegation to the bottom of the *hierarchy of evidence* in both qualitative and quantitative research (Greenhalgh 1997, Yin 2009,p.6).

### ***Preparing to leave***

*“It’s such painstaking work...All day long I sit, read and take notes.”*  
Anton Chekhov writing prior to his journey to the penal island of Sakhalin in 1890 (cited in Coope 1997,p.54)

It is a brave traveller that sets out unprepared, a mind uncluttered by other’s reports. Both Yin (2009,pp.32-33) and Simons (2009,p.28) encourage a literature review to focus one’s thinking and avoid idiosyncrasy; For Yin, “The path begins with a thorough review of the literature”.

My dissertation does not contain an extensive systematic review (for such see Fromme *et al.* 2009; Ponnampereuma *et al.* 2009). I have merely performed sufficient searches to allow me to report my experiences with reference to others’ published work, and to conclude that this research journey, while personally valuable, is practitioner-centred research – “the intentional creation of *shared* new knowledge” (Bourner *et al.* 2000; [my italics]) – and is relevant to other practitioners; the research question is “important to ask” (Reid and Green 2009).

Additionally my searches informed foreshadowed issues (see above) and the initial direction of enquiry. I return to these in the *Discussion*, but briefly they were:

- Opportunities within the curriculum for medical students to be observed and to receive supportive feedback are limited, and diminishing (Eichna 1980, Cassell 1997,p.148, Norman 2002);
- The long-case has fallen out of favour as an assessment tool (Norcini 2002, Wass and van der Vleuten 2004);
- Attempts to improve the reliability of the long-case as a formal assessment of clinical skills include the development of more structured cases and assessment tools (Gleeson 1997; Kogan *et al.* 2009)
- The long case provides an authentic interaction between student, teacher and patient, but often the teacher does not observe the student – simply receiving a summary of findings and conclusions (Ponnamperuma *et al.* 2009);
- Little is known of the ‘consequential validity’ of the long case (Wass and van der Vleuten 2004, Teoh and Bowden 2008).

Finally, the searches facilitated the framing of the research question.

## **The Research Question**

*“...the research question is the point of departure”*  
(Swanborn 2010,p.16)

I considered many questions (Appendix 2) and settled on:

**“What is the educational value of long-case observation?”**

**“Do learner and teacher feel that it is educationally worthwhile?”**

**“What is being learnt?”**

## Chapter 4

### Methods – Obtaining Evidence

#### ‘Obtaining a visa’ – Ethical issues

*“...are you seeking entry to engage in criminal or immoral activities?”*  
(US Customs and Border Protection I-94W Visa Waiver form, 2008)

On entering the United States one must admit acts of *moral turpitude* – immorality and wickedness – and deny criminal intentions, though such denial does not guarantee subsequent law-abiding behaviour. Likewise, approval of a project by a Research Ethics Committee (for my successful application form see Appendix 3) does not guarantee ethical research conduct. Further, it is impossible to predict every ethical issues that might arise. However, the very process of submission requires a consideration of likely ethical issues in advance, which may provide reference points for later ethical actions (Piper and Simons 2005). It also allows some guidance and reassurance from an interested external body and suggests an implied commitment to principled research.

In pursuing research in medical education I enter a distinct practice (Fish 2009), one concerned with morality and ethics as much as research methodology (Pring 2003, 2004, pp.142-157). Moral principles underlie choices in planning, performing and presenting educational research. Simons (2009) suggests that the “fundamental ethical principle in research...is to *do no harm*” (p.98), but sees a focus on the avoidance of harm as limiting the potential to “contribute positively to participants’ experience” (p.97) – reinforcing the view that educational research should be useful to those ‘researched’ (Golby and Parrott 1999, pp.60-64). She proposes *democratic* principles of fairness, justice and equity and three key concepts of confidentiality, negotiation and accessibility that address the “central

aspiration of the democratic model” – to balance individual privacy with the public’s right to know (p102).

Pring (2004), recognises the same potentially irreconcilable balancing of respect for persons, who are the *objects* of research, with the pursuit of truth – the *purpose* of research (p.145), but emphasises the distinction between principles, that justify actions, and the character or disposition of the researcher that leads to a tendency to act virtuously. Such moral and intellectual virtues include courage, kindness, generosity, humility, a concern for justice, truth, and evidence and extend beyond an obligation to research rigorously, to search for evidence exhaustively, to examine that evidence even-handedly and to:

“...exercise judgement in as impartial a manner as possible, to conclude only those things that can be justified in the light of the evidence, to be open to the critical scrutiny of others where that is possible (and, where impossible, to imagine what that criticism might be)” (Pring 2003,p56).

I drew on the British Educational Research Association’s Revised Ethical Guidelines for Educational Research (2004) to define my responsibilities to participants. Particular concerns were to minimise the impact of participation on the workload of the learners, to be sensitive to their vulnerable circumstances, to respect their privacy, to provide them with sufficient information to ensure voluntary informed consent with an understanding that they could withdraw at any time.

## **Recruiting participants**

My initial plan was to study six students’ long-case observations, performed by three clinical teachers, resulting in nine taped interviews for analysis by myself, as a non-participant researcher. I was advised, and agreed, that this would be impractical. I therefore restricted inquiry to my own

practice. I invited the three medical students allocated to me during their clinical apprenticeship between 4<sup>th</sup> October 2010 and 5<sup>th</sup> November 2010 to participate.

To reduce feelings of obligation or coercion, each student was contacted by a third party – a junior doctor – in late September and provided with the *Participant Information Sheet* (Appendix 3). This outlined the purpose of the study, the possible advantages and risks of taking part, my approach to data-storage and confidentiality, and my intention to report findings in a dissertation, in publications or at academic meetings. Understanding of this information, the voluntary nature of involvement and the ability to withdraw without explanation or sanction was confirmed by signing a *Consent Form* (Appendix 3). The students were also asked to agree that their Personal Tutors be informed of their participation, so as to alert them to this extra commitment, and were informed that another clinical teacher or medical academic might view data obtained during the study.

All three students consented. They were second year medical students with a minimum three years in higher education before starting the Medicine Programme. This was their second apprenticeship. With each, I performed a long-case observation during the placement and later recorded a one-to-one interview.

## **Research Interview**

I used a semi-structured interview technique as described by Bryman (2008). In preparation, I formulated a series of guiding questions (see Appendix 4) to provide some order while allowing flexibility, in the expectation that addressing the specific topics would help answer the research questions.

Each interview, of up to one hour, occurred in my office eight weeks after the long-case observations. This unintentional delay stemmed from a combination of clinical and academic workload. The first interview was recorded onto cassette tape and transcribed by my personal secretary. This

proved time consuming because of poor recording quality. Subsequent interviews were recorded using an electronic digital device and transcribed privately. I completed a final draft, though there remained a few indecipherable phrases.

Finding out about people through interviewing is best achieved when the relationship is non-hierarchical (Oakley 1981,p.41)

## **Among my souvenirs**

Levi-Strauss (1966) stressed the importance of acting as a *bricoleur* – looking back before starting; looking around when travelling; making use of what already is available, even if it was not designed for the task in hand (Derrida 1978,p.285). Given that I have participated in long-case observation of students for over five years, there is much archival data that could yield evidence, through interpretation, that predates the decision to perform this research.

During the first year of this Taught Postgraduate Masters degree course, I had: received written comments from three students following their long-case observations; reflected on aspects of three further observations when considering my educational values and; corresponded with Michael Golby after he attended two long-case observations to provide a critique of my developing educational practice. These, and other pieces of data, are listed in the accompanying table.

Interviews (interview schedule)

Malachy – Frances comments

Interviews/archival evidence – Interview schedule

Malachy interview decision taken en-route

Decisions taken en-route.

No specific artefact New understandings, new ideas, reflects

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## Appendix 1

### **An example of correspondence following a long-case observation**

**J is a first year medical student on the graduate-entry medical course. The observation took place during her first prolonged clinical placement.**

## **a) Letter to learner**

Dear J

### **Re: Long case Observation April 2010**

As promised, following your long case examination and our discussion here is a letter that contains some of the thoughts that I had. You will remember that you talked to a gentleman on the Coronary Care Unit. He had been admitted with breathlessness.

You started by introducing yourself and asking him his full name (but you forgot to ask how old he was). You told him that “I’ve just come in to have a chat” and followed that by “Do you wanna start by telling me a little bit about why you are here?”. This was a fairly open ended question and it allowed him to deliver a quite long narrative that outlined what had happened to him leading up to his admission to hospital. I was delighted to observe that, other than confirming which day was which, you did not interrupt him and continued to give slight verbal and non verbal prompts encouraging him to continue. Eye contact was good and you looked attentive and interested. Unlike most students at your stage you decided not to commit anything in writing until half way through the consultation. This is unusual. If you are indeed confident enough about your recall of the history this is an extremely good technique and it allowed you to give all of your attention to the patient.

At a natural end to his narrative you took him back to the night of his severe breathlessness and asked some questions of clarification regarding the onset and type of breathlessness. Some of this quest for clarification was couched in fairly “leading” terms – for example “so it felt sore every time you breathed – is that what you mean?”. You even tried to demonstrate an understanding of how he might have been feeling. You said, “you probably worried a bit and were panicky – it’s understandable”. Interestingly he didn’t contradict you. You explored his chest discomfort in some detail including its duration, its character and various exacerbating or relieving factors. Remember that I pointed out to you that many of these answers contained yet more narrative rather than answering the question directly; he sought to explain to you what he did as a result of the pain as well as what it felt like. This you did not interrupt and as a result you gained yet more interesting information.

We also had the unusual experience of finding the patient using technical terms and the clinician (you) using common terms. Remember he had told you that he suffered “TIA” and by attempting to clarify what he meant you asked whether he meant “mini strokes”. Interestingly there after, he was prepared to use the term “mini stroke” rather than TIA. I wonder what we can learn from this brief interaction?

He told you a little bit about his TIA’s and you realized that there were at least 2 forms - one form relating to disorientation and confusion and another form when he collapsed. I think it would have been better if you had asked him

directly whether he had lost consciousness at the time of such a collapse. Total loss of consciousness is not a typical feature of Transient Ischaemic Attack. You did try and find out whether the TIA was associated with transient paralysis by asking him whether they affected him physically.

You moved on then to the past medical history and he was prepared to give you a catalogue. He even started using his fingers to innumerate the different sorts of problems he had had in the past. In fact you interrupted him at the second item, namely that of pancreatic cancer. As a result of this interruption other facts about his past medical history (knee replacements) appeared later in the conversation by chance and perhaps other aspects (for example previous heat attack) didn't occur at all. At the beginning of the 'past medical history' the patient was "on a roll" and it might have been better just to let him get on with it.

You moved into a systems review with the phrase "just in yourself generally". You didn't do an exhaustive systems review and of course you had the opportunity of coming back to some specific questions towards the end of the consultation.

When you came to urinary symptoms you realized that he had both frequency and nocturia. I know that you considered prostatism as a problem in his case but you probably should have asked about the force of the urinary stream, hesitancy and post micturition incontinence.

He wasn't aware of the drugs he was taking and so you chose to summarise his case up to that point and it's then that you started writing. You reformed some of the previous questions and further explored his chest discomfort. You talked a little bit about the pancreatic cancer and went back to the past medical history. With questions such as "and everything else feels fine?" you explored his general health and then, as if from nowhere, you asked him about difficulties swallowing. He told you that "you've hit the nail on the head" (you must have felt quite proud of yourself at that point – you had scored a direct hit!) and some very important information came out at that stage. To me it demonstrates the fact that it doesn't matter when you ask the questions as long as the important questions *are* asked and you can indeed chop and change throughout the consultation as long as you get the information that matters. And having heard that he had difficulties swallowing I would have expected you to have asked at that stage about his body weight and any weight loss as well as vomiting or regurgitation.

You then moved to the social history asking about who he lived with, what sort of support he had and how he occupied himself. After some discussion about other people you brought the conversation back to where you wanted it to be by saying to him "so back to you". In fact on a number of occasions during the consultation you used very elegant and subtle techniques to get the patient back on track. It never felt as though you were forcing him to go where he did not want to, yet you managed to get where you wanted him to be!

Towards the end of the consultation you became even more conversational. You really did appear to be interested in him and when he said that his “brain is failing” and that he was going to have to stop doing some of his accounting work you commiserated with him and gave him the example of your own grandfather and what he did to keep his brain active.

In talking about the family history you used the word *siblings*. You need to remember that not all people know what siblings are. You were not frightened to use the word “death” when talking to him (that’s a bug bear of mine and I was glad to see you using non emotive terminology).

Finally you told him “I’ll just double check I have got everything” and proceeded to think through what he had told you. You covered some additional areas such as the activities of daily living, the presence of a cough and, as he undressed and you saw how thin he was, weight loss.

Your physical examination of course was limited both by time and by the type of problem he presented with. I was very happy with your approach which appeared to be gentle and thoughtful: communicating with him as you went along. Do remember to time the heart sounds with the carotid pulse (the first sound coinciding with the carotid pulse) I have relatively few comments to make about the examination other than to say that you are already at the stage of a weak fourth year medical student (on a 5 year course). You, and also your clinical skills tutors, deserve a lot of credit.

During our discussion afterwards you were a little upset that you had not used some of the opportunities that he had given you to discuss his own feeling (about what had happened that night and his health in general terms). Remember that on many occasions he told you how frightening it was and used the word “scared”. There were opportunities to discuss with him how he felt to be one of the longest surviving patients who had pancreatic cancer and how it felt to be the longest surviving male member of the family. You certainly have worked in environments before where such an exploration of emotions and feelings were a recognized part of the consultation. Just because you are moving into a more general setting does not mean that you can ignore these opportunities. Generally there is a time and a place for everything and it would be inappropriate to go around exploring everything in detail when there really isn’t enough time but I think that you could have used your judgment this time and delved a little deeper into his feelings that you actually did.

J I think that you can be really very happy with your interaction with this man, your conduct as a clinician in the clinical setting and some of the thought processes that you exhibited both during the consultant and afterwards. I don’t think that it is going too far to say that your consultation already demonstrates a therapeutic approach and that he would have been better for speaking with you.

Well done.

## b) Letter to teacher

### Reflection on my long case observation

#### Background

On Tuesday morning of this week, I met an elderly gentleman in the CCU of Singleton hospital. I had been asked by my clinical tutor to take a full clerking of this friendly fellow, followed by appropriate examination. During this time my tutor would assess my performance, ready to give me feedback. This is a collection of my thoughts on this process, and what I feel I have learned from the experience.

#### My thoughts

- I felt the feedback I was given was fantastic. Not because of the content, but because of the way in which it was given. Samples quoted from the consultation were read back to me, and it was just like listening to yourself on a tape recorder- cringe-worthy! Criticism can be hard to take, but when someone reads your exact words back to you, it doesn't take a genius to pick up quick what things come across badly.
- I felt that Tuesday was a real turning point for me. I have been finding it hard to integrate my own personality and skills into the doctoring roll. I feel like a have one hat that I wear which makes me psychiatric/nursing J, and another hat that is I'm-trying-to-be-a-doctor-but-I'm-not-sure-what-that-is-yet-J. Tuesday highlighted to me how important it is to try to wear both hats at the same time, and not to lose the skills I learnt though all my past experiences.
- I learnt that it is important to pick up and run with the prompts patients give during the consultation, e.g 'I'm scared, I'm worried'. There can be a wealth of information in what they are wanting to tell us, but the trick is to let them.
- Be careful about inferring things from the patient's dialog; if in doubt ask *directly*.
- To be more aware of whether I'm giving the patient leading questions.
- To take time to investigate all aspects leading up to a medical event; for example what the person had been doing just before acute SOB, to determine triggers, or exacerbating factors.
- Don't be scared to let the conversation run the consultation; rather than forcing a patient to stick to *my* list, let them tell the story.



## **Appendix 2**

### **The following research questions were considered during the planning and early stages of the project:**

What is the purpose of long case observation?

In what way(s), if any, is long case observation educationally worthwhile?

Does long case observation reflect clinical practice?

Is long case observation authentic?

What is being assessed during long case observation?

What is being learned, and by who? Could it be learned in any other way?

How do the learner and the teacher view long case observation? What are their expectations of, and aspirations for, participating in long case observation?

How could the educational value of long case observation be improved?

How much does the 'person' of the observer affect the value of long case observation for the learner?

Is there some professional utility in long case observation and is this independent of the teacher?

What is going on during long case observation?

### **Using Stenhouse's (1975,pp.118-119) criteria for evaluation of an educational practice:**

What is the 'meaning' of long case observation?

What is the potential of long case observation?

What problems are faced in practice?

What factors predict success or failure in realising the full potential?

## Appendix 3

### Ysgol Gwyddor Iechyd

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School of Human & Health Science  
and Medical School

# RESEARCH ETHICS COMMITTEE

## Application For Research Ethics Committee Approval

**N.B. All questions must be answered.**

1. Title of Project: **Long-case observation in undergraduate medical education: A case study**

2. Name: Clive Weston

Qualifications: MB BCh. FRCP.

Contact Address: School of Medicine, Grove Building, Swansea University

Post Code: SA2 8PP

Email: c.f.m.weston@swansea.ac.uk

Contact telephone number of Researcher: 01792 285354

If a student please name your course of study:

MA Professional Education in Clinical Settings

3. Sponsorship: (if applicable) Course fees for the MA has been paid by ABM University Hospitals Health Board, through its SIFT Apportionment Committee.

4. Name of Supervisor: Dr Aled Jones

**5. Aims and Objectives:**

I propose to use a case-study approach to explore more deeply a part of my existing educational practice in clinical settings – long-case observation.

Here, long-case observation describes attentive watching, by a senior clinician (teacher), of a medical student (learner) clerking a patient in a hospital ward. The teacher and learner then retire to discuss clinical aspects of the case, the clinical methods employed and the student's developing clinical and professional thinking. Later, the student provides the teacher with some 'learning points' and receives a detailed summary of the discussion.

*Aim*

I aim to better understand the educational value of long-case observation in medical undergraduate education. How is it viewed by learners and teacher - Is it educationally worthwhile?

*Objectives*

1. This will require an exploration of the values underlying my philosophy of educational practice in the clinical setting and those of the learners, including their experiences, aspirations and expectations.
2. I will need to place long-case observation, as described here, within the context of professional learning, the literature on undergraduate medical education and within the context of the Swansea Graduate Entry Medicine curriculum.
3. I will analyse the content of the learner-teacher interaction - identifying those aspects of clinical practice that are either discussed immediately after the observation or contained within the later exchange of correspondence.
4. I will explore the way the teacher approaches teaching during the learner-teacher interaction - identifying the pedagogical strategies employed and what this says about their approach to education (e.g. the 'education as product' model).
5. I will ask the students to reflect upon their experiences of long-case observation and place it in the context of their previous learning in clinical settings and their professional development.

I will submit this research as a dissertation at Masters level to the School of Human and Health Science, and may prepare a paper for publication.

6. **Background/Justification for Study.** Review of Literature (approximately 500 words with focus on key issues)

The General Medical Council (2009) requires graduates “carry out a consultation with a patient...take and record a patient’s history...elicit patients’ questions...their views concerns, values and preferences...[and] perform a full physical examination” (p.19). The observed long-case should be an ideal way to learn and assess this. It approximates closely to authentic clinical practice and is “an integrated in-depth assessment of clinical competence” (Wass and van der Vleuten 2004). It allows both an appreciation of the student’s holistic approach to the patient (Ponnamperuma *et al.*, 2009) and aspects of their clinical competence that are less context-specific, (e.g. building rapport, communicating sensitively (Dare *et al.*, 2008)).

However, judgements made using long-cases are thought overly subjective and unreliable. So the long-case, in high-stakes examinations at least, has given way to multiple short standardised assessments of individual clinical skills using objective structured clinical examination (OSCE) (Harden and Gleeson 1979) and short structured assessments of focussed history-taking or clinical examination – the mini-clinical evaluation exercise (mini-CEX) (Hill *et al.* 2009).

In my experience, most newly-qualified doctors deny having ever been observed during a complete interaction with a patient. This is not new; “We are training future physicians who have never been observed to elicit a history or perform a physical examination” (Eichna 1980); “Most medical students have *never* been observed doing a history and physical from beginning to end” (Cassell 1997,p.148); “No one I know was ever observed doing the long case” (Norman 2002).

Published studies report wide variations in the use of long-case observation between American medical schools (Association of American Medical Colleges 1997) and within clinical specialties (Howley and Wilson 2004), a greater likelihood that students be observed by junior, rather than senior, doctors, an association between having been observed with greater self-confidence (Chen *et al.*, 2008), and with scores obtained during clerkships (Hasnain *et al.*, 2004).

“Little is known about the consequential validity of the long case in terms of...students’ learning” (Wass and van der Vleuten 2004). Simply put, it is unclear what message the use of the long case ‘sends’ to the learners, nor what it tells them about the principles directing the curriculum or the values of the curriculum developers; nor indeed what they learn about their teachers and their future professional roles through participating in the long-case. Without this knowledge it is impossible to define what is being lost as it is phased-out. Teoh & Bowden (2008) believe that the long-case emphasised “the centrality of the patient encounter in medical practice” and report that final year medical students stopped seeing patients and concentrated on preparing for written examinations when long-cases were removed.

In developing clinical teaching within the Swansea Graduate Entry Medicine course I have promoted long-case observation within a programme of clinical apprenticeships, such that each student will have the opportunity to take part in 9 long-case observations over 4 years. This does not form part of any formal summative assessment.

Golby and Parrott (1999,pp.60-64) propose four criteria to decide whether research justifies the adjective ‘educational’. The research should be *about* education and itself contain educational values; it must be of practical educational benefit; it must be intelligible and useful to those ‘researched’; it must be educational for those who conduct it. They also advise novice researchers to consider an interpretive paradigm, in particular ‘case study’, as a good approach to such enquiry.

I believe that the research outlined in this application fulfils these criteria, is timely, and that I have an obligation to research this aspect of educational practice in order to more fully understand the value of long-case observation to learner and teacher.

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## 7. Research Design/Methods

Data Protection Act requires that all Staff who process or use any personal information adhere to the eight data protection principles. These are that personal data including sensitive data :

- be obtained and processed fairly and lawfully and shall not be processed unless certain conditions are met
- be obtained for a specified and lawful purpose and shall not be processed in any manner incompatible with that purpose
- be adequate, relevant and not excessive for these purposes
- be accurate and kept up-to-date
- not be kept for longer than is necessary though the retention of data for historical or statistical research can be kept indefinitely ( s 33 of the Act)
- be processed in accordance with the data subject's rights
- be kept safe from unauthorised access, accidental loss or destruction
- not be transferred to a country outside the EU unless that country has equivalent levels of protection for personal data.

I intend to perform empirical educational case study research, which will be predominantly evaluative. I will be a participant observer.

I only intend to research my own practice. In other words I will not observe other clinical teachers as they perform long-case observations.

The students who are asked to participate will be the two or three second year medical undergraduates allocated to me during the clinical apprenticeship that runs from 4<sup>th</sup> October 2010 until 5<sup>th</sup> November 2010. This will be their second such apprenticeship. These students will have graduated from other degree programmes, with at least three years of higher education at degree level prior to starting the medical course. The students will not have been allocated to me for the purpose of this research.

If one or more of them decide not to participate in the research project I will have to postpone parts of the data collection and analysis until a later apprenticeship (e.g. 11/04/11-13/05/11 or 13/06/11-8/07/11).

The various sources of evidence for analysis will include documents, audio-taped interviews, transcripts of such interviews, hand-written notes, and a research diary. I will not be obtaining photographs, film or artefacts.

These will include:

- Curriculum documents, including freely available course handbooks, assessment policies, evaluations of the apprenticeships and open letters to the group of clinical teachers
- Various written assignments and appendices that I have submitted during the first two years of the Masters in Professional Education in Clinical Settings
- Correspondence between previous students and I following earlier long-case observations
- Correspondence between myself and an educationalist, who has previously witnessed me performing a long-case observation
- Correspondence between the participating students and I that would normally be generated as part of the long-case observation
- Correspondence from participating students related to their verification of relevant data and their reading of various interpretive parts of the research

- Audio-tape recordings of the learner-teacher discussion that takes place after each long-case observation
- Audio-tape recordings of semi-structured interviews with participating students following completion of the apprenticeship
- My handwritten notes made as I observe the students
- Handwritten notes of any conversations with other clinical teachers when relevant to the subject
- Handwritten research logbook/diary, including personal reflections on the progress of the research

Audio-data will be obtained using digital audio technology and stored digitally on encrypted, pass-word-protected USB storage devices. I will perform transcription of part or all of the interviews into Microsoft Word documents. Wherever possible all correspondence will be electronic in the same 'Word' format. The names of the students will be deleted from all documents and replaced with a random letter (e.g. Student A). The students' names would not appear within the final dissertation unless a student requested an acknowledgement.

All electronic data will be transferred to, and stored in, a MacBook (laptop) or iMac computer, with enabled 'FireVault' protection. This ensures encryption of files within a 'home folder' that can only be accessed by password.

Handwritten notes and the logbook/diary – containing some notes following supervisor meetings will be kept securely. The names of the students will not appear within the notes or the logbook.

As now, no patient-identifiable information will be kept, by either the teacher or the student.

The signed consent forms will be kept, separate from the data sources above, in a locked office within the University.

Analysis will involve repetitive review of the various audio-tapes of long-case discussions and semi-structured interviews and subsequent transcriptions and scrutiny of the documentary evidence. Common themes will be sought or become apparent leading to formal coding and thematic analyses. Presently these themes are likely to include pedagogical strategies, the enculturalisation of students and the developing professional, congruence between learning and teaching, personal reflections. I will be discussing my progress and therefore sharing access to analysis, and data sources as necessary with my research supervisor.

The dissertation will be completed by the end of the academic year 2010-11. Data sources will be kept for at least as long as that. Some transcripts will appear in the main text or in the accompanying appendices. I will take advice as to when it would be reasonable to delete the various electronic files. Perhaps deleting them if or when the dissertation is accepted. I will not destroy the research logbook/diary (as part of an audit trail).

Validity will be assured through *respondent validation* – checking accuracy of participants' contributions and discussing my interpretations with them and third parties – and *triangulation*. This means that I may allow a trusted third party – a fellow clinical teacher or university academic – to review the primary data sources and my interpretations of these. Any subsequent discussions or alterations will be noted in the research diary. I will make this explicit to the participating students, together with a request for consent to share 'their' primary data sources.

Reliability will be addressed through the audit trail that is the research log and providing a sufficiently detailed description of the preparation and process of the journey that is the research.

Generalisation is a more difficult concept in case study research. I hope to provide such a detailed description of the context of the case and my journey through the research that the reader of the research report glimpses similarities with their own situation and shared understandings of educational practice.

N.B. It is possible that part of the analysis, interpretation and write up of this research will take place in New Zealand at the University of Otago, Dunedin. I believe that equivalent levels of protection for personal data apply in New Zealand.

## **8. Ethical Considerations (describe in detail)**

Possible harm to the students directly relating to their participations include, coercion to participate, excessive work load, feelings of being 'used' or misrepresented and loss of privacy through loss of sensitive personal data or publication of the research.

I will adhere to the Ethical Guidelines for Educational Research produced by the British Educational Research Association (2004) and any suggestions by the SHHS/SoM Research Ethics Committee. My guiding principles will be honesty and openness (Golby and Parrott 1999, pp.90-94), and the maintenance of trust and respect for the rights of the participants.

There are significant issues with research that involves a relationship between participants, in this case learners and teacher that are in some ways unequal. Our real-life roles within the Medical School place the students in a vulnerable position where they may feel coerced into beginning and continuing to participate. There is a place for a 'critical friend' in ensuring truly informed consent is obtained (see below).

I need to minimise the impact of participation on the workload of the students. The long-case observation is a normal part of their apprenticeship, though not all teachers request learning points from the students. Therefore the extra work involved with participation will include a semi-structured interview of up to one hour after the apprenticeship has finished and before the examination week at the end of term, and time spent verifying data sources and commenting of interpretations. There is no extra written work for the students. This verification of data serves to allay fears of misrepresentation. I will, with students' permission, inform their personal tutor that they are taking part in the research and ask the tutor to monitor to ensure that they are not being 'swamped' with extra work as a result.

The students will be offered a copy of the final report and offered an opportunity to have a final debriefing.

Privacy – anonymity and confidentiality – will be maintained as described in section 7 above.

It is my understanding that NHS Research Ethics Committee approval is not required for this educational research into an existing educational activity. Patients will not be interviewed nor will audiotapes be made of the student-patient interaction.



Issues of consent are discussed below.

There are no specific future implications of this study in terms of potential harm to other participants.

#### References

British Educational Research Association (2004) *Revised Ethical Guidelines for Educational Research*. At <http://www.bera.ac.uk/files/guidelines/ethical1.pdf> (accessed 1st June 2010)

Golby, M. and Parrott, A. (1999) *Educational Research and Educational Practice*. Exeter: Fairways Publications.

### 9. **Consent**

Written consent is required from the participating medical students, and post-hoc from previous medical students for use of their earlier long-case observation learning points and corresponding written feedback as data sources for analysis, and from the educationalist who previously observed my practice of long-case observation.

Post-Hoc requests for use of existing correspondence will be via email containing an explanatory letter that explains the purpose of the research and assures confidentiality (though the educationalist will be asked to waive his anonymity). A copy of the information sheet will be included for their information.

Potential participants will be the two or three second year medical students who have been allocated to me for their second clinical apprenticeship.

At least one week after the start of the apprenticeships the potential participants will be contacted by a recently qualified doctor. I will have explained the purpose and methods of the research to that doctor. The doctor will provide an information sheet (attached) to the students and they will be asked to consider whether they wish to take part.

There will be time to answer any questions because while a consent form will be available (attached), students will be allowed up to five working days to decide on participation.

Students will be clearly informed of their right to reject participation or to withdraw consent to continue to participate at any time up to the point of submission of the dissertation.

10. The information supplied is to the best of my knowledge and belief, accurate.

I confirm I have obtained permission to undertake this study from my Supervisor and the appropriate Programme Manager/Director/Head of Department.  
(please include in correspondence)

[Note that the application should be reviewed by your supervisor to resolve any methodological problems.]

I understand that I may be invited to explain my research proposal to the Committee, either in person or by telephone.

I understand that the School of Human & Health Science Research Ethics Committee gives Ethical Approval only and does not guarantee the quality or scientific validity of my study.

**Signature of Investigator:** Clive Weston

**Date of Submission:** 21/08/10

*Upon completion, please forward an electronic copy by e-mail to [G.Abbott@Swansea.ac.uk](mailto:G.Abbott@Swansea.ac.uk)*

Please also submit a signed hard copy to the Chair of the Committee (address below).

***[PLEASE SUBMIT THE ELECTRONIC COPY OF THE APPLICATION AS ONE DOCUMENT ONLY, WHICH INCLUDES ALL RELEVANT DOCUMENTATION ]***

*G.Abbott  
Secretary  
Research Ethics Committee,  
School of Human & Health Science  
Swansea University  
Singleton Park, Swansea, SA2 8PP.*

*Dr Aled Jones  
Research Ethics Committee,  
School of Human & Health Science  
Swansea University  
Singleton Park, Swansea, SA2 8PP.*

*Email: Aled.Jones@swansea.ac.uk  
Chairperson  
SHHSREC*

***The committee meets monthly (see below). Your information must arrive 2 weeks before the next meeting in order to ensure consideration. Late applications will not be considered***

## **Participant Information Sheet**

### **Long-case observation in undergraduate medical education: A case study**

I would like to invite you to take part in an educational research study.

Before you decide you need to understand why the research is being done and what it would involve for you.

Please take time to read the following information carefully. Talk to others, including your Personal Tutor, about the study if you wish.

This form tells you the purpose of this study and what will happen to you if you take part. It also provides detailed information about the conduct of the study. You can keep a copy of this form, as well as a copy of a signed consent form if you decide to participate.

Ask if there is anything that is not clear or if you would like more information. You can contact me by email – [c.f.m.weston@swansea.ac.uk](mailto:c.f.m.weston@swansea.ac.uk)  
Take time to decide whether or not you wish to take part.

### **What is the purpose of the study?**

To better understand the educational value of long-case observation in medical undergraduate education. How is it viewed by learners and teacher - **Is it educationally worthwhile?**

In this context long-case observation has at its heart observed-clerking (attentive watching) by a senior clinician of a medical student, followed by immediate discussion and later reflection on learning points. There is the opportunity for a long-case observation during each of the nine clinical apprenticeships during the Graduate Entry Medicine Programme.

### **Why have I been invited?**

This is a matter of chance. You have been allocated to myself and Dr Bal Bajaj for a clinical apprenticeship and this coincides with the timing of the data collection for the study.

### **Do I have to take part?**

It is up to you to decide. I will describe the study and go through this information sheet, which you can keep. You can sign a consent form to show you have agreed to take part. You are free to withdraw at any time, without giving a reason. This would not affect the standard of experience you receive during the apprenticeship nor any formal assessment of your progress. You will have the opportunity to have a long-case observation whether or not you participate in the study.

### **What will happen if I take part?**

If you agree to participate, then in addition to the long-case observation that we would normally perform during the apprenticeship, you would be asked to attend for one semi-structured interview after the apprenticeship. This interview would be recorded and securely stored (electronically) for later transcription. It would last about an hour and would explore your experiences of the curriculum, learning in clinical settings and the long-case observation in particular.

Further, you may be asked to review the transcript, and other data collected as part of the study, in order to verify or comment on my interpretations. This, with time to reply, might take up to 3 hours spread over three months.

The study uses an interpretive approach called Case-Study Research. It relies on collecting a variety of data, (documents, interviews, research diaries) which act as individual pieces of evidence that are then analysed and interpreted in order to illuminate the research question.

When case study research is presented or written up – it is hoped that this work will appear as an MA dissertation and possibly a publication – it often contains excerpts from transcripts or correspondence. With suitable steps to preserve your anonymity I would ask you to agree for such excerpts obtained from your involvement to be published.

A further technique in case study research is the use of a third party to review the data sources and analyses in order to improve the validity and reliability of the findings. I would ask therefore that you give consent for Dr Malachy O'Hagan, one of the clinical teachers, to act as that third party.

### **Expenses and Payments**

There is no financial incentive to take part in the study.

### **What will I have to do?**

You will need to

- Attend for the normal long-case observation
- Reflect on your learning through the construction of a list of 'learning points'
- Attend for a semi-structured interview (1 hr)
- Listen or read data from the interview and comment on my interpretations

### **What are the possible risks or disadvantages of taking part?**

The most obvious disadvantage is the extra work involved in participation (approx 4 hours), which has to take place during a busy academic course. There is a possibility that you will disagree with the conclusions of the study leading to feelings of having been exploited or misrepresented. There is the risk of loss of privacy through loss of sensitive personal data (despite storage in encrypted storage devices) or through recognition of your comments in research publication.

### **What are the possible benefits or advantages of taking part?**

There is the opportunity to shape a part of clinical teaching on the course in the future. There will be opportunities to more deeply explore your own values as a learner in clinical settings. There is however no link between your participation and subsequent evaluation of your performance during the apprenticeship.

### **What happens when the study stops?**

A report will be submitted as a dissertation by the end of the academic year. You will receive a copy of the report with a chance to comment or be 'de-briefed'. At that time audio-taped interviews may be deleted but all other data will be stored for a minimum of seven years.

### **What if there is a problem?**

If you experience a problem you can contact me by email ([c.f.m.weston@swansea.ac.uk](mailto:c.f.m.weston@swansea.ac.uk)) and I will try and help you. If you would rather not talk to me, your personal tutor will be aware of your participation and should be available to help. If you have a complaint about the performance of the research study you can contact my supervisor, Dr Aled Jones, who is also the Chair of the joint School of Health Science/ School of Medicine Research Ethics Committee ([Aled.Jones@swansea.ac.uk](mailto:Aled.Jones@swansea.ac.uk)).

### **Will my taking part in the study be kept confidential?**

Yes. I will follow ethical and legal practice and all information about you will be held in confidence. It is likely that your student colleague on the apprenticeship will become aware of your involvement. Further your personal tutor will be aware of your participation and will ensure that it is not causing excessive workload.

All information collected about you during the course of the research will be kept strictly confidential. Your student number, date of birth and address will not be kept and you will be referred to by a single initial in transcripts, written analyses and publications.

All electronic data will be transferred to, and stored in, a MacBook (laptop) or iMac computer, with enabled 'FireVault' protection. This ensures encryption of files within a 'home folder' that can only be accessed by password.

Handwritten notes and a logbook/diary – containing some notes following meetings with my supervisor will be kept securely. Your name will not appear within the notes or the logbook.

It is possible that I will complete the analysis and writing up of the study during a sabbatical period in New Zealand. I am legally obliged to inform you that your contributions will be taken outside the EU.

### **What happens if I don't want to carry on with the study?**

You can withdraw from the study at any time without prejudicing your future progress in the apprenticeship or on the course, and without needing to give a reason. Up to the point of submission of the dissertation, you can withdraw your consent for data gained as a direct result of your participation to be included.

### **What will happen to the results of the research study?**

The intention is for the report of the case study into long-case observation to be presented to Swansea University as a dissertation for an MA in Professional Education in Clinical Settings. It is also very likely that the findings will be presented at educational meetings both internally and externally. An article outlining the study and its findings may be submitted for peer-reviewed publication in the educational literature.

You will not be identified, or acknowledged, in any report unless you were to give your consent.

### **Who is organising and funding the research?**

There is no direct funding for this study. However, the fees for the MA (c£1,800 p.a.) are paid for by ABM UHB via the SIFT Apportionment Committee.

**Who has reviewed the study?**

This is Educational Research rather than clinical research. As such it has been reviewed and given favourable opinion by the joint Research Ethics Committee of the Schools of Human and Health Sciences and the School of Medicine within Swansea University.

**Further information and contact details**

For general and specific information regarding the study contact me  
([c.f.m.weston@swansea.ac.uk](mailto:c.f.m.weston@swansea.ac.uk))

For issues regarding your decision to participate or to withdraw contact your personal tutor.

Dated: Nov 2010

## CONSENT FORM

***Title of Project: Long-case observation in undergraduate medical education: A case study***

Name of Researcher: Clive Weston  
Please initial box

1. I confirm that I have read and understand the information sheet (dated.....) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving reasons, and without my educational progress or legal rights being affected.

3. I understand that relevant audio-tapes of interviews and other data collected during the study may be looked at by a clinical teacher or medical academic, and by individuals from regulatory authorities. I give permission for these individuals to have access to those data concerning me.

4. I agree to my personal tutor being informed of my participation in the study

5. I agree to take part in the above study.

\_\_\_\_\_  
Name of Patient

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Person  
taking consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

***When completed, 1 for student; 1 for researcher***

Email 10/9/2010

Hi Clive

The vice-chair of the School's REC has forwarded to me the ethics committee's response, please see comments below. Could you please address these points and send response to Professor Mike McNamee, whom I have copied into the message, at [M.J.McNamee@swansea.ac.uk](mailto:M.J.McNamee@swansea.ac.uk), thanks.

Please get in touch with me should you wish to discuss these points and your responses to them.

All the best

Aled

1. A colleague, with whom, data will be shared, is not specified in the proposal. The committee wanted to know if there would be any conflict of interest (eg if the other colleague was teaching them or if they had professional contact with them such that might compromise or render vulnerable the students). Would the students know in advance who the data would be



shared with; this might be necessary viz informed consent.

2. There appears to be a typo re data deletion: recommend norm of up to 7 years max.

3. ***Researcher proposes to go back to participants to verify data veracity: what will they do in matters of dispute (if any)?***

Email 14/9/2010

Dear Clive

Your responses have been reviewed by myself and Prof Steve Edwards. We are in agreement with what you propose and suggest (viz point1) that you utilise Dr Malachy O'Hagan as suggested.

Good luck with the research.

Mike

## **Appendix 4**

### **The Interview Guide Used in Semi-Structured Interviews of Students**

Can you summarise how you ended up as a medical student?

Based on your experiences would you summarise your views of higher education generally and medical education in particular?

For an activity to be 'educationally worthwhile' for you as a medical student, what would be its characteristics?

When I mention 'Long Case Observation' (LCO), what comes to your mind?

What (if any) were your expectations of the LCO beforehand?

For what purposes might the LCO be useful?

Did you intend/hope to gain anything from the exercise?

Can you describe how you felt during the LCO?

How do you usually feel when you clerk a patient?

Was it different this time?

What do you think might be learned (and by who) from the LCO?

What did you learn from the LCO?

Do you think that the LCO was a realistic representation of clinical practice?

Is it a representation of the sort of practice in which you can see yourself engaged?

What other opportunities are there for your activities to be observed in a clinical setting?

Does it matter who observes during the LCO – for example would their seniority, profession or relationship with you have any effect on its value?

Would you have appreciated a more structured approach to the LCO with, for example, a checklist to follow, a standard feedback form and an assessment grade?

Did the written exchange of feedback and learning points have any value?

Was the LCO 'educationally worthwhile' in any way?

Are there aspects of LCO that could be changed in order to increase its educational value?

What does it say about the curriculum that LCO is included in it?