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Thesis Chapter 10

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Chapter 10

Outcome: Towards a culture of conscience in a developing community of practice?
10  OUTCOME - TOWARDS A CULTURE OF CONSCIENCE IN A DEVELOPING COMMUNITY OF PRACTICE?

10.1 Overview

In this chapter, the purpose, research questions and hypotheses of the thesis are revisited in the process of drawing conclusions. In addition, a critique of the methodology used in this research is offered to assess the contribution to knowledge.

The overall aims of this research study were: to explain the conditions creating and sustaining a professional community of trainers and its concept of training practice against a backdrop of increasing regulation; and, to understand the effects of compliance culture on the sharing of practice and development of shared understandings in this community. The pertinent questions posed in line with these aims are addressed in subsequent sections.

Because it offered a pragmatic, flexible framework for analyzing the activity of trainers in situ, CHAT was applied to demonstrate how the concept of practice manifested in this community. Moreover, as shown in Chapter 3, AT bridges the traditional divide between theory and practice offering CoP researchers a model of contextualised activity, which can be theorized and tested through the development of an instrument. This instrument also serves as a conceptual framework and an evaluative tool, in this case for the concept of practice.

Therefore, gaining phenomenological insight into the concept of training practice involved recasting the five layers of social reality identified in this study as inter-dependent activity systems within the field of clinical research. In effect, these five levels represent a set of nested activity systems (AS):

AS1. Governance:

- The regulatory environment encompassing and governing good clinical practice (GCP), which concerns practice in the field of clinical research - activity of governance with the object of ensuring compliance with regulations

AS2. Field:
Clinical research industry constituting the field of practice i.e. pharma, CRO, ITP, NHS, academia - *activity of clinical research* with the shared object of conducting clinical research in compliance with regulations

AS3. Organisational:

- Clinical research training practice settings within various non-uniform functional workplace structures: training departments, single dedicated FT trainers, or PT trainers in shared roles - *activity of clinical research training* with the object of expedient training

AS4. Professional:

- Professional community of clinical researchers i.e. the Institute of Clinical Research (ICR) - *activity of CPD* with the object of sharing best practices, raising standards and developing the professional

AS5. Community:

- Clinical research trainers group within a cross-boundary structure (Community of Practice) i.e. the Trainers’ Forum (TF) within the ICR - *activity of sharing practice & discussing issues* with the object of learning new ideas, benchmarking practice and raising standards

Appreciating the quaternary contradictions in the Forum arising through each of these levels or systems provided an understanding of the place and pivotal role of training in the clinical research process. For example, on the level of AS5, this entailed analysing the concept of practice as it related to training process (partially imported model), and as it manifested within the community of trainers (partially constructed model). On other levels (AS1–4), it involved exploring the socio-cultural underpinnings within the wider contextual framework that influenced the concept of practice. Examining the concept of practice at these different levels revealed the models/concepts that were partially constructed within, and partly imported into the activity system of interest i.e. the TF. Moreover, their functions as tools
were then evaluated in terms of declarative and procedural models, as well as experiences or outcomes in the TF. In effect, analysing each inter-related or neighbouring activity system at a *theory-historical* level provided further layers of context that served to illuminate the inner workings of the TF as an activity system.

Yet, in practical terms, the complexity of each of these layers or neighbouring activity systems, necessitated limiting the main empirical focus of this thesis to the final level: the professional community of trainers (TF) and their activities of sharing practice and discussing issues related to CR training practice. Meanwhile, movement back and forth between all levels in terms either of analysing *object-historical* developments or *theory-historical* perspectives was necessary to understand the activity and actions from a ‘social-ecological’ perspective within the specific level of the TF (Lemke, 2001: 17-18). The multi-voiced nature of longitudinal participant observations and interviews provided a further empirical dimension to analyses of *object-historical* developments and *theory-historical* perspectives within neighbouring activity systems.

Thus, by means of moving back and forth between the inter-dependent layers of activity systems, the effects of regulatory developments (signified by the switch from voluntary to mandatory inspections) on the constitution of practice within the TF were analysed. That is, the relationship between trainers’ concept of practice within the TF (AS5) and a *culture of compliance* was traced through the workplace (AS3), wider field of practice (AS2) and the system of governance (AS1).

Hence, the study addressed the research questions by identifying, describing, and interpreting the socio-cultural elements that perpetuated or transformed the concept of training practice in the Trainers’ Forum (TF) and its neighbouring systems.

A detailed picture was built over time by using ethnographic techniques within a developmental research approach. Moreover, in order to describe *the way we do things around here* the concept of practice (declarative concept) was linked with particular pedagogic activities and training idioms (procedural models). In turn, through situating these
concepts, pedagogies and idioms within their larger socio-cultural context, it became possible to appreciate why the participants of the TF approached their activity - of sharing practice and discussing topical training issues - as they do, with respect to how their activities and actions as trainers are sustained by their larger socio-cultural context, and what problems are encountered as a result.

For example, as revealed in Chapter 7, job adverts for trainers in this field revealed a bias towards hiring subject matter experts (SMEs) with expertise in clinical research as the knowledge domain, rather than professional training expertise. In accordance with senior management’s objectives in the workplace (AS3) to demonstrate regulatory compliance, the focus of these SMEs was on the functional task of delivering technical content, guiding their development as knowledge-based trainers, and reflecting a restricted rationality of training practice.

Moreover, in Chapter 8 it was revealed that members of the Forum had different expectations of what should happen there. Thus, in looking at TF interactions from a critically ethnographic perspective - two types were apparent: based on either a monologic or dialogic approach. In the first approach, the roles of participants were well defined and their expectations were clear: the "speaker" talked and the audience "listened". With a dialogic approach - everyone had an opportunity both to speak and to listen, but perhaps with a less predictable or routinised form of interaction, or outcome. However, monologic interaction predominated.

In Chapter 9 it was shown that this difference in expectations reflected a qualitative difference in trainers’ conceptual and instrumental translation of the object of activity in the Forum i.e. sharing practice, as well as the central activity of discussing training issues, through:

- a content-driven process of information transfer via monologue, or
- a process-driven method of enquiry via dialogue.
In effect, these differences were representative of contrasting pedagogies, which differentiated trainers as either knowledge-based or facilitative. Therefore, in light of these findings it is now possible to answer the research questions posed in Chapter 1 in subsequent sections.

10.2 Re-visiting the three research questions

10.2.1 Research Question 1: Why is the discourse on pedagogy in the Trainers Forum marked by internal contradictions?

The first research question is addressed in this section through a series of four associated questions.

RQ1a: Why is a content-driven approach to sharing and discussing practice and training issues dominant in an emergent Community of Practice (CoP)?

Preliminary analysis of activity at the Forum revealed that trainers appreciated that they had a conscious incompetence concerning how to evaluate the effectiveness of their training programmes. They also appreciated that strategically focussing on their professional development meant developing their role from that of knowledge-based trainers to facilitators of learning. However, when efforts were made to change the transmission model, it entailed promoting them as innovative training methods\footnote{TF_FN_4/C_12-04-1} as discussed in Chapters 7 and 8.

Nevertheless, despite an awareness of the need for change in the workplace, a transmissive model of practice predominated in the Trainers’ Forum. The reasons for this are explained as follows.

In the system of governance (AS1) GCP operates as a tool, in that inspectors use it as the performance standard in clinical research conduct against which clinical researchers are measured. In the field of clinical research (AS2) and in the workplace (AS3) this tool has become a rule of conduct, known as “GCP compliance”. Therefore, the activity of the regulatory system (inspecting statutory compliance with GCP) has produced an object and a
rule that governs the activity of these two related neighbouring systems (to comply with regulations founded in GCP). In socio-cultural terms this rule of conduct is transformed into a culture of compliance, which then operates globally in the field (AS2) and locally in the workplace (AS3).

In training terms, as shown in the findings in Chapter 7, this ruling culture of compliance in the field of clinical research (AS2) translates into a bias towards hiring predominantly clinical research subject matter experts (the subject-producing activity) to perform as knowledge-based trainers in preference to specialised training professionals. Subsequently, for knowledge-based trainers (KBTs) in the workplace (AS3), compliance culture becomes a rule of conduct (expedient delivery of technical content), or an operational standard of behaviour (compliance with senior management’s objectives (shown in Table 8-10), based on a restricted rationality concerning the limited value of training to the organisation). Thus, because focus in the workplace is mainly on curriculum delivery (i.e. stage 3 of the training cycle (Figure 8-3)), both full-time and part-time KBTs are limited in their opportunities to become sufficiently versed in all aspects of their ‘trade’, namely evaluation, as revealed by the Forum survey (Table 7-2: trainers’ responsibilities). So in an everyday epistemological sense (Bourdieu, 1990; Webb et al, 2002), as practitioners, they may lack the ‘practical tools of the trade’ to fully ‘play the game’ in their organisations and consequently secure appropriate training budgets. In turn, this evaluative capability is dependent on recognising the difference between conveying information and creating an opportunity for trainees to develop knowledge i.e. to learn where “…knowledge is the uniquely human capability of making meaning from information - ideally in face to face relationships with other human beings…” Miller (2002:1).

Therefore, through these conditions, because the dominant rationality in the workplace concerns the expedient delivery of content (technical information), KBTs are habituated to a transmissive pedagogy. Subsequently, in the Forum, because KBTs comprise the majority, the dominance within the community at large of the content-driven, trainer-centred transmission
pedagogy over the process-driven learner-centred enquiry pedagogy is perpetuated through this bias.

**RQ1b: Why are some trainers committed to the transmission model?**

In turn, because subject matter experts in the role of trainer are encouraged to develop professionally as KBTs, rather than as facilitative trainers, transmissive pedagogy remains the dominant concept of practice imported from the workplace, guiding trainers in their discussions in the TF. In effect, because the workplace object of expedient delivery was transformed into a rule of expediency that subsequently became a pedagogical tool of convenience (monologue) in the Forum (AS5), Forum activity is restricted mainly to monologic interaction.

The majority commitment to this model of practice was then reinforced in the Trainers’ Forum because, as discussed in Chapter 7, it serves as a model of professional development. Moreover, it helps to explore identity, consistent with it being a Community of Practice (Meyers, op.cit.) consisting of “groups of people who share a concern, a set of problems, or a passion about a topic and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, McDermott and Synder (op.cit.:4). That is, the three identifying features of Wenger’s CoP (op.cit.:76) in terms of the dimensions of its practices that are implicated in a sense of identity were also fulfilled in the Trainers’ Forum, as follows: -

- Mutual engagement (attendance and participation as core, active, and peripheral members)
- Joint shared enterprise (common endeavour to share and discuss ideas predominantly via monologue)
- Shared repertoire of negotiable resources accumulated over time (common resources of language style by means of which members of a particular community express their identity (Bourdieu, 1998): as transmissive or deliberative pedagogues).
Thus, through-modelling their shared understandings and common resources (such as EFsD, language style or idiom and similar approaches to issues or problems) members of the TF expressed or developed their sense of identity and belonging on basis that the majority were transmissive pedagogues.

**RQ1c:** Is there a relationship between the transmissive pedagogy and the compliance regime? 
If it exists, how do we explain this relationship?

In answering RQ1a, the relationship between the compliance regime in the governing system of regulation and transmissive pedagogy in the TF was explained and traced throughout neighbouring systems in its various transformations from tool to rule and so forth, as represented and summarised in Figure 10-1.

![Figure 10-1: Tracing transformations](image)

In addition, in Chapter 8 (Table 8-10) role of the workplace as a rule-producing and instrument–producing system of activity was discussed in terms of the effect on how practice is shared and discussed (the central activity) at the Forum, to explain why the discourse on pedagogy is marked by internal contradiction (RQ1). That is, depending on the tools available to them (EFsD and pedagogy) and through their habitual use in the workplace, trainers in the Forum behaved either as traditional, knowledge-based presenters or as progressive facilitators. By implication, even in the TF, the motives of SMEs hired as KBTs in the field of
practice, differed from training practitioners. The focus or goal of the former group was on achieving the task of expeditiously delivering content, rather than on how the task was achieved.

By contrast, the goal of those demonstrating a facilitative practice was driven by standards of conscience as part of the internal goods of practice to lead a deliberative enquiry, in order to generate common understanding through shared meaning (as exemplified in an extract from one of the artefacts produced by a facilitative trainer, shown in Appendix M). Therefore, despite apparently having the freedom to choose how to share and discuss practice, the choice of monologic methods reflected the dominant rationality through conformity to the workplace rule of expeditious delivery.

10.2.2 Research Question 2: What activities help the Trainers Forum develop towards becoming a community of practice (and conversely which activities act as a barrier to becoming a CoP)?

Each of the associated questions are answered in this section.

RQ2a: What are the characteristics of activity in the TF? What does practice look like?

As discussed in the previous section, a culture of compliance, which originates in the regulatory environment (AS1), has taken root within contrasting epistemological frames of discourse (EFsD) that we observed in the TF. In turn, these EFsD shape the concept of practice i.e. due to core epistemological beliefs, which operate as cognitive elements within the activity of training (i.e. training as information transfer, or as a process of inquiry).

Therefore, in the TF saying-writing-doing discourses concerned how we talk about training while in the act of discussing and sharing our practice. Meanwhile, being-valuing-believing discourses were revealed in our approach to the task of sharing & discussing practice: as content (information transfer) or as process driven (enquiry-process). Thus, talk about “covering content”, or “getting through the material” during presentations delivered as monologue, with questions reserved until the end of the presentation, categorised the EFD as “received” and characterised activity as monologic.
Therefore, taken together, the approach, methods and idiom used to share practice operationalised key elements of the concept of practice. The standards of practice that followed were found to be contingent on (and thus defining) the concept of practice illustrated through these elements. For example, in a transmissive pedagogy the standard guiding practice concerned the delivery of content (presentation skills) and communication of ‘information’ (communication skills) so that it could be received and processed to become ‘knowledge’.

By contrast, in an enquiry-led pedagogy, participants were encouraged to actively develop particular thinking skills and attitudes by engaging with subject matter through a facilitated process of dialogue, effectively encompassing different elements of the cognitive, affective and psychomotor learning domains.

*RQ2b: Why do trainers talk about learner-centred approaches but predominantly tend to use trainer-centred methods in this community?*

This contradiction may be explained by:

- Lack of awareness of the contradiction between Teaching & Learning approach espoused and Teaching & Learning methods applied in the TF.

- Dominance of a pedagogic model of ‘knowledge’ transmission imported from the workplace.

As summarised in Table 8-10 (Chapter 8), the domination of habitually transmissive pedagogy\(^{222}\) in the Forum highlighted several instances of quaternary contradiction. That is, although trainers could decide for themselves in the Forum which topics to discuss and how to discuss them, the restrictions imposed in the workplace (L4 RU-AS3) to deliver or transmit content expediently (L4 OB-AS3), through monologue (L4TO-AS3) were perpetuated in the

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\(^{222}\) 39 transmissive:18 delibe rative, as shown in Chapter 8, Table 8-5: Predominant conceptual/procedural models of practice characterising Forum activity
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Forum. Consequently, despite their object to collectively share and discuss practice in the Forum, tension arose when trainers’ efforts in the Forum to lead deliberative enquiry through dialogue, deviated from the predominant transmissive pedagogy to “deliver” agenda content. Inconsistencies in discourse combinations i.e. talking about learner-centred strategies while demonstrating trainer-centred methods were indicative of divisions in trainers’ commitments to develop their professionalism, business opportunities, or protect their employers’ interests and as reflected in contradictions within and between their object and its mediating tools.

RQ2c: What social processes are moulding the TF (i.e. processes involved in its structuration) e.g. how does the TF run: how is it organised (planning & administration; decision-making; consultation etc.)? Who makes decisions and how?

Despite the acknowledged need state expressed from the beginning of the TF to develop from KBTs to facilitative trainers, the identity of trainers in the Forum was not defined explicitly in terms of pedagogic rationality. Rather, trainers were routinely differentiated in the Forum on the basis of their functional status as cross-functional PT or dedicated FT trainers and location of their practice (pharma, CRO, ITP), as a means to identify their competing interests within the community i.e. as colleagues, clients or competitors. As revealed in Chapter 7, this level of differentiation reflected the heterogeneity of trainers in the field of clinical research and the lack of uniform structure in the workplace.

Nevertheless, such differentiation of status, on the basis of the FT or PT nature of the role, was based on the assumption that regardless of duration of service and irrespective of their qualifications as trainers, FT and PT trainers differed in their levels of experience, and did not share equivalent status. Thus the lack of uniformity has led trainers to stratify their experience on the basis of time served within a hierarchy where dedicated full-time trainers occupy the top position, irrespective of their training qualifications or pedagogic rationality.

Consequently, the basis on which trainers are recognised in the Forum provides a springboard for developing deliberative enquiry (based on appreciating differences in pedagogic rationality, expressed in EFsD, instead of enquiring about functional status). In effect, this
constitutes a recommendation for expansive learning and development in order to re-direct attention to professionality.

**RQ2d: How are trainers working within the Trainers Forum to establish shared understandings about practice/training issues?**

A secondary contradiction (L2RU-OB, illustrated in Chapter 9, Figure 9-11) presenting through a rule that the object of sharing and discussing practice in the TF was not about training the trainer highlighted how an opportunity to address members’ needs and to reach a common understanding of the goals of the Forum has been forestalled. Consequently, upholding this rule hinders its development as a CoP.

Furthermore, analysis of practice in the TF from three different CoP perspectives (core, active and peripheral) - that may also be appreciated as social positions in a horizontal division of labour – has established its conceptualisation from two different operational levels of professionalism (conscience/compliance), each of which has a different rationality and focus. That is, CoP members who operate from a culture of conscience have demonstrated concern with organisational learning, where training is an expansive process of co-constructing meaning mediated through a deliberative pedagogy. By contrast, CoP members who operate from a culture of compliance remain concerned with the functional task of delivering training by means of a transmissive pedagogy. Meanwhile, the social mechanisms underscoring community outcomes are summarised in Table 10-1 as the cultural conflict underscoring the spectrum of professionalism in the TF.

Therefore, as this study has revealed, the Forum’s potential lies in appreciating the use value of adopting an enquiry-led pedagogy, which hinges on the deliberative capability of trainers:-

- to take the strategic training focus necessary to develop professionalism and,

- to appreciate the role and need for consistency of idiom, methods and culture in the pedagogy of organisational learning.
Thus, the journey in the Trainers’ Forum towards becoming a community of practice reflects its struggle as an emergent profession to develop its specialist knowledge and tools in order to establish autonomy of standards.

10.2.3 Research Question 3: How can the Trainers’ Forum realise its potential as a CoP to provide guidance about training standards generally, and evaluation practices in particular, in order to transform training culture from one of compliance to one of conscience?

Challenging “tick-box” mentality both inside and outside the Forum provides a springboard to resolve the dominance of transmissive pedagogy. In particular, adopting an enquiry-led approach in the Forum helps trainers develop their professionality through questioning of the value of expedient delivery in the workplace, with its associated object of minimising training costs. By this means, we might appreciate that the use value of enquiry-led training to organisations lies in developing the deliberative capability of trainees - to reduce instances of GCP non-compliance - thereby increasing the cost-effectiveness of clinical development programmes. More crucially, in exchange, the requirements of regulators are satisfied if not exceeded.

Frequent use of the phrase “tick-box exercise” expressed the tension between the use and exchange values of expediently delivered training. Its use also illustrated the primary contradiction in tools used in the Forum; namely, in the cultural elements of pedagogy operating as standards: compliance versus conscience (L1TO2d: Culture). Consequently, as discussed in Chapter 8, developing the highest standards of training practice in the Forum (and in turn, GCP in the workplace), through the exercise of conscience, remains challenging while employers’ way of doing things predominate (transmissive monologue in a culture of compliance) within this community. For example, as revealed in Chapter 8, section 8.3.1, transformation of the workplace object of expediency into a rule inhibited dialogic interactions and fruitful discussion, particularly where it fulfilled an expansive purpose.

If, as expansive learning theory suggests, the TF, as a community of practice, represents a boundary-spanning structure then small changes in this activity system have the potential to
transform activity within each of the inter-related activity systems and vice versa. However, a
demonstration of the effect of small changes was limited in this study to empirical-analysis of
activity in the TF. Nevertheless, identifying the links between these systems through
highlighting contradictions that impinge upon TF activity is the first step in making change
possible.

Hence, to reach shared understanding and agreement about ‘good’ training practice within the
TF, the process probably begins with the inclusive setting of the meeting agenda. But, who
decides which issues are topical? And, if the constituents of best practice are not explicitly
mentioned or discussed how can best practice be recognised? Therefore, if the agenda serves
as the expression of the TF’s goals - to share best practice and discuss topical training issues -
then perhaps more trainers should voice the need for more discussion about the nature of
practice, starting with its definition. Moreover, as the research revealed, there is a need to
appreciate that giving precedence to employers’ interests in terms of what may be discussed,
and how it may be discussed conflicts with the purpose of the Forum, as a vehicle for CPD.

Such small changes, especially in the organisational approach towards setting and agreeing
agenda topics, irrespective of members’ status as core, active or peripheral may enable more
trainers in the TF to fulfil their training needs through consciously developing competence
about whatever aspects of practice are of concern, such as the process of evaluation. In this
way, as a whole, the CoP may shift its sense of conscious incompetence about evaluation to
the next level, that of conscious competence, by sharing experiences and thereby
developing or helping to construct knowledge. Shifting towards a more transparent or
inclusive approach towards all members - peripheral and active/core – may increase
members’ ‘buy-in’ or involvement, which in turn may increase the likelihood that the CoP
will continue to develop and sustain members’ interest and passions.

223 Howell (1982:29-33) describes the four stages as: unconscious incompetence; conscious incompetence;
conscious competence and unconscious competence.
In effect, these observations constitute opportunities and recommendations for expansive learning in the TF, identified through analyses of contradictions within and between its elements and its neighbouring systems.

10.2.4 Reflecting on thesis propositions
The hypotheses proposed in Chapter 1 concerning the system of activity within a professional community of practice were that:

- If trainers feel divided in their commitments (between their profession, and their employer), then they may speak a language (of process pedagogy) to satisfy their professional peers, but feel forced to deliver cost-constrained training that will satisfy their executive employers.

- If the activities of communicative action (dialogue, and giving and taking of reasons to develop dialectical understanding of training) are emphasized within the forum, then trainers may be more likely to become a community of practice reaching shared understanding about an enquiry-led pedagogy and a culture of conscience in relation to training and ultimately, regulation.

These propositions were examined on the basis of rigorous analyses, at each of the three stages of a CHAT methodology in order to address research questions posed in this thesis. Accordingly, a conceptual-analytical framework, substantiated by empirical evidence, was proposed to describe and analyse the concept of practice that embodied the object of activity. This framework succeeded, when applied during actual-empirical analysis as an evaluative tool in two main aspects:

1. Allowing declarative and procedural models of practice (i.e. expressed and modelled within contrasting pedagogies and associated training idioms) to be evaluated against defined categories of the concept of practice, theoretically derived from the literature, and
2. Linking elements of pedagogy (approach, methods, culture and idiom) to epistemological stance or frames of discourse categorised as discourse combinations (saying-writing-doing-being-valuing-believing).

Consequently, examining these propositions established the factors hindering or helping the development of the Trainers’ Forum as a Community of Practice. In particular, a link was established between the concept of practice (expressed within a dominant transmissive pedagogy and its associated idiom) in the Trainers’ Forum and the larger socio-cultural context (compliance culture rooted in the system of regulatory governance), which explained “why we do what we do”. Nevertheless, trainers also had insight into their needs (to develop competence regarding evaluation; to develop a facilitative model of training).

In conclusion, the springboards to expansive learning highlighted in this thesis offer the opportunity for future developmental research in the Trainers’ Forum, since the challenge remains to push participants into “formulating qualitatively new models as genuine keys for resolving the double bind” (Engeström, 1987, (5):7).

10.3 Implications of using AT for this study: contribution to knowledge; strengths, limitations and future recommendations

As discussed in Chapter 4, section 4.2, as a “theoretical investigation moving on the level of categories”, an AT-based methodology is challenging, especially when considering “...how to bring the categories developed into fruitful contact with practice” (Engeström, 1999b:22).

Yet, as discussed in Chapter 2 (section 2.5), because AT can be operationalised it passes the test of being an applied theory. That is, as shown in Chapter 3, the basic AT model and the subsequent framework developed during the conceptual development phase is focused, specific, and contains unique measurable/observable and understandable elements, which Storberg-Walker (op.cit.:567) offers as the definition of an applied theory.
Nevertheless, because AT can be applied in varied ways to differing contexts, its flexibility as a methodology poses several concerns or weaknesses (Mwanza, 2002 (4): 22; Blin, 2002) involving:

- A lack of stipulated methodology for its application
- A lack of standardised approach or replicable method for its operationalisation, leading to difficulty in “... replicating, comparing and criticising the approaches taken to operationalise Activity Theory.” (Mwunda op.cit.(4):92)
- A need for expansion of AT (e.g. “to include a language of description that would allow identification and investigation of: the circumstances in which particular discourses are produced; modalities of their cultural production; and, their implications in shaping learning and development” (Daniels, 2004).

These concerns are addressed in turn.

Engeström comprehensively illustrates expansive research methodology, providing the stages and steps that formulate analytical strategy, as illustrated in Chapter 3, section 3.4. Even so, this is necessarily non-prescriptive since third generation activity theory produces a need to develop conceptual tools to understand dialogue, multiple perspectives and voices, and networks of interacting activity systems. Inevitably, the development of these tools reflects the unique features of the activity system revealed through theoretical and empirical investigation. Nevertheless, as demonstrated through Engeström’s CHAT, expanding the basic model to include at least two interacting activity systems contextualises and thus, reveals the cultural and historical dimensions of the activity system under investigation.

Hence, revealing the “modalities of cultural production” depends on the conceptual tools that emerge from, and are grounded in, the unique system under examination. Accordingly, any attempt to standardise the application of AT through conceptual tools must account for the unique conditions, motives or goals giving rise to the operations, actions or collective activity within a particular system of human activity, given its complexity. This attempt has involved
identifying the objective regularities of a practice through its cognitive and cooperative tasks, which constituted the routinised actions within a system of activity. In turn, these objective regularities are revealed in the declarative conceptions, procedural models and patterns of interaction/social discourses within the activity system.

Moreover, as shown in Figure 2-2 (Chapter 2), 3rd generation AT or CHAT gives us a definitive triangular model to systematically operationalise six elements that serve as a unit of analysis in an applied theory of social learning. Furthermore, these six elements are standardised (subject, object, tools, rules, community and DoL). However, the task of identifying these activity system elements and the unique reasons for contradiction within and between them is problematic. It depends on creatively, yet systematically discerning layers of social reality, and delineating each in turn as separate but inter-related systems of activity.

Even so, this six-point unit of analysis still provides the methodology to proceed systematically on three levels: that of routine operation, individual action and collective activity through the medium of object-historical, theory-historical and actual-empirical analyses of the activity system of interest and its rich layers of context. Therefore, in general terms, the contribution of this study has been to show how AT can be applied as an approach and method with theoretically formulated and empirically tested evaluative tools, to reveal the richness of human experience and the complexity of human activity in terms of its cognitive and cooperative social elements.

Moreover, in specific terms through this research, it has been demonstrated that in taking a practical turn (via phenomenological examination during the first stage of object-historical analysis) an activity system methodology offers the following:-

- a way to determine the nature of the relationship between the predominant transmission pedagogy observed at the TF, as a particular standard of training practice, and the compliance regime that pervades the larger “system” of quality standards in the context of clinical research conduct.
• a means to examine this relationship in terms that move beyond basic classificatory explanations, to demonstrate how community outcomes and underlying social mechanisms are linked.

For example, characterising the features of so-called traditional transmission pedagogues or progressive enquiry pedagogues within the TF into distinct sociological groupings to see who they were as individuals - might, or might not, have revealed why particular groupings collectively leant more towards a compliance culture or strove to develop a culture of conscience. The more pertinent questions perhaps were how these groupings formed and why particular tendencies prevailed, as a consequence of particular conditions.

Thus, in the second stage of theory-historical analyses, a concept of practice was identified through observing the patterns of activity and action in the Forum. That is, the concepts and models partly constructed within the central activity, and partly imported into it as cultural artefacts were analysed. Finally, the latter stage of analysis culminated in actual-empirical-analysis of “…the internalized (conceptions of practice) and invented models (what practice looks like at the TF) professed and actually used or upheld by the participants of the activity” (Engeström, op.cit.: 6). In this way, the categories developed through theoretical investigation were brought into “fruitful contact with practice” (Engeström, ibid.: 22).

Hence, in this study, activity theory provided a systematic methodology to simultaneously examine, describe and analyse, on the one hand, how the concept of training practice manifested within a particular community of practice – the TF, and on the other, how this concept of practice was influenced by the wider contextual framework and its socio-cultural underpinnings. Moreover, the history of the Trainers’ Forum as an activity system was embedded not only in its internal structure and organisation, but also in the global history of the tools, procedures, concepts and principles that became mediators of its activity.

In addition, as a metatheory, activity theory also provides the means to “…develop analytic categories for theoretical frameworks in epistemology” (Scribner, 1997). Consequently, in this study, the EFD was identified as a mediating tool in the activities of sharing and learning.
Thus, in the final actual-empirical stage of analysis the complex nature of activity in the CoP, in terms of the socio-cultural underpinning of its cognitive and co-operative elements, was further distinguished using the contrasting EFsD observed within the CoP (i.e. in terms of *saying-writing-doing* and *being-valuing-believing* discourse combinations that indicated knowing was embodied as received or constructed).

Therefore, it is the contention of this thesis that CHAT does not lack rigour, through weaknesses in its methodology, due to a lack of standardisation. However, its application inevitably depends on the critical skill of the developmental researcher to discern *what’s going on around here* using all the available tools provided by CHAT. Far from lacking tools or standardised methodology, AT provides a plethora of tools that perhaps are seldom used fully. This research has endeavoured to use these tools to their fullest extent. Rather than claiming to expand AT, its application has been demonstrated at the level of declarative conceptions (concept of practice), procedural models (methods), and social discourses/interactions (experience of practice) to explain the intimate and intricate relationship between object-oriented actions and cultural means in a community of practice.

This approach of exploring the concept, method and experience of practice has served to illustrate how the conceptual tools that are necessary for *actual-empirical* analysis may be constructed based on *object-* and *theory-historical* analyses of the activity system under investigation. That is, through the language and behaviour observed at the TF, an evaluative instrument (as shown in Table 9-2 and Table 9-3 derived from *object-historical* and *theory-historical* was tested via *actual-empirical* analysis to illuminate the objective regularities of practice observed in the activity system of trainers. Moreover, through this instrument, elements of pedagogy (approach, methods and idiom) were linked to trainers’ epistemological stance (knowledge: constructed or received) or EFsD (*saying-writing-doing* and *being-valuing-believing*).

Nevertheless, CHAT is not without its challenges. In particular, adopting an interlocutory position presented the real time challenge of how to present and discuss findings. Thus,
negotiating this middle ground meant maintaining a balance between needs and influence as a participant, and research instincts. At times, this endeavour was confusing, overwhelming and frustrating. In practice, it involved knowing when to seize the moment, which might make a difference to the unfolding activity, to ask questions or to challenge assumptions. Moreover, such interactions were more often spur of the moment than planned, but which nevertheless were guided by a desire to understand and communicate others thoughts, feelings and experiences about common needs, and how these might be satisfied within the TF.

AT provides the tools to unravel the complexity inherent in the relationships between subjects and tools, which mediate the object of activity according to the rules of the system under investigation and its division of labour. Its strength lies in the interlocutory approach, which focuses attention on the object of activity in the system under investigation and its context rather than the reflective researcher’s position, relative to the object of study (i.e. subjective/objective or insider/outsider).

Therefore, in contrast to other studies, focus was on a community of practice spanning a field of practice (clinical research training) and based within a professional institution, rather than any individual organisation and its geographical distribution. Studies have shown that communities of practice can make a difference to business outcomes via the development of social capital. However, “there has been relatively little systematic study of the link between community outcomes and the underlying social mechanisms at work” (Lesser and Storck, op.cit.:833). This developmental study has endeavoured to address this gap, focussing attention primarily on opportunities to extend professionality thereby moving towards a culture of conscience, such that regulatory requirements may be exceeded rather than merely fulfilled.

It remains to be seen whether “the conflict between internal and external resources”, which trainers appreciate, may be resolved. However, if it holds that “…because communities of practice are not confined by institutional affiliation, their potential value extends beyond the boundaries of any single organisation” (Wenger et al (op.cit.: 4) then members of the
Trainers’ Forum have an opportunity to transform the status quo. As such, the outcome could affect not only the system of activity inside the TF, but could change the ethos and moral order of corporate power elite within their organisations. Accordingly, the springboards to expansive learning highlighted in this thesis offer the opportunity for future developmental research.

However, the hypotheses of this thesis established that both internal and external factors have hindered the development of the Trainers’ Forum as a Community of Practice, which leads to the conclusion that transforming a culture of compliance into a culture of conscience in the field of clinical research represents a challenge for at least two reasons:

- First, globally - because the regulatory agenda dominates the drive to uphold standards in the field of clinical research, rather than a desire to excel.
- Second, locally - because contrasting pedagogies competing within training discourses have implications for the development of standards about training in general, and for evaluation practices in particular.

Nevertheless, as found in this study, a need exists for trainers to realise their potential as practitioners through discussing the nature of what constitutes best practice, in order to grasp their experience and turn it into knowledge, since

“…Learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it” (Kolb, 1984).

Otherwise, training standards may continue to be dominated by regulatory purposes, reinforcing a culture of compliance, which paradoxically may limit the expansive development of practice. Accordingly, the Trainers Forum provides the means for further specific developmental research, which offers a three-fold opportunity:-

1. On the basis of the springboards identified in the Forum, to push participants into “formulating qualitatively new models as genuine keys for resolving the double bind”.

PART 4 CONCLUSIONS AND RECOMMENDATIONS
2. To participate in the ongoing activity of sharing practice by means of demonstrating dialogic, dialectic practice.

3. To further validate the conceptual framework developed in this study as an evaluative tool.

In terms of the recommendations for future general developmental research, because propositions in this thesis were theoretically derived and empirically tested within a specific context, whether what happens around here can be generalised in conceptual terms to other settings, and their objects, depends on finding similarities in patterns between their features, conditions and circumstances, as discussed in Chapter 4.

On this basis, since CoPs are considered as social structures where “learning is an integral and inseparable aspect of social practice” (Lave and Wenger, 2002:57), it is feasible to replicate CHAT methodology, as demonstrated in this thesis, in other communities of practice.

However, each system under investigation contains its own unique features and objective regularities, according to its constituent cognitive and cooperative elements of practice. Therefore, the reliability of the conceptual-analytical framework proposed in this thesis depends on whether generalised elements of practice, theoretically derived, can be validated in different contexts through identifying their objective regularities, as illustrated in Tables 3-2 and 3-3.

In conclusion, therefore, the evaluative tool yielded from object-historical and theory-historical analysis, and tested or validated in actual-empirical analysis, is unique to the activity system under investigation, necessarily reflecting its emergent features and objective regularities. Anticipating otherwise risks misunderstanding or misrepresenting the complexity of the human activity being investigated.
### Table 10-1: Cultural conflict underscoring the spectrum of professionality in the TF

<table>
<thead>
<tr>
<th>Professionality (Quality or standards of practice)</th>
<th>Organisational grouping</th>
<th>Emergent profession</th>
<th>Individual trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedagogy</td>
<td>Constructive</td>
<td>Transmissive</td>
<td></td>
</tr>
<tr>
<td>Focus</td>
<td>Strategic: organisational learning (T/cycle)</td>
<td>Operational: functional task (delivery)</td>
<td></td>
</tr>
<tr>
<td>Rationality</td>
<td>Expansive expressive function</td>
<td>Restricted technical function</td>
<td></td>
</tr>
<tr>
<td>Epistemology</td>
<td>Knowledge is co-constructed through deliberation</td>
<td>Knowledge is transmitted through delivering information</td>
<td></td>
</tr>
<tr>
<td><strong>Functional tool</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Culture of conscience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Culture of compliance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>