

**Using Clean Language Interviewing to
model Curriculum Design in Higher
Education: Curriculum Design is Like
What?**

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0.1 Abstract

The design of the curriculum within Higher Education affects hundreds of thousands of students each year. Yet it is complex, messy and under-researched. Whilst skills and knowledge development have been explored in the literature, little has been done on how curriculum design happens within teams. Using Grounded Theory, this study set out to develop a model to advance the practice of curriculum design (CD) utilising the voices of those responsible. The study also used personal reflection to explore a set of strategies to advance Clean Language Interviewing (CLI) as a research tool. Purposive sampling was used to identify 34 participants: 5 senior figures in teaching and learning leadership and 29 team members from 11 programmes across 4 universities.

Findings show how important, and difficult, it is to get the conditions for curriculum design right. From the analysis emerged a model of principles and processes related to curriculum design that supports previous research on skills and knowledge. In addition, 'how this happens' and 'why this doesn't happen' came to the fore and the theme of alignment was borne out. This focus on the less tangible elements of curriculum design - the behavioural actions and attitudes that suppress or enable it to take place - offers a unique perspective to the research area.

Personal reflection resulted in a new description of the skills underpinning CLI: coding in-the-moment comprising of four key principles: tethering; coding; navigating; and modelling. These allow the researcher to traverse the data, interrogate codes and create meaning from participant's mental models. The intentions and activities of CLI are shown to echo and support those of Grounded Theory; CLI offers a means of data-collection that systematically keeps the

researcher's attention grounded in the concerns of the interviewee and out of premature theorisation.

This study offers a three-part model of curriculum design, which could be used at both team and institutional levels, alongside four key principles to support using CLI as a research tool. Both elements of this study offer originality and significance to the extant body of research whilst offering opportunities for development for researchers, academics and those with responsibility for curriculum design.

0.2 Structure of this PhD Study

This PhD has two aims: The empirical aim is to explore curriculum design as experienced by adults working in higher education and the methodological aim is to explore the specific method of data collection, Clean Language Interviewing, to understand how it is used in research.

These two aims are replicated throughout the thesis and the reader can expect to sometimes be considering CD and sometimes to be considering CLI.

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Chapter 1: Introduction

1.1 Introduction to the Research Study

This research study aimed to seek out staff in higher education (HE) who design and deliver curricula and to use Clean Language Interviewing (CLI) to find out how they go about it. The study had primary empirical aims to understand and enhance Curriculum Design (CD) as well as secondary methodological aims to better understand CLI as a research tool. Each section of this study will have two areas of interest, one empirical and one methodological.

1.1.1 Background to this research

University curricula are designed by groups of staff and delivered to cohorts of students, where effective teaching depends on effective CD and implementation to ensure significant learning (Olateru-Olagbegi, 2016). This is far from simple as there is no one right way or protocol for doing it (March and Wills, 1999). Theorists and practitioners do not have a shared understanding of the idea of CD (Gosper and Ifenthaler, 2014). Going back nearly 50 years, Schwab (1973) described the process of CD as unsystematic, uneasy, pragmatic, and uncertain. Literature about the overall design process was thought by Barnett and Coate (2004) to be scant, with Bovill and Woolmer (2019) suggesting there are still limited discussions about curriculum in HE. One purpose of this study is to fill in some of these gaps by exploring how a range of university staff who are actively engaged in CD currently think about the phenomena. This answers a call made by Ziegenfuss and Lawler (2008) who suggested that, due to the changing nature of HE, investigation into models and perspectives around CD was needed.

As a means to begin filling in some of the above noted gaps, this study seeks to uncover the participants' mental models (Johnson-Laird, 1983; Hackman and Wegeman, 2007). These being the representations of the surrounding world, the relationships between its various parts and a person's intuitive perception about his or her own acts and their consequences as well as the underlying embodied metaphors (Lakoff and Johnson, 1980; Morgan, 1997) they use to describe the design of the curriculum.

In this study, a general model of current CD within Higher Education (HE) emerged through data analysis. This model captures the key elements of CD and their relationship to one another. Alongside this model of CD, there are findings around alignment between the behaviours of and the demands on those leading CD and the impact this has on the teams being asked to design and deliver the curriculum. The empirical literature review deliberately took place towards the end of the project, in order to give context to the findings but without affecting them through premature theorisation; a key element of classical Grounded Theory Methodology (GTM) - see section 3.2 for further detail.

As well as exploring CD, another purpose for this study was to explore the use of an alternative interview process, CLI (CLI). This technique is a way of interviewing using a limited set of content-free questions to ensure that the data generated can be attributed to the interviewee with minimal influence from the interviewer (Nehyba and Lawley, 2020; Linder-Pelz and Lawley, 2015). CLI has been core to my business for 25 years and I wanted to take this opportunity to use it for an academic purpose, to reflect on it as a research tool, and find ways to enhance its use in practice. The concepts underpinning the methodological aims of this project were explored through the literature prior to and

throughout the project as these were needed to place the methodological approach in context.

1.1.2 Background to the research context in terms of curricula

All over the UK, around 2.38 million students are taught in 143 Universities (Statista, 2020) following a variety of curricula. Each of these individuals has chosen to pay fees to study their subject at a specific university and most likely enter with strong expectations for their future employment prospects (Hassel and Ridout, 2018). What they get when they arrive will depend on the curriculum and how it was designed by the programme lead, the team and the institution they've joined.

Since I went to university, 30 years ago, the HE landscape has changed. Although the purpose remains the same, education and research, the approach and the purpose seems to be different. Furedi (2010, p.1) calls this the 'institutionalisation of the policies of marketization' whether this be ideological, political, or economic. There is an argument around students as consumers who should have a say in what they are taught, and issues based around student satisfaction measures and the student experience. Curriculum development is not simply an exercise in pedagogic design as it is, according to Carey (2013), bounded by a variety of governance processes at different levels. He suggests that at the macro level curriculum is informed by national standards, at the meso level by the institutional frameworks and then at the micro level by the department and programme team.

The term curriculum in the HE context has different meanings: the syllabus taught to the students (Stark & Lattuca, 1997); a mix of the student as a learner with the academic's personal view of education (Fraser and Bosanquet 2006); an

imposed curriculum which may limit academic freedom (Barnett & Coate, 2005); or a dynamic, collaborative and transformative learning process (Brooman, Darwent and Pimor 2015). These different viewpoints indicate that there is not a shared understanding of the concept of curriculum (Gosper and Ifenthaler 2014) and this may negatively impact upon what is designed and delivered to students (Fraser and Bosanquet 2006). How the curriculum is evaluated by students is done, according to Porter and Smithson (2001), within two areas: the official - what is intended; and the lived - what happened. In addition to these internal influences, external drivers such as employability and internationalisation of the curriculum are affecting how the curriculum is arranged and composed (Lester and Costley, 2010).

In the last two decades the purpose of HE in the UK has been seen as the preparation of graduates to enter employment (Clifford & Montgomery, 2014), known as the employability agenda, alongside the education of students as global citizens (Bourke, Bamber, & Lyons, 2012) - the internationalisation agenda. The curriculum is where this is enacted in terms of the development of both aspects alongside subject knowledge and academic learning skills and this is both a complex and systematic process (Chaudhary and Kalia 2015).

Developing students into graduates to enter the workplace has been high on the agenda particularly since the 2008 economic crisis with Peeters et al. (2019) suggesting that both policy makers and scholars generally agree upon its importance. Yorke (2006, p.8) offers a widely accepted definition of employability:

'A set of achievements - skills, understandings and personal attributes - that make graduates more likely to gain employment and be successful in their chosen

occupations, which benefits themselves, the workforce, the community and the economy.'

The study of what employability is and how this is manifested in the curriculum is varied with Romgams et al. (2020, p.2589) suggesting that the 'concept is fuzzy, lacking clarity and specificity of meaning'. Overall employability within the curriculum relates to preparing students for their future work and all the challenges this may pose. Although research in the area focuses on either personal or contextual factors, most focuses on the resources of the person as this is more adaptable and within the area of control (Peeters et al. 2019).

The changing nature of the work environment does propose that universities need to prepare students for uncertainty and maybe multiple or portfolio careers, suggesting that the development of the personal resources and skills is key to this. Challice (2018) tells us that the complex labour market means graduates take more time to get established, therefore the university learning needs to stick post-graduation.

Employability is not just about getting a job; it is about developing attributes, techniques, or experience for life. It is about learning, and the emphasis is less on 'employ' and more on 'ability.' In essence, the emphasis is on developing critical reflective abilities, with a view to empowering and enhancing the learner. Employment is a by-product of this enabling process (Harvey, 2005, p. 13).

At the same time as employability has exerted its influence on HE, the sector has also adopted internationalisation agendas.

'Universities are obligated to make all of their students aware of their role as global citizens in an increasingly internationalised, multicultural world and

to prepare them for success in the global labour market.' (Kirk et al, 2018, p.3)

Where this was once related to widening the student body, the agenda is now more multifaceted and, in the curriculum, relates to global mobility and the development and recognition of globally related skills (Kirk et al, 2018). Leask (2004, p.338) discusses the internationalisation of the curriculum in terms of key skills and indicators, where a student would

'display an ability to think globally and consider issues from a variety of perspectives; appreciate the complex and interacting factors that contributes to notions of culture and cultural relationships'.

The curriculum therefore must reflect these factors and support students to develop these over the course of their programme. Using the diversity that exists in programme teams is one strategy as is ensuring that there are multiple opportunities for international study. The content of the curriculum is the obvious place where an international flavour can be delivered and assessments can match this.

McKimm and Jones (2018) suggest that the curriculum substance is a contested space, where according to Becher and Trowler (2001) power struggles play out, resulting in perspectives being included and excluded from the curriculum. Despite this, Barnett and Coate (2004) note that there is very little public debate on curriculum and how to bring it to the heart of HE.

The curriculum and the way it is designed and delivered is the cornerstone of the student experience. The internal and external drivers mould and shape what and how the content is delivered, and this study explores the curriculum from the

perspectives of the staff who design, manage and deliver it. Through spending time eliciting and analysing the thinking going on in this area, it is hoped that practical use can be made from this study - and the emergent model - to support other programme teams to reflect on their own mental models and processes for CD.

The background work to this study of the thinking behind overall curricula design began in 2005 when a north west university was granted one of 74 'Centre of Excellence in Teaching and Learning' (CETL) awards by The Higher Education Funding Council for England (HEFCE), as part of the largest ever funding initiative for teaching and learning in the UK (HEFCE, 2009). The CETL was entitled, 'Learning to Lead: Leading to Learn' with the main emphasis being on developing leadership and employability skills.

The overarching premise for this CETL was that the academic staff provide the basis from which the students learn and that their perceptions, abilities, knowledge and experience have a direct impact on what is then delivered to the students. This is not to say that the students do not have an equal responsibility for their learning, or that higher education is not a partnership, but that staff uncovering and improving their side of that partnership would positively impact on students' learning experience. As an external consultant, I was commissioned from 2005 to 2007 to work alongside a specific programme team to help them design what they wanted to have happen with the award and how they would work together to achieve it.

To explore the staff and student experience, the CETL employed me to use CLI as one of the approaches to uncovering mental models (Johnson-Laird 1983) for teaching and for learning across their subject. The hypothesis being that the more the staff team understood their own mental models for teaching at their best and the diversity between them as a

team, the better able they would be to support the students to uncover their own mental models for learning at their best. The aim for the project was for students to develop self-awareness and awareness of their peers in order to be better able to develop a range of strategies for learning at their best, making decisions and keeping motivated over time to enhance their learning and student experience (Nixon and Walker, 2007). One of the outcomes of this project was that the staff brought together their models for teaching at their best and for working positively as a team and through this exploration created a joint model for the course they were delivering together. This joint model - with the central metaphor that the course was like an IKEA store (first floor where everything is laid out, next floor specialisms, third floor you get to buy individual components and create new syntheses) - allowed them to better understand how the different taught modules fitted together and where the students were in this journey.

This research project has grown out of the foundation work done on the 2007 project and brings in developments in CLI as well as changes in the HE landscapes. It is about eliciting the mental models from staff at other universities to uncover their thinking behind designing and delivering the curricula that students are experiencing. As noted earlier, there are multiple approaches to CD and discovering how other institutions approach it in practice, not in theory, was a key purpose of this study.

1.1.2.1 Background to the researcher and reasons for reflecting on Clean Language Interviewing

From a young age I've been interested in how the rules of specific cultures are formed and how one can uncover those rules. I have lived in a number of countries and discovered that different cultures have different rules and that in

order to understand how to fit in you have to learn those rules. To try to understand how differently people think, I started studying Neuro-Linguistic Programming (NLP) (Bandler and Grinder, 1975; Dilts et al, 1980; Bandler, Grinder and Andreas, 1982) at the age of 18. I learned strategies for uncovering the structure of my own and other people's subjective experience, for example, whether people were representing their thoughts visually, auditorily, kinesthetically etc., and how people's verbal and nonverbal language could give clues to the way they were thinking. I wanted to look at different questions that can be asked to enable one individual to understand the thoughts and processes and 'invisible architecture' that make up another person's experience.

I followed this endeavour into academia and studied Anthropology and Linguistics at the School of Oriental and African Studies. I also completed four years of post-graduate research into strategies for lexical access, still with an interest in uncovering how other people, with experiences different from mine, were thinking. I was simultaneously working as an inner city youth worker and applying my skills practically to diverse groups of young people, often in conflict with one another. I wanted to explore their mental models - their subjective experience - without imposing my own mental models on theirs and to facilitate them to do the same with one another. Many of the tools I knew about at this time were too intellectual and too complex for my aims which were to help young people to reflect on their own beliefs, attitudes, choices etc. and to inquire into other peoples' as a way of developing collective trust.

During the late 1990s, I was acting as assistant to NLP trainers James Lawley and Penny Tompkins and they introduced me to David Grove and the tool he was developing known as Clean Language (CL) (Grove and Panzer, 1989). I felt

instinctively that I had found the right tool for the job. Using the CL questions, I was able to help the youngsters in my care uncover their own mental models for anger as well as for mathematics and spelling and they could subsequently borrow models from one another and update the ones they had. I began studying with Grove, not because I was interested in becoming a psychotherapist, but because I wanted to explore the ways in which this process could be used with individuals and groups outside of therapy to better understand one another's experiences and to develop learning communities (Walker, 2014). I was an early adopter and leading adaptor of CL for use in non-therapeutic environments. In order to adapt CL questions from a therapeutic application to one that could be used in groups where there was no contract for change, I changed the tone, speed and delivery of the questions, making them more conversational. I developed semi-structured interviews within which I used CL questions to develop people's initial answers.

Through the late 1990s and the 2000s, I worked across a broad range of fields, from anti-terrorism training teams, to senior managers in international companies, to charities wanting to end female genital mutilation but coming at it from opposing positions and needing support to find shared values. In each case, I initially used clean questions to interview stakeholders and then taught them a simplified version of CLI to use with one another.

Having spent 20 years as a leading practitioner and developer in the field of CL, I wanted to take CLI and embark on a reflective journey to explore the process from a research perspective. I chose CLI because it has already been written about by a number of researchers (Nehyba and Lawley, 2020; Linder-Pelz and Lawley, 2015; Tosey, Lawley and Meese, 2014) and I wanted to add to the body of knowledge using my years of experience as a practitioner and trainer. I noticed that

through using my interviewing out in the field, with groups rather than individuals, often in highly charged situations, I had developed a range of skills for managing the interview information in-the-moment, navigating their data and building useful models on-the-fly. I wanted to explore the skills that underpin CLI and bring them to the field.

1.1.3 Research Problem

The research problem that CLI is being applied to is: **How do senior managers and programme teams in HE think about their practice of overall CD?**

1.1.4 Research Objectives

1. To develop a model to advance the practice of CD
2. To explore a set of strategies to advance the practice of CLI as a research tool

1.1.5 Emergent Research Questions

As this research project progressed, it uncovered specific questions around the area of CD in HE:

1. What are the ideal principles and processes for designing curricula as stated by those involved in CD?
2. What is preventing alignment between HE and these principles and processes?
3. What are the conditions for successful CD and how can alignment with these conditions be achieved?

As I reflected on the use of CLI as a method of gathering data, the following additional questions emerged:

1. How does coding in-the-moment support CL interviewers to navigate and inquire into interview data during interviews?

2. What are the commonalities and differences between CLI and intensive interviewing as used in GTM?
3. What benefits do CLI bring to the GTM researcher?

1.1.6 Significance of research

1.1.6.1 Significance of the Research in CD in higher education

This study will explore how those leading the design and delivery of curricula are experiencing and interacting with competing demands on their time and attention. One area that may be of interest is the current performativity climate (Todd et al., 2015) and how this climate impacts CD. The study will contribute to the development of knowledge in this changing era of higher education.

Staff perspectives on CD are under-reported in the literature (Barnett and Coate, 2004). Despite a number of authors being interested, this is still reported to be the position in 2019, where conversations about theory and practice of CD are not being held and not being written about (Bovill and Woolmer, 2019). Research on individual learning, teaching and assessment may be found (Bovill, Bulley and Morss, 2011) but not on the overall design and application and how the parts interact with one another. As well as finding out more about overall CD, Bovill and Woolmer (2019) argue that curricula need to focus upon learning processes as well as learning outcomes and need to include space for innovation, creativity and ensuring relevance to learners. I was hoping that by asking those directly involved in CD about their thinking, I would be finding out whether, or to what extent, these aspects are included in CD and if so, under what circumstances. In order to uncover a model of CD, it is important to understand the staff's subjective experience and personal experience. Through understanding the

subjective experience of those involved in CD, this study aims to provide others with insights on design that allow them to engage reflectively on their own subjective experience and then to achieve better outcomes.

A second aim is for this study to enhance the practice of CLI, giving qualitative interviewers an alternative tool to use in their research and giving CL practitioners the tools needed to add interviewing to their skill set. It is anticipated that this research will bring together CLI and GTM, demonstrating how they can support one another in their endeavours to develop work that is grounded in data and minimises premature theorisation and bias.

1.1.6.2 Significance of research in relation to CL approaches

Although I have been using CLI in a wide variety of settings over 20 years, I have not had the opportunity to reflect deeply on the process nor to write up my experience. In order for CLI to be replicated and used by other researchers it needs to be unpacked into a set of replicable skills and principles. From here the benefits, costs, unique properties and overlap with other techniques can be studied.

CL approaches have been available for use in coaching, therapy and one-to-one change through the books written alongside psychotherapist David Grove (Wilson, 2017; Harland, 2012; Grove and Panzer, 1989). They were also made available through the seminal CL work of Penny Tompkins and James Lawley, *Metaphors in Mind* (2000), which created such a clear model of Grove's work that it could be studied and learned separately from the man himself. What is not so available is literature about how these processes are being adapted for use in non-therapeutic interviews. I have written up case studies of how to adapt CL for business and community development (Walker, 2014), a lot of which involves CLI, but

wanted to provide a more in-depth study to uncover a set of skills and principles behind the applications I had developed. There are some excellent articles and theses referring to CL and CLI (Nehyba and Lawley, 2020; Cairns-Lee, 2017; Linder-Pelz and Lawley, 2015). This project was designed to add to this work by exploring, specifically, how the bracketing off of assumptions is taking place, how the CL interviewer can build models in the moment and then navigate around these models filling gaps and inquiring further into information that is adjacent to what the interviewee was sharing. As a research tool these are useful skills for any researcher, as well as important skills for a CL interviewer who relies on the models that the interviewees build in order to know what question they should ask next.

Chapter 2: Introduction to Concepts

There are two core concepts underpinning the methodological approach being reflected on within this study: mental models and Clean Language. They will be introduced in detail here in order to give context to why this study is so interested in the quality of the questions asked during interviews and how they correlate, or don't, to the experience of the participant, versus the experience of the interviewer. Within this study, these concepts are important not only for the methodological inquiry but also for the empirical. If a study sets out to explore a model for the experience of participants engaged in CD in HE and aspires to ensure that that model is grounded in the experience of those participants, there are steps that can and should be taken to ensure fidelity between the data and the interviewee. These concepts help to explain why it can be difficult to separate the interviewer inference from the interviewee experience.

2.1 Mental Models

'When making decisions or talking to others, people use mental models of the world to evaluate choices and frame discussions' (Carley and Palmquist, 1992, p.601).

This research is about uncovering educators' mental models about CD, a set of personal opinions, assumptions, and views of the world that guide and influence how educators act (Duffy, 2003). A wide range of academics and others outside of academia are interested in mental models, including organisational learning theorists such as Senge (1990), educationalists such as Duffy (2003) and cognitive linguists such as Lakoff (1987). The notion of mental models may be found in the primordial origins of scientific psychology.

William James (1950) stated his General Law of Perception as: 'Whilst part of what we perceive comes through our senses from the object before us, another part (and it may be the larger part) always comes out of our mind' (p. 747).

A mental model, then, is a mental representation of the perceived world informed, however imperfectly, by our senses. We construct 'mental models' of external reality that allow us to interact with the world around us (Craik, 1943; Johnson-Laird, 1983; Senge, 1990). Mental models attempt to create a correspondence between the internal structure of the representation and the structure of that which it represents (Gentner and Stevens, 2014; Johnson-Laird, 2010). They are simplifications of the world as it is actually experienced. This simplification comes through deletion, distortion and generalisation and an interviewer interested in mental models must remember (Fletcher and Sottolare, 2018) that they are false even though they may be useful (Johnson-Laird 2010). Just because someone has a mental model, this does not mean that the model is accurate, appropriate or viable (Duffy, 2003). However, they are deeply engrained assumptions and understanding those models allows us to experience their benefits and their limitations and gives us an opportunity to create different models of our own over time (Senge, 1994).

The way that we structure our subjective experience is both unique to us as individuals and will have similarities over time and across experiences (Lakoff, 1987). Mental models are not all in the head; they are constructed and represented by our five senses and exist spatially and with sequence (Bandler and Grinder, 1975). For example, some people structure time from left to right, left being the past and right being the future, and if you observe their gestures over time, they consistently indicate the past to the left and the future to the right. Other people may have the past

behind them and the future in front of them and will consistently refer to this structure in their language (Hall, 1983; Casasanto and Boroditsky, 2008). When a team works together their mental models can become shared and can serve them to share information relatively accurately, to set expectations, and to work together to complete shared tasks (Converse, Cannon-Bowers and Salas, 1993; Adolph, Kruchten and Hall, 2012). Conversely, when team members have disparate models, this could affect the quality of the project that they are producing together (Mohammed et al., 2010).

These mental models may take different forms such as embodied sensation (Millar 1990) visual forms (Sharp et al., 1995; Senge, 1994), and abstract phenomena (Lakoff, 1987; Senge, 1994). There is a high interplay between memories, sensations and representations to form mental models that then allow us to describe our experience to another person (Brunyé and Taylor, 2008).

A critical antecedent for high performing teams is an understanding shared by all team members of team objectives and the processes needed to achieve them (DeChurch and Mesmer-Magnus, 2010; Fletcher and Sottolare, 2013; Salas, 2015). This collective understanding was identified by Rouse and Morris (1986) as a shared mental model – a model that must be taken into account to enhance team training and team performance (Blickensderfer et al., 1997). It is acknowledged that non-cognitive factors, for example physiological and affective states, influence team performance and processes just as they do in individual performance (Landon, Vessey and Barrett, 2016; Van den Bossche et al., 2006). However, in this study the focus is on cognitive factors in small teams and leaves the discussion of both non-cognitive factors and higher echelon collectives (teams of teams) for separate consideration.

Mental models can be identified through careful attention to speech and gesture but these models may be hard to detect in others for the same reason that they are hard to update in ourselves; when we encounter new information, we tend to categorise it based upon existing mental models (Duffy, 2003). Dilts et al (1980) state that it may be easier to uncover those mental models that match your own because they make more sense to you than others. Someone who is very used to perceiving through their feelings is more likely to pick up on the feeling words of other people and to give them greater importance. An interviewer who is very visual and who wants to make meaning visually may well listen out for clues as to how the interviewee is 'seeing' the phenomena and make more of these aspects of the interview as they help the interviewer to make sense of what's being said and therefore to ask more meaningful questions. If new information cannot be integrated into an existing model then this may result in new mental models being created or in the information being discarded (Gentner, 2002; Gentner and Stevens, 2014; Vandenbosch and Higgins, 1996).

Although people know they have ideas, opinions and feelings about the world and about the phenomena that they are describing, they may not be conscious of the mental models they are making or even of ones they may have held over time. These models are constructed by individuals based on their personal life experiences, perceptions, understandings of the world, social interactions and cultural norms. They provide the mechanism through which new information is filtered and stored. These mental models are not assumed to accurately correlate with reality but rather to be individual versions of reality from their perspective in this moment. People's models make sense to them and therefore they assume they have validity. An interviewer, if they want to elicit someone's models of a phenomenon, must take pains not to

inadvertently judge that model but rather to take it as being true for this person in this time.

When a staff team is unaware of their mental models, they may also be unaware of how they affect the actions that they are then willing to take. Sometimes staff work in teams and sometimes they don't yet are still expected to produce cohesive projects that all fit together. People's mental models affect what they pay attention to and therefore they influence their behaviour and if they are not examined then they can lead to teams doing as they usually do and getting the same results (Senge, 1990). Duffy (2003) suggests a range of strategies to support educators to assess their mental models, including: dialogue to help staff become aware of their mental models and how they affect their work; receiving and providing feedback and reinforcement; and evaluative inquiry which engages stakeholders in reflection, asking questions, and identifying and clarifying values, beliefs, assumptions, and knowledge. An interview, or any robust reflective practice, can illuminate the mental models to their owner, the interviewee, and give them an opportunity to bring them to consciousness. This can be done purely through having the time to sit and think and also by having their own words repeated back to them.

According to Collins and Gentner (1987), when a person explains a domain with which they are unfamiliar, they tend to draw on a familiar domain, which they perceive as similar. This means they can be using mental models from other areas of their life and analogously bringing them into being to create fresh understanding. One mental model can be used metaphorically to bring meaning to another. In their seminal work on metaphors and consciousness, Lakoff and Johnson (1980) propose that metaphors provide a way to describe complex processes by relating to concrete experiences in the world, that the way that we conceive the world is largely

metaphorical and that each individual uses their own, unconscious, metaphoric models to make sense of the world.

Additionally, Carley and Palmquist (1992) propose that a representation of a mental model, made up of concepts and relations, may be elicited as a metaphor via an interview. The verbal data in the interview is a sample of the full symbolic representation within the individual's cognitive structure (Carley, Fauconnier, and Sowa, cited in Carley and Palmquist, 1992) and the latter can be better accessed through careful attention to the words used. In this study, when I am listening for how curriculums are designed within my interviews, I can listen for the verbal structures that indicate a metaphor that is representing the activity or thought described (Morgan, 1997).

Argyris and Schon (1974) make a distinction between when people are sharing their thoughts and beliefs about the world, their espoused theory, and when they are acting on their tacit knowledge or mental models, their theory in use. They encourage researchers to aim to elicit theory in use when investigating mental models that impact directly on behaviour in the real world. This study is interested in theory in use and aims, through interviews with individuals who currently design curricula, to elicit a range of individuated mental models that are currently in use and from here to develop a generalised model that demonstrates what is going on within this research population.

2.2 Can interviewers uncover one person's mental models without influencing them with their own?

This section discusses why it's important to consider mental models while conducting qualitative interviews as well as

why it is necessary to separate the interviewer's own mental models from those of participants. This section addresses the interplay between mental models, metaphors and interviews.

David Grove (Grove and Panzer, 1989) asserted that the way we inquire into mental models is crucial if we are to elicit other people's mental models rather than projecting our own and deleting, distorting and generalising to the models we ourselves hold. Mental models are, by their very nature, outside of conscious awareness (Cairns-Lee, 2017) and despite there being a widespread interest in them, 'techniques for extracting mental models have lagged behind more theoretical concerns' (Carley and Palmquist, 1992, p.601). In order to access them for this study, someone will need to ask the right questions to bring them into awareness to be understood and developed (Hackman and Wageman, 2007). This section covers the issue of interviewers trying to uncover mental models without unduly influencing them with their own. Just as interviewees may not be aware of their mental models until they are asked questions and supported to explore their own thinking, so an interviewer may not be aware of their mental models and how these might be shaping their questions and therefore the answers they are eliciting. Van Maanen (1979, p.522) states that interviewers may distort or 'do violence to' or even falsely portray the very phenomena they seek to elicit even when they don't mean to. Interview questions themselves may inadvertently contain the interviewer's mental models, assumptions and preferences and instead of using the interviewer's questions to deepen an understanding of the interviewee, the questions may instead be saying more about the thinking of the interviewer.

In addition, since interviewers' questions are rarely reproduced within research papers, it can be difficult to evaluate the quality of the questions that interviewers have

based their research on. On reviewing submissions to the Academy Management Journal, Gephart (Rynes and Gephart, 2004) observed that the majority of papers were not explicit about the ways data had been elicited, interpreted and analysed and he calls for research papers to clearly lay out how the data was elicited so that a reader can judge how sound the data, and therefore the subsequent interpretation, is.

One reason this background is important is that Tosey, Lawley and Meese (2014) find that there is very little evidence within the literature on research interviewing that shows the impact of specific words or naturally occurring metaphors on the part of the interviewer on the quality of the data gathered. As CLI specifically aims to reduce assumptions and influence on the interviewee and on the data gathered, the dearth of literature is significant. This is one of the factors compelling me to reflect as much on the methodology as the empirical focus of this study. As an exception to the lack of verbatim interview data, Tosey (2011) cites Conklin's (2007) study of how interviewees had discovered and followed their calling, as it has published the exact questions used in a series of interviews. This table is replicated here as it includes what many researchers would consider perfectly acceptable questions. These can be compared with CL questions introduced later in this study. By forensically examining Conklin's questions, it is possible to see what words or metaphors were inadvertently introduced into the interviews. The table of Conklin's questions is reproduced here:

1. What compelled you to get involved in this work? Why do you do this?

2. What is the best thing about being involved in this work?
3. What are your hopes for this place, the world, the future?
4. What gives you hope?
5. What do you imagine the future to be? What is the image you carry around that drives your actions today?
6. What are your highest hopes for the work that you are doing?
7. Who else is involved?
8. What is the nature of the relationships that you have with the others who are involved? Who are they and how did you happen to come into contact with them?
9. How are you different from being involved in this work and with these other people?
10. Links to ecology, fundraising, relationships, politics. What roles have these topics played in your work? How do you manage these organisational realities and keep a keen eye on your mission or vision?

Table 1: Interview Questions from Conklin (2007)

These interview questions comprise 14 separate questions altogether and of those, 7 introduce metaphors including 'compelled', 'highest', 'picture', 'carry around' and 'drives'. This one-off observation demonstrates how in 50% of the questions the interviewer introduced their own

metaphors. While we don't know the exact impact that these metaphors had on the answers, it is likely that they will be acting as frames which shape how the interviewee is able to answer (Tosey, Lawley and Meese, 2014) and distorting the interviewee's answers towards the interviewer's assumptions and metaphors (Thibodeau and Boroditsky, 2011).

As well as metaphors providing meaning for an individual, there is also evidence that using metaphors in communication can affect the meaning individuals then make of that communication. Thibodeau and Boroditsky (2011) conducted a study of the impact of metaphors on the solutions study-participants suggested for reducing crime in a fictional case study. The study involved presenting the same data to two different groups, each using a different metaphorical frame (one used the frame of a virus and the other a beast), and exploring the way participants responded to them. Thibodeau and Boroditsky (2011) demonstrated that the metaphorical frame influenced the nature of the solutions participants suggested. Within this study, a single word referencing the metaphor was enough to prompt processing that subsequently fitted the metaphorical frame offered. They found that the metaphor was only impactful if it was presented within the context of the study and that a metaphor introduced early was more impactful than one introduced at the end of the case study. Finally, they noted that participants were not aware that their thinking was being influenced by the metaphor used. This shows that interviewees can be unconsciously led by the inadvertent insertion of metaphors into questions during interviews. Lawley and Tompkins (2011) commenting on Thibodeau and Boroditsky's study argue that once we buy into a metaphor we are constrained to follow its logic, and that we may not realise that our choices are limited to what makes sense within it. This concurs with Morgan (1997) who hypothesised that while

metaphors create insight and have strengths, they also distort. He notes that 'the way of seeing created through a metaphor becomes a way of not seeing' (Morgan 1997, p.5).

In their study of modelling shared reality, van Helsdingen and Lawley (2012) noted that an interviewee is highly unlikely to be aware that how the questions are being asked will be influencing their own answers. Similarly, if a researcher is not aware of the metaphors, presuppositions and assumptions in their questions there is little they can do to avoid unwittingly biasing the answers. It could be a case of the unconsciously biased, leading their interviewees to become biased, unconsciously.

To uncover another individual's mental model the interviewer must ensure they are asking about the interviewee's experience and developing the interviewee's models and metaphors. They should not be imposing their own meaning onto the individual and into the model itself. This includes not bringing in their own words or ideas and also means not influencing the interviewee by seeming more or less interested in different areas of what is being shared. If the interviewer becomes excited or dismissive over certain parts of the interview, the interviewee can become influenced, either to share more information of a certain type or to begin to bias their data to fit the response of the interviewer. Through taking a neutral role, a skillful interviewer asks good questions, and generates quality data from which valid findings may be produced (Roulston 2010). Here, a researcher attempts to 'put in abeyance presuppositions and prejudices she may carry with her into the field' (Conklin 2007, p 277).

Powney and Watts (1987, p.137) suggest that to remain neutral, 'questions should be asked, and answers received, in a neutral, straightforward way. Any verbal, or nonverbal,

feedback should be as non-committal as possible.' This neutrality can help reduce unconscious interviewer bias. It allows an interviewer to attempt to minimise any unintended indications about what the answers mean to them and to avoid indicating that certain answers are more valuable or desirable than others. However, it seems as if even interviewers like Conklin (2007) who are interested in reducing presuppositions are still unwittingly shaping the interview data through metaphor laden questions. What is needed is a discipline or method that is designed to gather high quality data, close to the interviewee's experience while minimising opportunities for the interviewer to bring in their own metaphors or even single words. This is what CLI is and why it is being reflected on within this study.

It is also important that the interviewer be aware of gesture and the integrity of gesture in illustrating internal metaphors. Interviewers should refer to metaphors as they are from the interviewee's perspective and shouldn't overlay their own gestures (Forceville, 2006). Konat and Juszczuk (2015) studied how interviewees use gesture to express complex information and in the endeavour to uncover mental models, which are multimodels, these gestures may hold clues to the other person's perspective.

2.3 An introduction to Clean Language

2.3.1 The concept of Clean Language

In this section I share the background and development of CL as a method suited for eliciting mental models and metaphors of participants while keeping the assumptions of the interviewer to a minimum.

CL has evolved from the clinical therapy work of David Grove and Cei Davies Linn (Grove and Panzer, 1989) which started

in the early 1980s. Grove looked forensically at the transcripts of those therapists purporting to be 'non-directive', i.e., keeping the patient's attention on their own experience and minimally altering or adding into their experience such as Satir (1972; Satir et al., 1991), Rogers (1959) and Erikson (1991). He noticed that they would still alter verb tenses and add in content that nudged the client to certain conclusions or introduced new ideas about their experience (Grove and Panzer, 1989; Lawley and Tompkins, 1996). Grove and Davies Linn developed a set of questions that could uncover the process and structure of the client's experience without introducing content from the therapist's experience or assumptions. This included working with autogenic metaphors that held meaning for the client and provided opportunities for the therapist to use those metaphors as entry points to unconscious structures underpinning symptoms. Grove (Grove and Panzer, 1989) believed that metaphors are epistemological, that is, they are congruent with how the client knows their own experience. Grove called this questioning technique Clean Language to emphasise the intention to keep the therapist's language as 'clean' and free from 'contaminating' assumptions and metaphors as possible. Thus, both the client and therapist attend fully to the client's experience. The process follows the client's own idiosyncratic logic rather than being mediated through the questioner's logic, experience, beliefs, etc. These questions are listed below.

Attributes	Location	Time/ Sequence back	Time/ Sequence Forward	Metaphor

What kind of ... ?	Where is ... ?	What happens just before ... ?	What happens next?	That's like what?
Is there anything else about ... ?	Whereabouts is ... ?	Where does come from?	Then what happens?	
Does ... have a size or a shape?			What happens after ... ?	

Table 2: Clean Language Questions

CL fits well with eliciting mental models (Lawley et al., 2010). This approach considers that every bit of structure in the question has the potential to shape and bias the response. Therefore, to get answers that are a close representation to the listener's mental model you should not ask leading questions. Instead, you should pare back your questions so that they introduce the minimum structure and content needed to request an answer (Grove and Panzer, 1989).

Grove's work involved eliciting, developing and engaging directly with clients' metaphoric mental models (Grove and Panzer, 1989). The relationship between Grove's metaphors and this study is that the metaphors help to illuminate the mental models of interviewees and give them shape and coherence (Lakoff and Johnson, 1980) so that the interviewer is less likely to overlay their own on to them. Metaphors are not simply linguistic devices for adding colour to speech or writing but rather keys to how a person is thinking as well as what they are thinking. Heracleous and Jacobs (2008, p.208) state that 'embodied metaphors encompass underlying

assumptions and tap into bodily, pre-reflexive forms of knowledge in the process of construction.' Metaphors, together with CLI can also be used in non-therapeutic contexts in order to support shared understanding and team development (Doyle, Tosey and Walker 2010; Nixon 2013; Nixon and Walker 2009). Learning to ask clean questions can support researchers to become more attuned to the conversational metaphors interviewees use to describe their phenomenological experience and at the same time to become sensitive to limiting the introduction of their own metaphors (Tosey, Lawley and Meese, 2014).

Since the late 1990's there have been a number of revisions to Grove's work and various adjustments for different applications including but not limited to:

- Clean Language (Grove and Panzer, 1989)
- Symbolic Modelling (Lawley and Tompkins, 2000; Way, 2013)
- Metaphor Therapy (Pincus and Sheikh, 2011)
- Emergent Knowledge (Wilson, 2017)
- The Power of Six (Harland, 2012)
- Systemic Modelling (Walker, 2014)
- Clean Space (Lawley and Way, 2017)

These incarnations share the common assumption that information about people's subjective and personally meaningful experiences can be efficiently represented as mental models and as metaphors explicitly or implicitly within their speech (Pincus and Sheikh, 2011). They also share the assumption that the individual responsible for forming the questions can reduce the degree to which their personal metaphors and mental models influence the answers

they get by asking 'cleaner' questions (Grove and Panzer 1989).

Chapter 3: Research Methods

This chapter of the thesis will explore the different research paradigms related to the study from both a theoretical and practical perspective. This is important because a researcher's beliefs and preferred approach is multi-faceted and complex and brings to bear critical influence across all aspects of the research - from initial purpose through analysis. According to Scotland (2012) these paradigms consist of ontology, epistemology, methodology and methods. The methodological approach for this thesis has been driven through a dual stance of grounded theory as the over-arching philosophy whilst utilising CLI as the data collection method.

3.1 Philosophical Stance

The context of both the research and the researcher is fundamental to the why a study is being undertaken and the approaches that are taken to do this. The research philosophy which is simply 'the development of knowledge and the nature of that knowledge in relation to research' (Saunders, Lewis and Thornhill, 2009, p.600) is therefore the starting point in exploring the research. In relation to the philosophy both the ontological and epistemological approaches need to be highlighted where ontology is the study of being (Crotty and Crotty, 1998) and epistemology is concerned with the nature and forms of knowledge (Cohen, Mannion and Morrison, 2017).

Bryman (2001) separates ontological positions into positivism and social constructivism. He likens the former to organisation, an entity that exists which is tangible and assigns individuals, groups roles, responsibilities and targets, and the latter to culture, which he suggests is a

collection of shared values, norms, behaviours or preferences into which people are socialised to conform. My ontological position is that of a social constructivist, believing that reality is constructed through human activity. Members of a society together invent the properties of the world and people create meaning through their interactions with each other and the environment (Kim 2001).

'Constructivism is a research paradigm that denies the existence of an objective reality asserting instead that realities are social constructions of the mind and that there exist as many such constructions as there are individuals.' (Guba and Lincoln, 1994, p. 43)

This ontological position and a lifetime interest in people means that I could be seduced into paying more attention to culture than to organisation and I had to keep this in mind during this research.

Guba and Lincoln (1994) suggest that a researcher's epistemological position is likely to be influenced by their prior ontological assumptions. Epistemology at its simplest is how we come to know something (Kivunja and Kuyini, 2017) and the position taken in this research is based within authoritative knowledge (Salvin, 1984) which is based on gathering knowledge from people in the know. Alongside this the epistemological position is interpretivist in that the subjective experience will influence the results from inception to analysis to conclusion.

An interpretivist epistemology and constructionalist ontology (Neuman, 2003) assumes that meaning is embedded in the participants' experiences and that this meaning is mediated through the researcher's own perceptions (Merriam, 1998). Delamont (2002, p.7) describes this as finding out '...how people you are researching understand their world'. According to Holliday (2002, p.5), researchers can only

'...explore, illuminate and interpret these pieces of reality', which implies a commitment to the idea of multiple realities. Knowledge is being created in interactive ways; therefore, constructivism emphasises the subjective interrelationship between the researcher and the participants and the construction of meaning (Hayes and Oppenheim, 1997). This study is set within a social constructivist theoretical position (Berger and Luekmann, 1967). According to Neuman (2003), social constructivists hold assumptions that individuals seek understanding of the world in which they live and work.

The interpretivist paradigm is closely associated with the view of qualitative research which focuses on understanding a given problem and understanding and explaining the dynamics of social relations (Queiros, Faria and Almeida, 2017). One criticism of qualitative research is in relation to generalisation of the findings. However, Cronbach (1975) argues that social phenomena are too context-specific to permit generalisability and it may not be meaningful when the study is on a particular situation and where the findings are to 'contribute to the broader picture by filling a 'hole' in the whole' (Larsson, 2009, p.28). Qualitative approaches '...are the best way of getting the insider's perspective ...the meanings people attach to things and events' (Punch, 2005, p. 238) which is the key aim of this study.

In the end, the argument for which is the best methodology comes down to decisions about what is most fit for purpose. According to Creswell (2012), the selection of an appropriate research design requires several considerations: firstly, the research problem will often indicate a specific research approach, or approaches, to be used in the enquiry; secondly, the researcher's own experiences, training and world view (Strauss and Corbin, 1998); and thirdly the audience to whom the research is to be reported. This study was designed to

uncover – through reflection on these models and analysis of the data elicited – a more general model that can inform future CD and delivery processes.

3.1.1 Philosophic stance and research approach

Interpretivist researchers uncover inside perspectives or real meanings of social phenomena and make an effort to 'get into the head of the subjects being studied' with the aim of understanding and interpreting what the subject is thinking or the meaning s/he is making of the context (Kivunja and Kuyini, 2017, p.33). The experiences and values of both research participants and researchers substantially influence the collection of data and its analysis. This study aimed to uncover the subjective and lived experience of individuals involved in CD in Higher Education and so needed to be qualitative in nature (Flick, 2014).

Qualitative research explores phenomena systematically from the point of view of individuals or populations, with the aim of generating concepts and theories (Mohajan, 2018). In this study of CD the research occurred in the natural setting and allowed for the development of levels of detail around the actual experiences of the participants (Creswell and Creswell, 2017). It relied on the premise that the data gathered was relevant, and resonated with the participants' idiosyncratic experience (Leung, 2015).

Guba's (1981) work suggests that when working within the interpretivist paradigm four quality criteria – credibility, dependability, confirmability and transferability – need to be recognised. Establishing credibility is an essential indicator for qualitative research (Liao and Hitchcock, 2018) and refers to the data and its analysis being believable, trustworthy or authentic (Guba, 1981). In this study, the data was collected from individuals working in

the sector at different management levels in a manner that stayed true to the data and the stories they told. This was checked in two main ways, through second interviews when the original findings were shared and through investigator triangulation, where different individuals were involved in the coding, analysis and interpretation (Lincoln and Guba, 1985). Dependability aligns with the issues of credibility and offers some difficulties to a qualitative researcher as the changing nature of the phenomena scrutinised makes it difficult to ascertain that the study's findings are replicable (Shenton, 2004). In order to answer the dependability question the processes of data collection and analysis have been explained in detail in Chapter 4, thus enabling the work to be replicated even if the results are not.

The third issue around conformity is mitigated in this study by the use of CLI. Shenton (2004, p.72) tells us 'steps must be taken to help ensure as far as possible that the work's findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher'. The utilisation of CLI means that some elements of researcher bias are removed and the voices of the participants are used to tell their stories. In terms of transferability, key to this study was the work of Tracy (2010). Her idea of transferability in qualitative research is one where she believes that findings in one setting may resonate and therefore offer some transferability to another. I hoped that the model of CD that this study set out to develop would resonate with others in the sector and therefore be useful - in other words some generalisation through transferability. In order that this could occur, it was important to ensure that the methods used to develop the model for CD offered robustness and reliability.

3.2 Grounded Theory approach

Grounded Theory is a methodological approach developed by Glaser and Strauss (1967), by which theory is constructed by gathering and analysing data in real life situations. Thus, theory evolves and develops during the phases between data collection and analysis. Grounded Theory (Glaser and Strauss, 1967), is a methodology that starts from a position of 'not knowing', which matches my philosophical stance. The intention of GTM is to understand human behaviour, subjective experience and thinking through the collection of data and analysis involving inductive reasoning processes (Engward, 2013). There are a number of challenges for researchers involved in Grounded Theory (Charmaz, 2006). This includes the researcher needing to decide on whether they belong to the post positivist, interpretivist or constructionist paradigms, which all come with their own set of ontological, epistemological and methodological beliefs and then to decipher which is the correct way to apply Grounded Theory (Hatch, 2008). To further complicate matters, the core processes and strategies of grounded theory (coding, theoretical sampling, comparative, iterative analysis) remain unchanged (Coghlan and Brydon-Miller, 2014). Researchers, therefore, must reflect and come to an understanding of their own personal epistemological and ontological views before they use Grounded Theory as a method of inquiry (Hatch, 2008).

As in other approaches, Grounded Theory researchers use a broad range of data, including observations and notes, but commonly they use interviews (Charmaz, 2006). The data gathered is then analysed and assigned codes demonstrating the meaning or answering the question, what's going on here? Through this approach the researcher allows patterns and relationships to emerge. Through levels of analysis, a central theory, explaining the data, emerges. This is then

developed and enhanced through comparisons with other theories around the phenomenon being investigated and the literature around the findings (Charmaz, 2006). Rather than theorising about the phenomenon (as in the traditional research method, see Figure 1), the research route is from data to theory, not through theory or hypothesis to data (see Figure 2). Data that is gathered following a Grounded Theory approach is according to Kivunja and Kuyini (2017) well suited to generating a theory from real life.

Having researched GTM (Birks and Mills, 2015; Charmaz, 2014; Glaser, 1998; Glaser and Strauss, 1967) I made illustrations of traditional research and GTM approaches to highlight the differences in the order of activities:

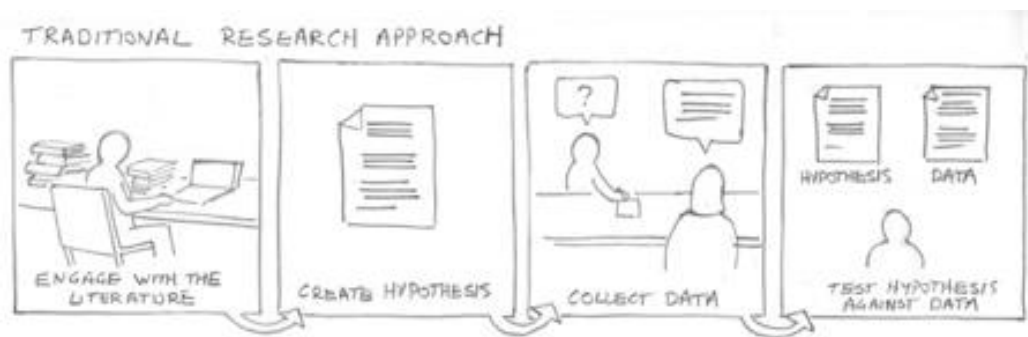


Figure 1: Traditional research method

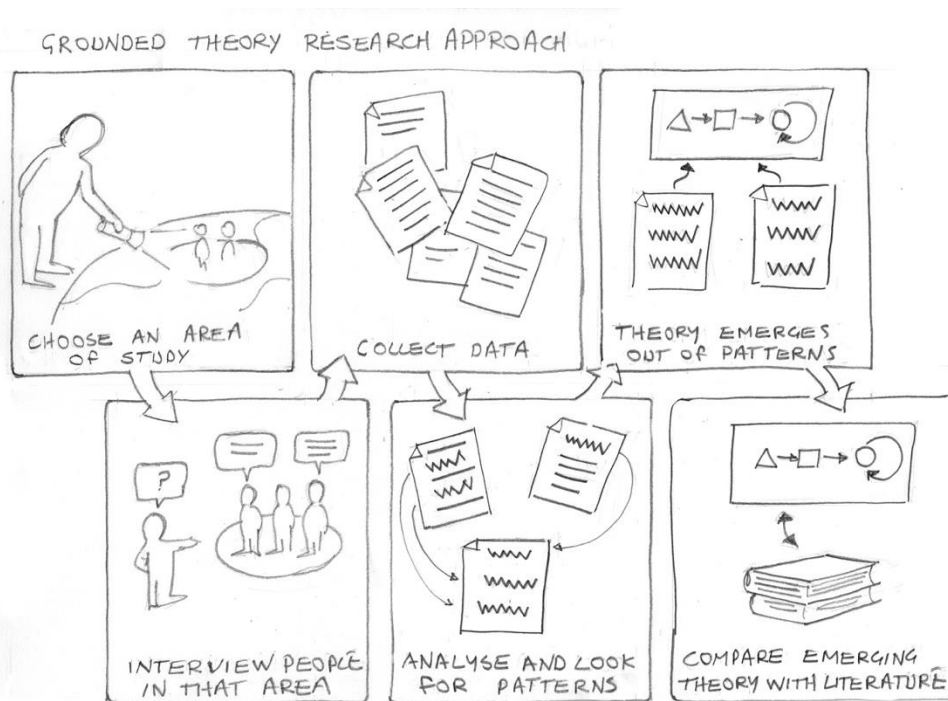


Figure 2: Grounded Theory research method

This study has been about taking the phenomenon of CD, exploring the experiences of those involved directly in the process, gathering data while concurrently analysing it and from here generating a number of hypotheses to be tested back against the data (Strauss and Corbin, 1998; Urquhart, 2012) resulting in an emergent model. Within this study I was interested in the subjective experience of those involved in CD - individuals and teams from different institutions. I wanted to know what they were thinking and feeling and how this impacted on their behaviours and their experience of the whole process.

A key facet of GTM is that a researcher should have no preconceived ideas about the theory before attending to the data (Glaser and Strauss, 1967) although it should be noted that on p.3 there is a statement that they do not approach reality as a tabula rasa (blank slate) but rather have a perspective that will help him or her abstract significant categories from the data (Urquhart, 2016, p.3). Researchers

are advised by classical Grounded Theory advocates (Glaser, 1978) not to read around the subject and not to use their own experience, expertise or other writing in the field to shape their theory. Others consider this not only unnecessary but to be a myth of the blank slate and to bring suspicion to GTM studies (Urquhart and Fernandez, 2016, p.4). In this study, the protocols of CLI were brought together with a classical Grounded Theory (Glaser, 1978) approach and the literature review took place following the findings as this most closely matched the protocols followed in Systemic Modelling which is one use of CLI in practice (Walker, 2014).

3.2.1 Interviewing as the research approach

There are all kinds of interviewing formats and methods of data elicitation but as Wertz (2011, p.17) says there is no 'hegemonic methodological hierarchy'. Each researcher takes their choice and needs to have reasons for one choice over another. Wertz (2011) adds that interviewing is an evolving discipline which is about developing methods to become more reflexive and multi-directional, with researchers and those researched both having a voice in and contributing to the research data and the method of elicitation. This has been a necessary shift in qualitative interviewing to include the voices of those underrepresented in earlier methods.

In qualitative research, an interview is seen as a conversation with a purpose: that of obtaining specific kinds of information (Merriam, 1998). The interview method is a social encounter, not just a means of collecting data (Cohen, Mannion and Morrison, 2017). Interviews are regarded as a place where knowledge is generated between the participants through conversations with a specific purpose, which are often question-based (Dyer, 1995). Yaffe (2011) argues that words and their construction are, by common sense, the key parts of any spoken interaction. Face-to-face interviewers

have the advantage of being able to note changes in body language and facial expressions which can be related to the interviewee's reaction to the question (Josselson, 2013).

One of the main advantages of using interviews in qualitative research is that they have been found to be successful in fostering reciprocity between the interviewer and participant (Galletta, 2013), enabling the interviewer to improvise follow-up questions based on participants' responses (Rubin and Rubin, 2005) and allowing space for participants' individual verbal expressions. CLI uses an unstructured approach with questions arising as the data demands. The advantage of using unstructured interviews is that they can generate and provide rich data that allows not only a broad overview but also provides an opportunity to delve deeper into particular issues not previously considered (Wilson, 2017). The spoken word, however, has a residue of ambiguity no matter how carefully we word the questions and report or code the answers (Gratton and Jones, 2010). Asking questions and getting answers is a much harder task than it may seem at first (Fontana and Frey, 2005). Like all data gathering techniques, being able to conduct unstructured interviews requires formal training and ongoing practice. (Rabionet, 2011). Having trained in and practised CLI for many years I had the necessary skills to utilise this data collection method. Rubin and Rubin (2005) state that to conduct an interview and truly hear what people say requires skills beyond those of ordinary conversation and takes considerable practice.

Unstructured interviewers do not use any set questions; instead, the interviewer asks open-ended, content-empty questions (Nehyba and Lawley, 2020) based on a specific research topic and will try to let the interview flow like a natural conversation. The interviewer modifies his or her questions to suit the candidate's specific experiences.

Unstructured interviews are sometimes referred to as discovery interviews and are more like a guided conversation than a strict structured interview (McLeod, 2014). They are sometimes called informal interviews and Charmaz (2004) recommends that GTM researchers engage in the unstructured process of intensive interviewing. The strengths of unstructured interviews are: they are more flexible as questions can be adapted and changed depending on the respondents' answers; the interviewer can deviate from the interview schedule; they can generate qualitative data through the use of open questions. All of this allows the respondent to talk in some depth, choosing their own words, which in turn helps the researcher develop a real sense of a person's understanding of a situation. Unstructured interviews also have increased validity because they give the interviewer opportunities to probe for a deeper understanding, ask for clarification and allow the interviewee to steer the direction of the interview. However, conducting an unstructured interview and analysing the qualitative data (using methods such as thematic analysis) can be time-consuming. Employing and training interviewers is expensive, and not as cheap as collecting data via questionnaires.

3.2.2 Critiquing the quality of interview data sources

Schaefer and Alvesson (2020) surveyed 30 papers across a range of journals and found that the large majority of studies did not critique the quality of their sources and consider whether the data they got was an accurate reflection of reality. They say it's possible to divide the attitudes

of studies into epistemic indifference, overconfidence, hypocrisy or modesty. This study is closest to the latter category. From the interviews conducted in this study, we were getting interviewees' spoken descriptions of what was happening, and we were not triangulating sources to find out whether that was actually happening or just what they said in that interview. We were not interviewing students or employers to find out whether the accounts of those designing and delivering the curricula agree or disagree with the experience of others going through the curricula or employing graduates of a particular curriculum. I know I can't really say anything about actual CD; all I can confidently say is that this what people were saying about their mental models about CD and that by keeping my questions as clean as possible I was aiming to reduce my bias but cannot eliminate all of the vagaries of what people say in interviews compared to what actual happens in real life or what they secretly think. Taking this limitation into account I was looking at patterns in speech acts and the purported best practice and seeing what could be made of the data elicited. I constructed my research knowing that interview data is limited, and my intention is not to make claims for absolute knowledge that cannot be substantiated.

3.3 CLI as a research tool

CLI is a relatively new process in the academic field. Owen (1996) introduced CL as a useful tool within phenomenology and following him, the earliest papers which have reviewed CL specifically as an interviewing technique started to appear from 2010 onwards (Lawley et al., 2010; Linder-Pelz and Lawley, 2015; Nehyba and Svojanovsky, 2017; Nehyba and Lawley, 2020).

Whilst CL is a 'content-empty' approach (Petitmengin, 2006), it does not claim to be 'nondirective' (Rogers, 1945). It is

directive, as are all questions, in that the interviewer requests the participant to attend to certain aspects of their experience that the interviewer has selected as relevant to the interview purpose. CLI can be useful in a qualitative research project because it has a well-specified method for asking non-leading questions (Linder-Pelz and Lawley, 2015) and refraining from pushing or forcing the data (Charmaz, 2006). Whyte (1984) has argued against using a genuinely non-directive interviewing approach within research (rather than a therapeutic) setting. This study followed the suggestions found in Zeisel (1984) to guide the focus of the interview to ensure the information relevant to the research questions could be elicited. There are some who argue that to 'do neutrality' during an interview precludes the interviewer from normal interactivity, which may in turn inhibit the interview process (Rapley, 2001, p.316). However, the CLI process has its own style of neutrality as the interviewer takes a curious and interested position, using the interviewee's own words to help create rapport and establish a positive relationship.

One of the first practitioners to propose CL as a research tool was Owen (1996), a psychotherapy writer and researcher. He lays out the approach as a reproducible method for phenomenologists to gather information from their interviewees. Owen (1996, p.271) talks of how Grove's (Grove and Panzer, 1989) CL method 'reveals the place of metaphor and metonymy as possible connections between language and lived experience'. He states that Grove's use of CL aims to investigate the precise experience referred to by the interviewee and to revivify that experience to inquire more deeply into it. Therefore, Owen proposed, CL could be used to investigate the relations between speech, lived experience, metaphors and memory in a phenomenological manner within a research project.

Many different CL practitioners have developed and adapted CL for interviewing and some have written and published their work to make it available to the academic world (Lawley et al., 2010; Tosey, Lawley and Meese, 2014; Linder-Pelz and Lawley, 2015; Cairns-Lee, 2017; Nehyba and Svojanovsky, 2017). The first formal, empirical study of CLI as a research tool was carried out in 2010 in a joint practitioner-academic project on the topic of 'work-life balance' and published in the British Journal of Management (Tosey, Lawley and Meese, 2014).

The discipline of using CL in qualitative research directly addresses the issues of priming, leading and loaded questions which introduce researchers' metaphors and constructs, thereby reducing the potential for unintended interviewer bias. This reduction of undesired influence can have an impact at all stages of research, including design, data gathering, analysis and reporting (van Helsdingen and Lawley, 2012).

3.3.1 Agreeing a scale for Clean Language interviews

Most interview techniques ask interviewers to stay close to the spoken word (Rubin and Rubin, 2005). CLI provides a systematic process to ensure that the interviewer cannot inadvertently bring in assumptions. Lawley devised a scale for assessing the 'cleanness' of an interviewer's interventions (Lawley and Linder-Pelz, 2016). On this scale, questions can be divided into four categories as shown in the table below. He invited several experts in CL to rate different interviews on their 'cleanness' to ensure that there was a common understanding of which questions went into which category. The examples illustrate questions that fall into each category in response to this interviewee statement:

'Designing the curriculum is like bringing lots of strands together and trying to make something beautiful and useful out of them.'

Category	Description	Examples
Classically Clean	Using only the interviewee's words plus a clean question.	<p><i>And when bringing lots of different strands together, what kind of bringing together?</i></p> <p><i>And bringing different strands together, and trying to make something beautiful and useful, and when it's beautiful and useful, that's beautiful and useful like what?</i></p>
Contextually Clean	Asking questions specific to the interview topic or using words that are basically content-free but support the interview process.	<p><i>What aspect of design are each of the strands?</i></p> <p><i>How long does bringing the different strands together take?</i></p>
Mildly Leading	Bringing in low-level content that might influence the answers.	<p><i>Is it just you bringing the strands together or do different people each have different strands?</i></p> <p><i>And you're trying to make something beautiful and useful... Beautiful to whom, useful for whom? Students or staff?</i></p>

Strongly Leading	Introducing metaphors, judgement or other content not directly grounded in what the interviewee has already said.	<i>So, as you weave together this tapestry, does it get tiring?</i> <i>Do the different strands compete with one another?</i> <i>How can something so messy turn into something beautiful?</i>
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Table 3: 'Cleanness' categories [Revised definitions based on Lawley, 2017]

This 'cleanness rating' is a tool for reflection that all researchers could use in order to reflect on their interviews and to discover unintended assumptions in their questions. They could look for correlations between their own assumptions, leading questions and the answers they got from the interviewees. This approach could sensitise them to their own patterns of inference or as a systematic method to assess the 'cleanness' of a whole interview (Linder-Pelz and Lawley, 2015).

3.3.2 A Process for Clean Language Interviewing

In this section I will outline the process of CLI, as I understood and used it at the start of this study. One of my research outcomes was to uncover principles of CLI to enhance the practice. Over the course of this study, I uncovered a range of skills underpinning CLI and a revised process can be found in the Findings chapter (5.2). For a full version of CLI including the findings from this study please see Appendix VI.

Nehyba and Svojanovský (2017, p.4) have identified three basic principles for CLI:

- The interviewer makes exclusive use of the literal verbal and non-verbal expressions used by the respondent during the interview.
- The questions asked are designed, as far as possible, to eliminate content assumptions introduced in the words, concepts and logic of the interviewer.
- The questions facilitate the subject to elaborate on answers that are relevant to the phenomenon under study.

The difference between these principles and conducting unstructured interviews is the strict adherence to the rules and the notion of making exclusive use of interviewee data. Returning to the notion that Conklin was wanting the researcher to 'put in abeyance presuppositions and prejudices she may carry with her into the field' (Conklin, 2007, p.277) the table of questions used was not clean as understood by CLI. This subtle shift makes all the difference and is the reason for going into these concepts in detail.

3.3.2.1 Develop a neutral 'Clean' state for interviewing

All interviewers need to be conscious of their state of mind and emotions (Brinkmann and Kvale, 2005). Even when they are not shown through words, attitudes of researchers can show up in body language and tone and preconceptions towards the interviewee and leak out (Charmaz, 2006). A good state of mind is important in CLI for the interviewer to be able to pay attention to many details in the interviewee's words and gestures and to build a model of the interviewee's experience (Nehyba and Lawley, 2020). For this reason, it is particularly important for a CL interviewer to be in a good emotional and mental state prior to beginning an interview.

3.3.2.2 Initial question

The starting question of any interview plays a vital role. It is impossible to open an interview with a classically clean question (see list below) because the interviewee has yet to provide any content and it is the interviewer's role to set the direction of the interview based on the purpose and frame of the research. After much reflection, I decided the simplest way to begin was to ask, 'For you, CD is like what?', say nothing else and let the interviewee answer without interruption. In my pre-pilot interviews this question elicited relevant responses in most of the interviews. However, for some interviewees the question was too 'clean' - it did not have enough context and they were not sure what information I was after. If I had left the interviewee in this state, rather than stimulate them to think about their own experience, the question would have distracted them into thinking about the question itself and not what it was attempting to point to. In order to remedy this, I had some follow up questions ready, such as:

- How does it begin?
- What's it like overall?
- When you think about the whole thing, how does it work?

My aim was to keep the follow-up questions as free from content as possible so as not to sway the answers from the interviewees.

The clean questions developed by Grove (Grove and Panzer, 1989) accept and extend any of a person's salient words or gestures. There is subset of CL called 'classically clean questions' that are at the heart of CLI. The interviewer takes an interviewee's word or a phrase and incorporates it into any of these classically clean questions:

- What kind of...
- Is there anything else about ...
- Where/whereabouts is ...
- Where does ... come from
- What happens just before ...
- What happens after ...
- What happens next
- That's like what?

In addition to the classically clean questions, the options available to the interviewer can be extended by a range of contextually clean questions. There are two types. One type of question references the research topic with a minimum of added assumptions; the other type of non-leading question is congruent with the logic and context of the interviewee's descriptions. Both types of question aim to expand on the data already provided. These questions should be asked purposively in service of developing an understanding of the interviewee's experience in relation to the overall purpose for the research. Nehyba and Svojanovsky (2017) investigated the difference in the 'cleanness' of the questions asked by two interviewers who had gone through an intensive three-day training course and two who had attended only a four-hour workshop in the CLI method. Acknowledging that this was a small study, and the results are only indicative, Nehyba and Svojanovsky found that over 90% of the more highly-trained interviewers' questions met the criteria of clean, while one-third and two-thirds of the less-well trained interviewers' questions were classified as leading.

3.3.2.3 Use gestures to make sense of what is being said from the interviewee's perspective

Non-verbal communication has long been accepted as a major source of information in interviews (Mehrabian 1972). While Mehrabian stated that 93% of communication is non-verbal and that this should capture the interviewer's attention, he later said that this had been misinterpreted and his results should be interpreted as people respond more to non-verbal than verbal communication, particularly if they do not match. The interviewer may keep sketches of the gestures and references in space alongside notes of what was said. Rather than keep notes which are verbal and written in the chronological order in which they appear, when I am conducting a CLI, I generally use A3 paper and create a sketch of their actions and behaviours in the middle of my paper while leaving plenty of room for writing notes. Ostrower (1998), suggests that inexperienced researchers should be given note-taking training before they go into the field so that they can start research as early as possible, and this would be a particular kind of note-taking. Saunders, Lewis and Thornhill (2009) advocate that the information collected in interviews collates the ideas and should contain not only what was said but what was seen and heard outside of the interview too. I kept notes on conversations and mini-interactions outside of the formal interview, including, as Wolfinger (2002) advises, notes of things I was seeing, thinking and feeling about the interview.

I reflect the gestures back to the interviewee during the interview, in the same way, direction and speed as they were using them. I treated them the same way I might treat a word. As well as gestures, I followed the interviewee's lines of sight to help me to understand how they were organising their mental models.

3.3.2.4 Repeat back key/salient words and either pause or ask a question

Within interviews, there are lots of words that the interviewer could code. Deciding what is 'salient' is a key endeavour during the interview (Brinkmann and Kvale, 2005). Salience has its meaning origins in what 'leaps out'. Salience during a CLI is what draws the interviewer's attention to a certain word or phrase that then stands out as needing further inquiry. Salience in any interview depends on the purpose, the interviewee, the data gathered so far and the interviewer. Each interviewer has a different idiosyncratic way of perceiving information. It is important that any interviewer, but particularly a CL interviewer knows their own patterns. This is because certain words or gestures will resonate with their own mental model and these will naturally seem more salient to them, whereas a CL interviewer is attempting to discern what is salient for the interviewee. They also will know their own preferences and therefore what kinds of data they are likely to be drawn to and what they are likely to miss. The skill of being aware of the tendency to pay more attention to your own preferences can be developed in training groups by modelling how and what the interviewer selects as salient and comparing that to what other interviewers select.

Once the interviewer picks out a salient word, phrase or gesture, they can repeat this back to the interviewee and pause. This is often enough to prompt the interviewee to engage with their own thinking and to give more information related to the concept, metaphor or behaviour selected. This is one of the cleanest ways to build information from what is initially shared. This repeating and pausing also helps the interviewer to remember what has been said and to give themselves time to choose the question they want to ask next.

At times the interviewer can use several the interviewee's exact descriptions to repeat back a summary of the model they are developing, or key points in the data gathered so

far. Following this with a pause invites the interviewee to correct or add in any extra information that occurs to them.

3.3.2.5 Detect and utilise autogenic metaphors and their entailments

A lot of Grove's work in CL was about eliciting autogenic, naturally occurring, metaphors in people's language and developing these for therapeutic purposes (Grove and Panzer, 1989; Lawley and Tompkins, 2000). In interviews, these naturally occurring metaphors help the interviewer build a model of the interviewee's experience. For example, when one of the interviewees in this study said, *'It's really a set of interchangeable building blocks and there needs to be more of a flow'*, the metaphors in the statement carry more information than would be implied by a simple coding of the words. Metaphors come with an inherent internal structure, logic and entailments that provide a rich description of the way the interviewee has made sense of their experience. These additional implications help the interviewer to find out more about what is happening in the interviewee's inner world and how they are constructing their mental models. If the interviewee uses a metaphor such as *'It's like herding cats.'* it says a lot about the degree of control that the herder has as well as the attitude of the cat (Programme Team member) to anyone trying to herd it. These metaphors also help the interviewer to interpret gestures. For example, if the interviewee describes their experience as *'a journey'* they may at the same time use a sweep of a hand. The interviewer can utilise the logic of the journey metaphor to identify the direction, the beginning and the end of the journey. For example, they can use this logic when enquiring about the beginning of the journey, by pointing to the start of the hand sweep. Metaphors provide clues to attitude as well as to structure.

3.3.2.6 Build useful models of the experience of the interviewees that serve the overall purpose

By studying the language of the participants, the CL interviewer aims to allow the researcher to build a representation of the mental models they hold that inform social action (Carley and Palmquist, 1992). Through using clean questions, the interviewer can start 'creating a model of the inner world of their participant as their participant describes it, without overlaying their own model of the world' (Cairns-Lee, 2017, p.125). This part of the process ties very closely back to the purpose for the interviews. The usefulness of a model depends on what is the intended use for the data uncovered through the interviews.

Before closing an interview, the interviewer may recap their draft model of the interviewee's experience or what seems to be important as a way of checking whether anything has been missed or the interviewer is misunderstanding the interviewee's meaning. Not only will this enable greater refinement of the ideas being presented (Tosey, Lawley and Meese, 2014), it is one way for the interviewer to build confidence that the data is representative of the interviewee's authentic experience (Linder-Pelz and Lawley, 2015).

3.3.3 Limitations of CLI as a research tool

All research methods have advantages and disadvantages or limitations. One limitation of CLI is that it is relatively new. It has been used in several post-graduate research projects (Hanley, 2020; Cairns-Lee, 2017; Calderwood, 2017; Munsoor, 2018; Philmon, 2019; Pickerden, 2013; Lloyd, 2011; Vanson, 2011). However, apart from those papers already cited, there are at present only a few other published

academic papers which have made use of CLI (Van Schuppen, Sanders and Van Krieken, 2021; Langley and Meziani, 2020; Conway, 2019; Sinclair, 2019; Sanders et al, 2018; Janssen et al., 2014; Buetow, 2013; Barner, 2008). This means that while there are many examples of CLI being used by practitioners in the fields of market research, education, health and organisations (Open University, 2011; Walker, 2014) few of these have been published and not enough academics have yet tested its efficacy.

Another possible limitation is the time and effort required to acquire the skills to be a competent CL interviewer. Cairns-Lee (2017) said her extensive training in CL enabled her to maintain a high degree of consistency during her interviews with 30 business leaders about their mental models of leadership. In reviewing her use of CLI, Cairns-Lee (2017, p.291) concluded that 'when sensitively asked' even a few 'clean questions can elicit quality data from the inner world [of the interviewee], provided the enquirer also uses the exact words of their interlocutor'. Notwithstanding, Nehyba and Svojanovský (2017) found that intensive training over three days could significantly improve the interviewer's ability to consistently ask clean questions. Two interviewers attended a three-day CLI training course and two others received a four-hour workshop. Nehyba and Svojanovsky then compared the cleanness rating of their interviews. Those with longer training achieved 92% and 96% of their questions rated classically clean or contextually clean. Those with the shorter training achieved 34% and 64%. This correlates with findings from Fowler and Mangione (1990) that trainee interviewers needed at least five days training to ask probing, non-leading questions and that after 10 days a third still couldn't do this. These are small examples and more work is required in the field to test what is needed to learn this technique.

It is also worth noting that there is sizeable difference in skill required to ask clean questions in a traditional semi-structured interview format, and for those questions to be informed by real-time modelling of the information. One of the challenges for an interviewer who wants to learn to model in this way is the lack of description about what the CL interviewer is doing internally. During this project I conducted reflection sessions with other grounded theory and CLI trainees to uncover principles that could enhance the practice. The findings presented later are an attempt to begin to redress this lack of knowledge.

There are many criteria of interview quality in addition to 'cleanness'. Several authors have attempted to define quality in interviews (Cassell and Symon, 2004; Guba and Lincoln, 1994; Roulston, 2011) but there is little consensus. There is also a lack of systematic methods for comparing the quality of data generated by one interviewing method with another. Therefore, it is not possible at present to say that CLI produces more, better or a higher quality of data than other interview methods. There have only been a few reviews of interviews conducted by non-CLI trained interviewers using the cleanness rating (Lawley and Linder-Pelz, 2016; Nehyba and Svojanovsky, 2017). The small numbers of interviews examined in these reviews means that no definitive conclusions have been reached. The most that can be said is that they suggest that traditional interviews, even those conducted by experienced interviewers, contain a higher proportion of interviewer assumptions embedded in their questions than CLI interviews. Further research in this area would be most welcome.

There are always ethical considerations in any research interview (Patton, 2015) and in particular in-depth research interviews (Allmark et al., 2009). There is potentially an additional ethical issue arising from using an interview

method that was developed for psychotherapy. CL is not the first approach that was originally designed to support participants to gain insight into some of their most difficult experiences to cross over into social science research (Rogers, 1945). As a result, the CL interviewer has to ensure that the conversation remains within accepted parameters of a research interview and does not stray into a more therapeutic area. Hiller and DiLuzio (2004, p.4) point out there are many similarities between a research interview and a therapeutic interview in that both ask the interviewee to 'tell their story' and require a relationship of trust and rapport. Unless there is an explicit agreement with the interviewee that they are taking part in a transformative interview (Roulston, 2010), the aim of an interview must be to gather data about the research topic and not to challenge and change the understandings of participants.

Chapter 4: Research Design

In this section each stage in the research process is described along with examples with a view to aiding the reader's understanding of why it exists and the reasons for inclusion in the process.

Spoiler alert: This section on research design, will be showing what I thought that I was doing when designing this piece of research and starting the process of interviewing and coding. Through this study, however, new findings emerged after around 50% of the interviews and towards the end of the study and these findings will be shared in Chapter 5 and discussed in Chapter 6. This includes coding in-the-moment, which is coding and analysing those codes live, during the interview.

4.1 Pre-pilot

Prior to conducting the formal interviews, I held three mock interviews with colleagues at the university I was based, to fine-tune the CL interview technique. As a result, some expressions and words were changed to make the questions clearer (Kvale and Brinkmann, 2009). Often the structure of the main questions is reordered to improve the flow of the discussion during the planned interviews (Rubin and Rubin, 2005). These conversations had two aims. Firstly, to ascertain what kinds of information would be yielded from interviewing programme leaders with the question: 'For you, CD is like what?', and secondly to find out how much information could be gathered using purely clean questions and how many supplementary questions I might need to use to gather a cogent sense of how programme leaders thought about CD.

On analysing these three interviews, I found that on a few occasions the interviewees waited for me to ask more questions or to give them guidance on what kind of information I needed from them and on these occasions asking the following prompts were useful:

- What supports CD?
- What hinders CD?

These questions have the metaphors of 'support' and 'hinder' in them and while I wanted to avoid 'shaping' the interviewees' answers with external metaphors, I also wanted the interviews to run smoothly and at times these questions appeared to give them more structure to think about and come back with answers. This range of questions was compatible with a CLI approach which advocates using a range of questions from classically to contextually clean (Linder-Pelz and Lawley, 2015) and I only used the supplementary questions if they were needed.

After interviewing these three individuals, I noted that each of them spoke about the role of the institution and of the team and the relationships between team members and the programme leader. I decided to investigate CD from the point of view of the institutional leaders, programme leaders and team members to explore this relationship.

4.1.1 Sampling

The first step in selecting the most appropriate sample is to define the population (Gray, 2017). According to Statista (2020) there are 143 universities in the UK and these can be grouped in different ways. For the purpose of this study, through stratified random sampling, the University Alliance (UA) was chosen as the sub-population. The UA is a group of large to mid-sized professional and technical universities (University Alliance, 2017) and this sampling approach aimed

to ensure that there was some similarity with respect to one or more characteristics (Sharma, 2017) across the organisations. The university where this study was based was, at the time of data collection, within the grouping labelled as the University Alliance (UA) whose mission states:

Our Teaching Excellence Alliance is a collaborative venture which brings together Alliance universities to promote excellent teaching and learning, and to better understand and define – as well as champion and showcase – excellent teaching at Alliance institutions. (University Alliance, 2017)

Purposive criterion-based sampling was utilised to recruit participants because individuals were required to satisfy a set of pre-determined characteristics (Patton, 2015; Gray 2017): they had to be academic teaching staff from institutions within the UA. The first approach taken was to utilise the network of a leading UK practitioner in teaching and learning who contacted all the teaching and learning leads at the UA universities (n=12) to ask for their support for the project – mirroring a snowball sampling technique (Gray, 2017). This approach was utilised in order to connect to relevant people in the subject-area and was perceived to be useful as it capitalised on 'expert wisdom' (Suri, 2011, p.6). While this initially promised to be a productive gateway into the Universities, only one university agreed to take part. The second strategy was to approach teaching and learning leads at all the remaining universities (n=11) within the UA directly, and through this method one more institution agreed to take part. Gaining participants to take part in the study was proving difficult. Therefore a third strategy was used whereby personal contacts at universities within the UA were asked to make connections with the teaching and learning leads. This gained two more

access points with the resulting sample of four institutions being achieved.

Given that the study was about reflecting on how the universities design curricula, it was surprising that it has been so hard to get institutions to agree to be involved. Those individuals who responded to the invitation to be involved with a 'no' gave lack of time or too heavy an administrative load as the reason they couldn't engage. The resulting sample group for this study can be seen in Table 4 in Section 4.3.1 First Interviews). The 34 participants interviewed included 5 individuals (from 4 universities) in a senior position of responsibility for teaching and learning at an institutional level, 11 programme leaders and 18 members of programme teams.

4.2 Ethical Approval

As the study involved individuals and teams working in organisations, ethical considerations were at the forefront of the design and the research gathering. Bell and Bryman (2007, p.71) list 11 principles of ethical practice which were kept used as a checklist through the study.

1. Ensure no harm (physical and/ or psychological) comes to the participants, researcher, or others.
2. Respect the dignity of the participants, researcher, or others and avoid causing discomfort or anxiety.
3. Ensure informed consent of participants.
4. Safeguard the privacy of participants.
5. Ensure the confidentiality of research data.
6. Protect the anonymity of participants and organisations.

7. Avoid deception through lies or behaviour which is misleading.
8. Declare any affiliations (professional and/ or personal), funding sources and conflicts of interest.
9. Ensure honesty and transparency when communicating about the research.
10. Ensure reciprocity whereby the research is of mutual benefit.
11. Avoid any misrepresentation or false reporting of research findings.

The study also used the British Educational Research Association (BERA, 2016) guidelines for ethical research and ethical approval (reference 16/ELS/025) was obtained from the University Research Committee on the 7th October 2016.

According to Guillemin and Gillam (2004), procedural ethics force us to consider and reflect on the fundamental guiding principles that govern research integrity. They go on to propose that procedural ethics acts remind us to be thoughtful and reflective about our intentions and actions within our research and to be mindful not to cause ourselves or our research participants any harm. Studies are also accepted or rejected on ethical judgements made by an ethics board that have their own biases, concerns and preferences. Originally this project sought to explore two sets of participants, those designing 'successful' courses defined by success on the Teaching Excellence Framework, and those who were designing and working on 'unsuccessful' courses. The ethics committee rejected this project as being likely to cause harm to programme staff on 'unsuccessful' courses. This in itself brings into question the ethics board's beliefs about the ability of staff to be open to scrutiny when facing challenges. Since staff have access to National Student Survey (NSS) scores and are party to course reviews

it will not be a secret that their courses are or aren't performing well. As a result of that ethical decision, the study interviewed staff of different courses, with no data gathered on the performance of the courses whose design is under scrutiny. This leaves the project with less 'bite' to say that one theory underpins these results and another theory underpins the others. Rather the researcher and the reader need to unpack which aspects of the theory appear to make sense to them as useful rather than knowing that they are associated with good marks and ratings.

Undertaking in-depth research is crucial in advancing knowledge in HE (Cleary, Horsfall and Hayter, 2014). Within this study, using GTM and CLI, I was not taking an expert position on the participants' experience. The relationship between me and the research subjects was one of participation and discussion between equals (Parsell, Ambler and Jacenyik-Trawoger, 2014). This means that, in terms of ethical consideration, nothing is being done to the subjects that they can't easily comprehend, and the interviews were about their own areas of expertise which reduces the risk to the participant group. The rights of any individual in a research study are that confidentiality of information and anonymity are assured and that participation is voluntary and based on informed consent (Couchman and Dawson, 1995). All the participants were volunteers and not forced to join in. All personal details were kept confidential and the data stored in a secure place. LJMU processes have been followed and all participants received Participant Information Sheets (Appendix I) and are asked to sign Consent Forms. Participants were advised of their right to withdraw from the study at any point and at this point their information would have been destroyed. All information has been kept according to GDPR guidelines.

All interviewees were sent a copy of the interview transcript so that they could have a copy of the reflection and also so that they could edit their answers. This allowed them to choose to remove any aspects of their interview through which they believed their colleagues could identify them through deductive disclosure (Kaiser, 2009). This was of particular importance as the data would be represented as an individual model and potentially as a general model and many respondents were concerned about the confidentiality of their responses. This was also an opportunity for them to reflect on the model that I had built of their experience during the interview and for them to update or edit or correct any assumptions.

4.2.1 Protecting Participants

For qualitative studies, there are potential ethical issues around the identity of the participants as this may be difficult to hide from colleagues and the organisation (Ferguson, Yonge and Myrick, 2004). Within this study there are participants at both institutional and operational levels within the university contributing to the emerging model of CD. This brings with it potential risks of people at different levels in the institutional hierarchy having access to a shared model and potentially using it to judge one another's performance. To negate this risk, the interviews were conducted by someone external to the organisation and all interviewees were offered the opportunity to check the transcript of their interview for any information they felt could identify them and any changes will then be made (Parsell Ambler and Jacenyik-Trawoger, 2014).

4.3 Data collection

This section takes the reader through the CLI protocols implemented and interweaves the wider research method of GTM. While these two approaches are each focused within their particular realm, there is very real intersection of these two sets of discipline where they serve to strengthen each other. In order to comprehend how this works, this section uses actual experiences during the research to exemplify the emergent synergy.

As has been explored in earlier sections the method of data collection was intensive interviews (Hochschild, 2009) following CLI protocols (Nehyba and Lawley, 2020). The activities involved a process that I have come to call, coding in-the-moment, which is how I was navigating the CLI and will be explored in depth within the findings. Prior to this research and during the first 50% of first interviews I was not consciously reflecting on many of the tacit skills that I had been using for over 20 years. It wasn't until I got together with two fellow GTM researchers to compare and contrast our coding techniques with some shared transcripts that I realised how much coding was taking place during my interviews - categorising and building structure and looking for patterns and relationships - and this then became part of the study. This interaction can be viewed in Appendix II.

4.3.1 First Interviews

Each participant (n=34) was interviewed to explore their perceptions of the overall design and delivery of the curriculum from their standpoint. Interviews lasted for a minimum of 30 minutes and a maximum of one hour and interviews were digitally recorded, tidied and transcribed. As well as what I heard during the interviews, I kept notes of what I saw, gestures made during interviews, the way that

interviewees arrived and their attitude to being interviewed as is recommended in Charmaz (2006). During the interviews I kept visual spatial notes of the interviewees' mental models, using their gestures to give clues to the organisation of their thinking and experience. At the end of each interview I had a pictorial map of their experience as they organized it and a transcript of the questions and answers verbatim.

Univer- sity	Teaching and learning lead	Progr- amme	Progr- amme leaders	Progr- amme team	No. first inter- views	No. second inter- views
A	1 Head of Learning and Teaching Enhancement	i	1 Principal Lecturer	2 Senior Lecturers	4	2
B	1 Senior Lecturer in Learning and Teaching	i	1 Principal	2 Senior Lecturer	8	4
		ii	1 Course leader	2 Academic Leads		
		iii	1 Course leader	0		
C	1 Associate Pro Vice-Chancellor	i	1 Principal	2 Senior Lecturers	8	3
		ii	1 Interim Course Leader	2 Senior Lecturers		
		iii	1 Associate Head (Academic)	0		
D	1 Head of Curriculum Development	i	1 Course Director	1 Course Director 1 Senior Lecturer	14	4

	nt and Review	ii	1 Course Director	2 Principals		
	1 Head of Digital Pedagogy	iii	1 Course Director	1 Course Director 3 Senior Lecturers		
		iv	1 Course Director	0		
TOTAL	5 teaching and learning leads	11 programme leads	11 programme leaders	18 programme team members	34 first interviews	13 second interviews

Table 4: Number of participants interviewed across the four universities

4.3.2 Second Interviews

A second round of interviews took place for participants, during which further questions were asked that arose from the categories that emerged during the first interviews. Interviews lasted for 30-60 minutes. 13 out of 34 participants were able to make themselves available for a second interview.

During the second interviews, I was still engaged in what will be called in the findings, coding in-the-moment, and I was also engaged in selective and theoretical coding (Birks and Mills, 2015; Urquhart, 2012) where I was taking in vivo codes and relating different codes together. This included deliberately interrogating statements that described interviewees' attitudinal orientation towards CD to uncover the conditions that means they were aligned or misaligned with the principles and process they espoused. The research aimed to uncover causal relationships between the categories that had been identified. Birks and Mills (2015) write that while open coding can seem to fracture the data, intermediate or axial coding reconnects the data, allowing meaning and core categories to emerge. The discovery of theory is an

inductive process with some procedural flexibility and ease of coding (Glaser, 1978; Glaser, 2002). As well as identifying categories, the study looked for 'negative cases', that is, instances that did not fit the categories thus far identified such as when people spoke of principles they aspired to but could not attain (Charmaz, 2006, p188).

4.3.3 Comparing and contrasting programme teams and institutions

I had great difficulty getting appointments with these academics and the interviews took place at different institutions at different times which meant that I was sometimes interviewing a teaching and learning lead at one institution and then a programme team member at a different institution on the same day. I had a range of interviews from different teams and institutions before I had all of the interviews in from one institution or one single programme team. For this reason, I was able to pull out the generalised good practice and principles findings from the first 12 interviews before I was able to compare and contrast different programme teams or different institutions.

I began this process of comparing and contrasting from around the 15th interview when I started to realise that there was a pattern across groups. Once I had all 34 first interviews from all of the institutions, then I was able to then separate out institution by institution data, programme team by programme team data and start to uncover patterns in the initial findings and see whether there were any significant patterns across or between the teams or institutions. I was also able to use second interviews to inquire further into patterns or attitudinal orientation and uncover whether the participants felt able, or not, to enact the principles and processes they aspired to (See Appendix IV).

4.3.4 Data analysis

Spoiler alert: This section on Data analysis, like much of the research design, will be showing what I thought that I was doing. Findings on coding in-the-moment will be shared in Chapter 5 and discussed in chapter 6.

The process of open coding was the most time-intensive for the first 12 transcripts because that period also involved learning to code. I started by coding one transcript, then the next. I compared answers in the initial interviews by asking the question, 'What is this about?'. Following a GTM approach, the transcripts of the initial batch of transcripts were read and reread on an individual basis and codes generated (Strauss and Corbin, 1994). Rather than assign my own codes to data, I used the words that the participants said, in vivo codes, also known as natural coding (Saldana, 2015) to keep the data as close to the participants' own experience as possible (Grove and Panzer, 1989).

For example:

Interviewee:

'Well the end point is, "What does the graduate look like?" and I take two points of view from that. I take an academic point of view about what the benchmark standards suggest and equally what we as an academic team suggest, and what we're proud of. Then I also take an industry end point as well. I do lots of research before I design any course. I take lots of primary research into what industry sees as a graduate or as a post-graduate'.

The following table shows how a segment of interview data results in in vivo codes.

Data	Codes
Well the end point is, "What does the graduate look like," and I take two points of view	End point Graduate look like 2 points of view
from that. I take an academic point of view about what the benchmark standards suggest	1st point - academic
and equally what we as an academic team suggest, and what we're proud of. Then I also	We/team proud
take an industry end point as well. I do lots of research before I design any course. I take	2nd point - industry I design Research
lots of primary research into what industry sees as a graduate or as a post-graduate.	Industry needs

Table 5: Interview data as in vivo codes

The initial question, 'What is this about?' serves to direct me to wonder about what is happening and to give one or two in vivo codes to the sentence and ask further questions only relating to this code without a specific agenda. These initial codes will work on a line-by-line basis, attributing words or sentences or paragraphs to a heading that groups what those codes have in common. This in vivo coding contrasts with in vitro coding which happens much later in the coding process and allows for greater interpretation of what is meant (Harris, 2015).

The second question comes from my own CLI experience and is asked throughout the interview as well as when working in the transcript. The answers build on the answers to the first question and generate a sketchy model of how the participant makes sense of designing the curriculum and how the different parts of their mental models fit together and relate to one another. During this interview I am building a map of their mental models, in some ways I am building a new mental model of their experience. I continue this map building while working with the transcript and pick up any clues that I missed during the live interview.

I was asking myself the question 'What else needs to be here for what is here to make sense?' This prompted me either to create codes presupposed by the data or to ask further questions in a second interview. The way that these kinds of coding fit together are illustrated in Figure 3.

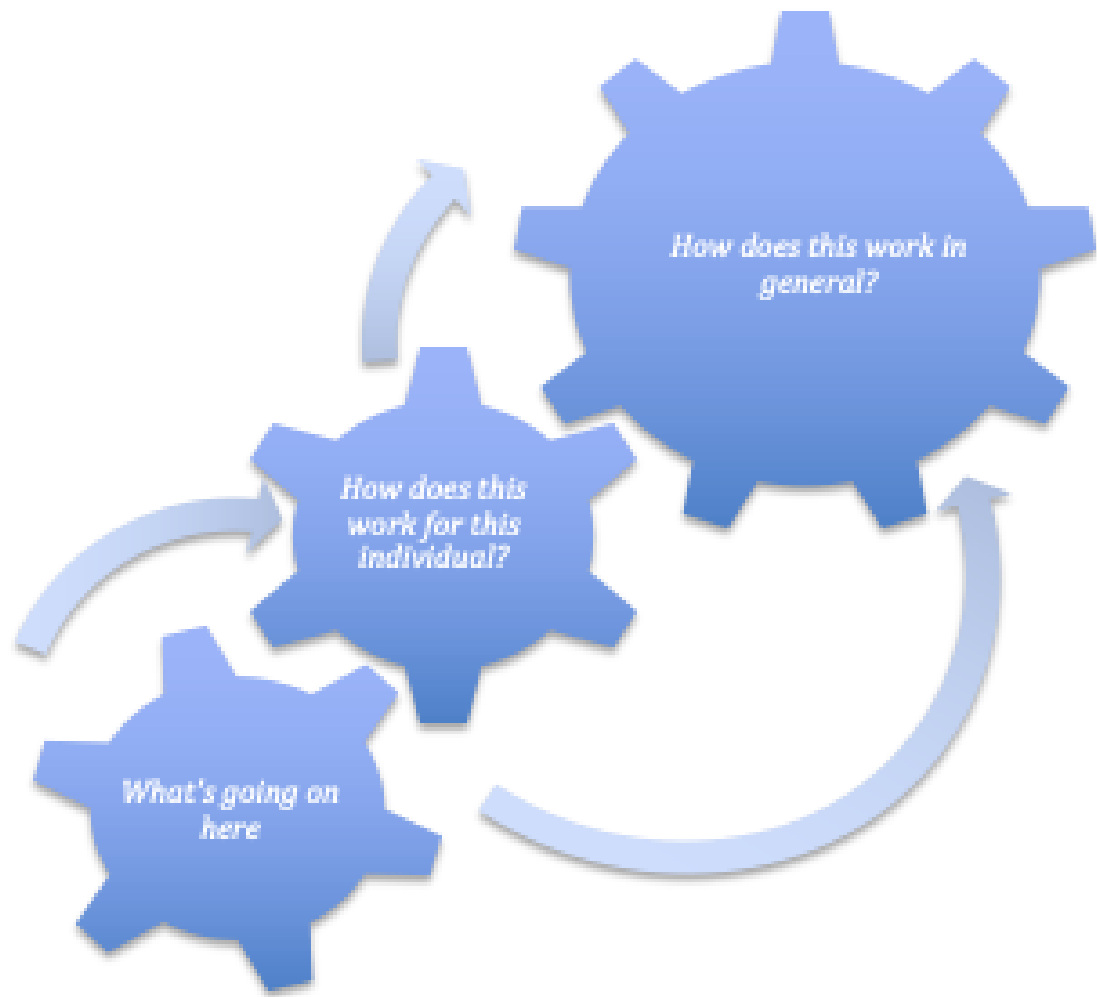


Figure 3: Levels of Coding

As each of these interviews was read and reread, there was a simultaneous building of a more generalised model across the models. The process of coding open codes and categories involved consistency checks within one transcript and across transcripts by closely examining the text fragments that had the same in vivo code assigned.

Initially, assigning codes meant utilising the visual schema I had made during the interviews with my notes as well as writing down ideas, thoughts or even 'gut-feeling' in a notebook. In order to identify sub-categories, I often had transcripts as well as visual maps of the mental models of

the individuals arranged on the floor in front of me and let my attention wander around the data looking for patterns within the in vivo codes and across the relationships between the codes. As new categories emerged, I went back to earlier texts and coded for those categories (Birks and Mills, 2015). This allowed me to qualify and elaborate the emerging model, thereby capturing the full depth and complexity of the data within the emerging model. The process was iterative, with observation and analysis building on the interview preceding it across the whole group (Duhscher and Morgan, 2004).

Combining GTM and my own process of building a generalised model of experience is illustrated in Figure 4.

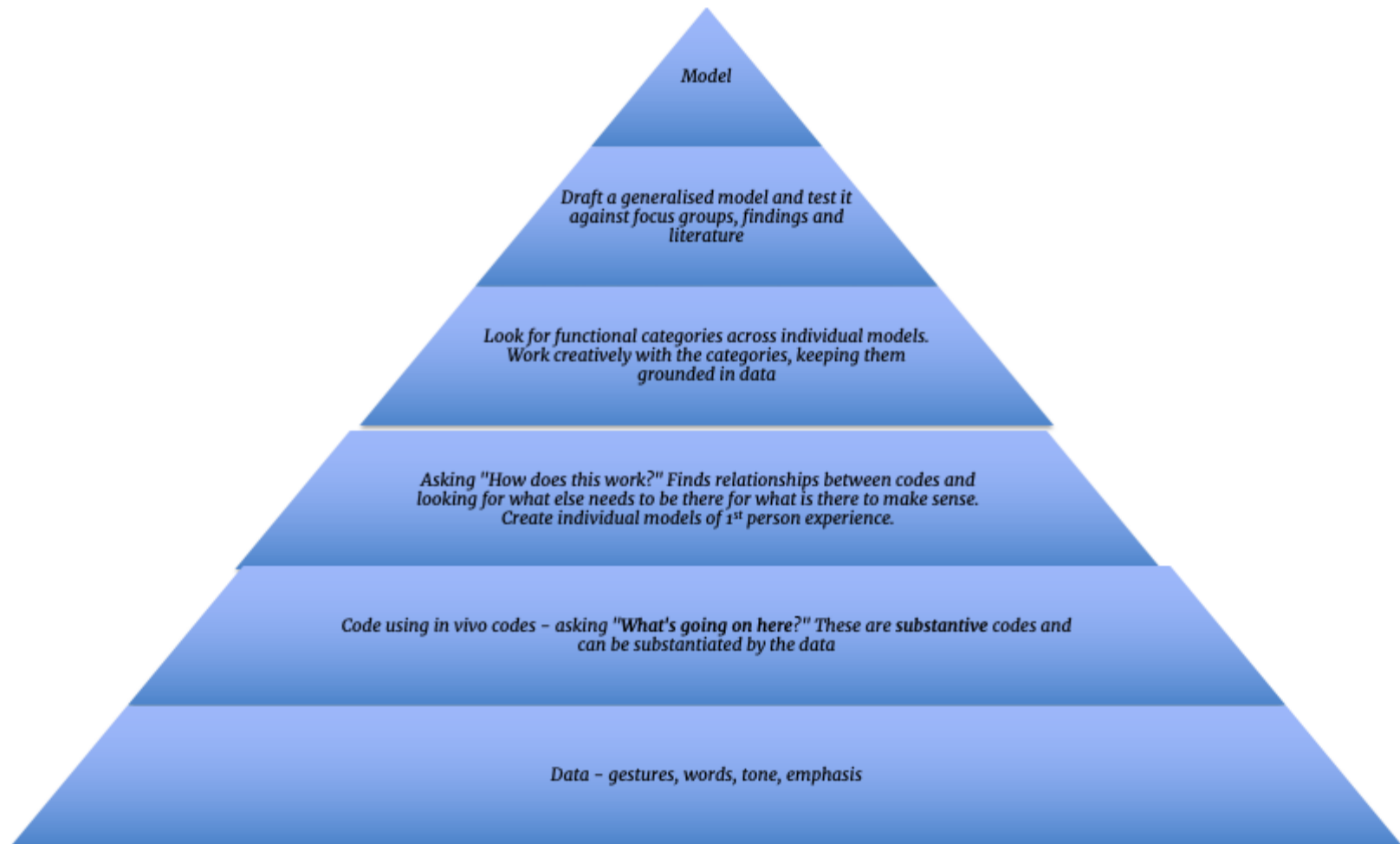


Figure 4: Combining Clean Language Interviewing and Grounded Theory Methodology

Selective coding is considered the second step after open coding (Birks and Mills, 2015), in which a category is chosen to be the core category, and all other categories are related to that category. There were many categories emerging and after analysing 12 interviews, there started to be a sense of theoretical saturation as two core categories (Urquhart, 2012) emerged, Principles and Process. The next five interviews yielded very little few extra categories, although it seemed as if I was missing an important category in the data.

Glaser (1978) underscores the importance of the core category for grounded theory, namely the generation of theory occurs around a core category. Goulding (1998, p. 88) summarises the importance as follows:

'A core category pulls together all the strands in order to offer an explanation of the behaviour under study. It has theoretical significance, and its development should be traceable back through the data. This is usually when the theory is written up and integrated with existing theories to show relevance and a new perspective. (...) According to Glaser (1978), a core category is a main theme which sums up a pattern of behaviour. It is the substance of what is going on in the data'.

So far, two core categories, based on selective codes, emerged from the analysis. For the following three interviews and continuing to compare and contrast with earlier models I had a theoretical insight (Glaser, 1978; Birks and Mills, 2015). I began a process of abductive inference, considering all of the theoretical reasons for the data that I had found, forming hypotheses and checking them empirically by examining the data (Charmaz, 2006, p188). There was something going on with the attitude towards CD and different groups

had different attitudes. I went back through the transcripts and then began coding for the relationship between participants and CD and their attitude to the Principles and Process.

I found that the principles and process continued to emerge as core categories through the following interviews. Once I had in 34 interviews including all five of the Teaching and Learning Leads, I started to group the transcripts into programme teams and institutions and new categories emerged that had been present in earlier analysis but that I had not yet noticed as core to the problems of CD for this group of individuals. This was the category of Alignment and brought the other core categories into a meaningful model in that that there was an aspiration across all participants to embody a set of principles and to follow a process but then there was the issue of whether or not individuals and teams were able to align their behaviours to these aspired principles and process.

In stage 3 of my data analysis, I reengaged with the data that was concerned with understanding this core category of alignment.

4.4 Summary

This chapter has outlined the methodology and methods used in this study. A qualitative, interpretive strategy was employed; the process of selecting the sample and the ethical considerations that guide the research are identified and outlined. Data were gathered over a three-year period from four different higher education institutions with three significant gaps in the research journey due to personal circumstances. The interviews were recorded and transcribed to provide text for analysis through coding and

categorisation (Birks and Mills, 2015). Explanations and the model that emerged are grounded in the data (Glaser, 1978).

Chapter 5: Findings

Overview of the Chapter

This study has two kinds of findings. The first are empirical (5.1), where the three key themes that emerged from the data will be explored - the principles and processes underpinning CD, and the alignment between team behaviours and those principles and processes in HE. The second is methodological (5.2), where I uncover the skills and processes that emerged about how I employed CLI as a research tool within this study. Both sets of findings were uncovered simultaneously and iteratively but are split into empirical and then methodological for ease of reading.

5.1 Phase 1 CD Findings

The initial two core categories that emerged within this study were CD principles and CD process. The final core category of alignment, came from reengaging with the first round of interview data, and as a consequence, utilising the second round of interviews to explore what was the difference between those who were acting the way they wanted to in relation to CD and those who didn't or couldn't. These three themes became core categories, relating what people said was important in CD (principles) what they said they should be doing to enact those values (process) and then whether or not their behaviours aligned with what they thought was important (alignment). In the findings there are differences between those teams that were happy with the alignment between principles, process and their behaviour and those teams who were unhappy because they were misaligned on one or more subcategories. Of the 11 programme teams utilised within this study 54% (6) believed they were able to fully apply the CD principles and the CD process with 27% (3)

missing one or two principles or stages in the process and 18% (2) missing three or more principles or process stages. Three participants, one teaching and learning lead, one programme leader and one programme team member reported that CD for them was misaligned on seven or more subcategories.

These themes are presented in the next three sections, each taking a different core category. Figure 5 below shows those three themes:

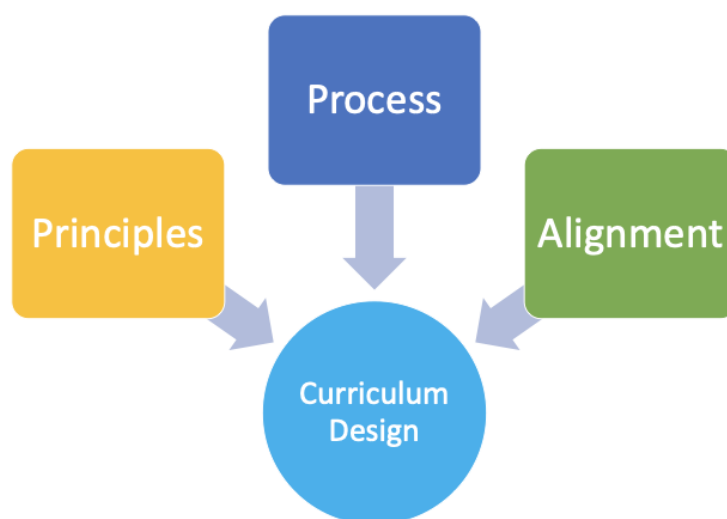


Figure 5: Model of Curriculum Design in HE

5.1.1 Principles

The first core category is principles, and the subcategories that need to be woven throughout the CD can be seen in Figure 6, these will be explored in this section.

CD Principles

Keep student at heart of process	Appreciate Colleagues	Make time to reflect & Create	Synthesize theory & practice	Be Congruent
<ul style="list-style-type: none">• Student experience from prospectus to graduation• Space assessments from student perspective• Build independent learning skills	<ul style="list-style-type: none">• Ensure all voices are heard• Value academic and non-academic contributions• Lead a culture of openness and feedback	<ul style="list-style-type: none">• Programme Teams need to make time for CD• Institutions need to make time for CD• Value T&L as much as Research	<ul style="list-style-type: none">• Research Industry and academic• Balance researchers and practitioners• Build in early opportunities for synthesis	<ul style="list-style-type: none">• Have a design for CD• Make design process congruent with course outcomes• Align each endeavour with overall course outcomes

Figure 6: Curriculum Design Principles with subcategories

Out of all the sub-themes, keeping students at the heart of the process was agreed upon by almost every participant irrespective of their level within the organisation. The emphasis was ensuring that the student was uppermost in the minds of those designing the curriculum. It was not about 'lecturers bringing in their favourite research modules' but about finding out what students need and want and what industry needs from students.

The teams researched what was needed by employers and by the university, as well as what was wanted by alumni and current students and, having combined this knowledge, they imagined their ideal 'end product'. There is also agreement across these research subjects that the curriculum is there to create graduates skilled in critical thinking, with desirable work skills in their chosen field. These seem to be the two key foci for the output of the curriculum. Working from the end backwards, they imagined the students experiencing their curriculum journey connecting the kinds of students that their courses attracted with the kinds of students they wanted to be known for producing. One participant said that they utilised the 'perspective of 4 or 5 diverse students' to help them keep different kinds of students in mind and to 'reduce their own bias'.

'We heard from all these voices ... we wanted to be focusing on the students and their experiences, and their learning, and their outcomes.' (Programme Team Social Science)

One participant who worked at a senior level talked about what could happen if the student was not at the heart of the design.

'So you have very single minded unit coordinators thinking about what they want to do in their unit, in a silo to what's happening in the rest of the course

and students experience a course rather than a unit and they will notice things that create dissonance.' (Teaching and Learning Lead).

The findings indicated that the curriculum is a complex puzzle and that the design needs to develop skills from arrival to graduation.

'Our job is to get them from where they put simple pieces together, able to create a 50-piece puzzle to where they can complete a 5,000 piece jigsaw for their final dissertation.' (Programme Leader, Social Science)

When planning the student journey, assessments were a top priority according to the participants. Assessments forced students to 'synthesize knowledge' and to be 'making links across modules' and over time. With the student at the heart of the process, the design meant assessments were spread throughout the course, with variety to ensure that different skills would be developed, and student needs would be catered for.

In terms of a pathway through the course, areas of high and low stress in relation to assessments were discussed, with a key element being how these are staggered those so that not everything is in at once

'This is not just a matter of making the assessment fit the content, that is part of it, but we also have to be thinking again about the students. What kinds of assessments suit mature, part-time students with children?' (Programme Leader, Education)

A third aspect that points to the principle 'Keep the student at the heart of the process' is taking into account that at the start of their journey, students need more support (e.g. with study skills) than they do as the course progresses.

Over 50% of participants spoke about the need for 'scaffolding'.

'You hold their hands tightly in the first year then let them go.' (Teaching and Learning Lead)

'We can see that evolution or that growth of skills from the basics or core skills at first-year level and broadening out to the acquisition of more specific skills at Level 5 and 6.' (Programme Team, Social Science)

The participants discussed how the curriculum is designed to enable the students to develop independence. Participants suggest that tasks and assessments should demonstrate the move from *'bright young mind to independent critical practitioner'*.

'I take them on that journey moving them from maybe quite dependent at the beginning, to much more independent and ready so that they can then hit the ground running.' (Programme Leader, Education)

Creative assessment design forces students to demonstrate that they are using these skills of independent research and collaborative working.

'I started it off as being a way of trying to get students to take responsibility for their own learning. Students for far too long have wanted to be spoon-fed and so what I wanted to do very early on, is to get students to try to take responsibility and to find out information on their own.' (Programme Leader, Science)

For some teams there is a discrepancy between the micro and the meso purpose of the curriculum, in this case prioritising retention over independent critical thinking.

'There's been a dumbing down of higher education in terms of assessment... You can get away with having programmes without any exams... sometimes they have multiple choice exams and ... inevitably you get better retentions.' (Programme Team, Education)

The second sub-theme moved away from a focus on the students' needs, to paying attention to the staff that develop the curriculum. Staff relationships were reported as being essential. Of the participants who were happy with their CD process, 70% of them, repeatedly spoke about luck. For example, one team member said, *'We're really lucky in this team'*. By exploring this concept of what it meant to belong to a lucky team further, what emerged was the idea of professional appreciation where ideas were welcomed and never criticised.

'It is complex putting on a course. I mean you can only do it well you know, if every person's contribution is valued.' (Programme Team, Health)

'It's a supportive team, it's an encouraging team and I think it's a team that respects the abilities and the professionalism of each team member.' (Programme Team, Social Science)

Lack of appreciation was highlighted by the participants who were not happy with the CD process they were involved in. They lacked a common goal for colleagues to appreciate their diverse contributions.

'Universities are notorious at bringing together groups of individuals and they're called a team but actually they have very little to do with each other and don't really have any shared sense of purpose.' (Teaching and Learning Lead).

In terms of voices inputting into the curriculum, participants talked about the importance of this coming from both academic and non-academic staff, linking back to the idea of appreciation for others.

'We've got a fantastic programme administrator and ... she's so good at her job and so skilled at her job and ... she's got loads of years' experience. The students know her. They can come and talk to her and she'll sort things out ... she can be so positive for the student experience because it's all that underpinning stuff, it's not just about going to the lectures.' (Programme Team, Health).

To foster reflective practice and critical thinking, all those involved in CD who said it was working, spoke about being open to feedback, new information and learning. The participants at all levels in this research cited feedback as vital to quality design.

'We looked critically at ourselves and whether we were able to teach a course like this, whether we had the skills or the resources. We were our own best friend, or critical friend.' (Programme Leader, Social Science).

This openness and feedback were cited as being important before, during and after the design process and feedback is taken during and after delivery.

'In terms of the curriculum process, it doesn't finish with the delivery because we evaluate the unit, after it's been delivered, if it's a team effort.' (Programme Leader, Science)

'The willingness to cross-fertilise has got to be both a true acknowledgement of other people's skills and knowledge and the value of it but also a willingness to

accept your own lack of skills. I think in some ways those two things are very reciprocal. If somebody is acknowledging your expertise in one area it becomes easier to acknowledge your failures in others.' (Programme Team, Health).

In those teams that were least happy, they spoke about people working in silos and about one or two people doing all the work and the rest leaving them to it.

'I do the donkey work.' (Programme Leader, Health)

The final aspect that emerged in this sub-category was around leadership with this element being the one aspect that could pull the rest together.

'She is really authentic. She has always got time to, you know, to listen to you, to provide advice. She will admit when ... she's forgotten something, when she hasn't done something, when she's done something and it wasn't quite right. And that sets a tone for enabling other people to do the same.' (Programme Team, Health)

'The challenge in programme leadership is that sometimes it is just given to somebody and they very rarely have a lot of autonomy. But if they apply for it then they are seen as, "Well, that person is the [Programme Leader]" so it's a strategic leadership role rather than just a job they're trying to hand out".' (Teaching and Learning Lead)

Appreciating one another and making sure everyone is interested in other team members' contributions is not a simplistic process due to the many conflicting demands within HE.

'It's quite a complicated jigsaw because we've got things like the subject benchmarks so we've to make it

work with that. We've got industry saying, "We'd like this, that and the other." We've got areas of expertise from colleagues; people always want to use their area of expertise.' (Programme Team, Social Science)

The fourth sub-theme was the extensive time required for good CD, alongside the issues of job role and work focus. Three quarters of the participants mention being time poor, and many say that although a university is supposed to foster reflective, critical thinking in students, there isn't time allocated in workloads for staff to do that thinking themselves.

'In my experience developing a curriculum is not something that is built into your workload; it is something that you do on top of your workload.'
(Programme Lead, Education)

Participants noted that if they need to create programmes that support students to become effective critical thinking practitioners, then the design process needs to be given time and attention by those involved, to do that effective critical thinking. This tied in with the congruence sub-theme, that they needed to demonstrate that which they wanted the students to emulate.

'Sometimes sitting and thinking and reflecting is a very wise use of time, but there's not that time, and it's a shame really because reflection is key to professional development.' (Programme Team, Science)

'I think greater discussion across the university, or even faculty level or school level, would help or could help provide a richer curriculum. But I think, at the end of the day, the barriers there are probably time. We're all strapped for time and resources, to be honest'. (Programme Team, Social Science).

A solution to the time issue offered by participants was about leaders actively making space to meet and design the curriculum in a schedule where most staff could attend. The programme teams most positive about CD met regularly and made time in their schedules before deadlines became urgent.

'Every Friday, the meetings are there, they are timetabled and protected so if anyone tried to schedule something, they had to work around it.'

(Programme Team, Social Science).

Siloed roles in the University system that separate staff also add time-related challenges.

'You've got your high-flying researchers you would like to do research and you would like your students to be taught by those researchers, but their timetables are much more complicated because they might need to go to a conference to present some work or to go out and do the research work and therefore how do you timetable them in.' (Teaching and Learning Lead).

'Part time staff add to the complexity for course leaders.' (Teaching and Learning Lead).

Most participants mentioned in interviews that they felt that competing demands of the sector meant that prioritising CD was more difficult. Staff who said they struggled to find time themselves or to get their teams to prioritise CD said that if a department values and rewards research over teaching and learning, this sets up a culture where staff will prioritise and promote their research over this aspect.

'A lot of them are very research focused and therefore couldn't really give a damn about the teaching, as long as it's actually minimum.' (Programme Leader, Science)

'We're still a long way off from getting that parity to say, "Well actually, your discipline research is really important, but actually we also think it's important that you understand the process of learning and teaching."' (Teaching and Learning Lead)

In one institution, interviewees gave a clear reason why teaching and learning needs to be prioritised and is:

'For us our income comes from teaching and learning, from the undergraduate tuition fees. That is where the bulk of our income comes from. Our research income in comparison is minute, unlike Russell Group Universities where it is the other way round. So we've got a culture where learning and teaching is prioritised.' (Teaching and Learning Lead)

The final sub-theme relates to the synthesis of theory and practice in a designed curriculum, supporting students so that they see how to apply their learning and they can critically reflect on their practice.

'I teach a little bit of the background context like a few kinds of key concepts and just introduce them, and then immediately we'd start applying them to clinical data and expand on the theory as we went along in that way.' (Programme Team, Social Science).

Participants talked about the need to link theory and practice throughout the design process.

'We look externally and internally for information and for industry specific feedback.' (Programme Lead, Social Science).

'We have found that teamwork is a sought-after skill in [industry] and therefore this is now a new core skill in our course.' (Programme Team, Social Science).

This synthesis needs to happen at different levels, as it is not just about the content, it also relates to the 'why' and 'how' of the curriculum is taught. Balancing the academic and the industrial and managing the latest 'trends' in curriculum is mentioned. Participants talked about using the latest theories in teaching and learning, not only the latest theory about whatever the subject matter is.

'There are a lot more mechanisms we can now use, such as flipped classrooms and practical sessions. Much more thinking about experiential learning as opposed to just theoretical learning.' (Programme Leader, Education).

Using the contacts of ex-industry staff to keep in touch with what employers want, and understanding what key technological advances have been made in industry were highlighted as ways of synthesizing the theory and practice.

'We consider our stakeholders, current students, past students who've gone into the industry, past students who didn't go into the industry and contacts that we have in our areas of specialism [people we worked with in industry].' (Programme Lead, Social Science)

Some staff say that when institutions value research over teaching and learning this makes for an unbalanced curriculum. If the aim is for students to synthesise theory and practice, then in order to be congruent with this, researchers and those with industry experience need to design the curriculum together so that those two worlds can be brought into one.

'I am slightly in awe of my colleagues who have all these research credentials and lots of publications and PhD's and so on, but whenever the topic has come up they're in awe of my clinical expertise and so I think

that's where the mutual respect comes from.' (Team Member, Health)

'An inability to bring in others, if you feel there's any holes, hinders curriculum design.' (Programme Leader, Social Science)

Suggestions were made by interviewees about how students might be supported to link academic knowledge with 'real life data' or 'case-studies' from the start.

'If we're driving towards a reflective practitioner, they need to know fairly early on what that is, and why it's valuable.' (Programme Team, Health).

'It wasn't a case of teaching all the theory first and then all the clinical application later; it needs to be integrated from the start.' (Programme Leader, Health)

Assessments can be used to synthesise knowledge and practice across modules, between subjects and across the years. This needs to be a whole team approach not just focused on individual modules.

'For each module there is an individual component but there's also an overarching assessment that normally happens at the end of the semester and it pulls the learning together, so we don't have silos.' (Programme Team, Social Science)

The third sub-theme focused on congruence, which in this study is explained as being agreement or harmony between one aspect of CD and another. One manifestation of this is the desire for congruence between the behaviours modelled by staff and the desired outcomes for students.

'Having staff model what they want the students to be. So having staff that have an HEA fellowship that's enabled them to be reflective, critical thinkers then

their teaching models what they want the students to do.' (Teaching and Learning Lead)

'They [staff] are passionate about their subject areas. There's passion there and we want the students to be as passionate about it as we are.' (Programme Team, Science)

The findings demonstrate a desire for congruence between the CD process and the values of academia across the institution.

'This is an academic institution and it [curriculum design] should be research and evidence-based.' (Programme Team, Education).

'We're an academic unit so we need to be looking at data and information and what employers want and what the most recent literature says, looking at literature and research around different areas to inform our thinking.' (Teaching and Learning Lead).

The attributes and behaviours that staff state are desirable in the CD process came out clearly in the interviews, but this may not happen in practice. Participants at all levels talked about how a lack of congruence in the way that their institution treats CD can result in incongruence in the way the programme team engages in the process.

'They don't have the time to share, it almost seems like an indulgence really to think about those questions about what is the purpose of students coming to university, having a university experience rather than a kind of training experience. In a really pressurised environment where it's all about get this done, get that done, get this done and I think that's what suffers, really, ultimately, is that suppression of ideas and sharing of ideas.' (Teaching and Learning Lead)

'They [Quality Assurance processes] mitigate against real critical thinking about teaching and learning - what you want your programme to do, who your idea of the learner is.' (Programme Team, Education)

50% of participants said that each activity within the curriculum should align and be congruent with the course outcomes, the subject research, the ideal graduate, teaching and learning theory and with industry practice. This alignment can be designed creatively into the curriculum and help with the synthesis of theory and practice.

'I approached the business school and asked them if we could put something together that would take a business unit and design it for our students and so what came from that was an example of cross-faculty collaboration.' (Programme Leader, Science)

There was clear agreement between different teams across different institutions on what constituted good practice. When individuals said they were engaged in CD that they were proud of, these were the principles they said were being acted upon. Those teams that were not happy with their CD said that these were the principles that should be applied.

For each interview I created a CD map that illustrated the principles and allowed a process to emerge. For each team, a group map was developed amalgamating that individual's ideas. For each institution, an institutional map was created to allow an opportunity to compare maps between institutions and teams.

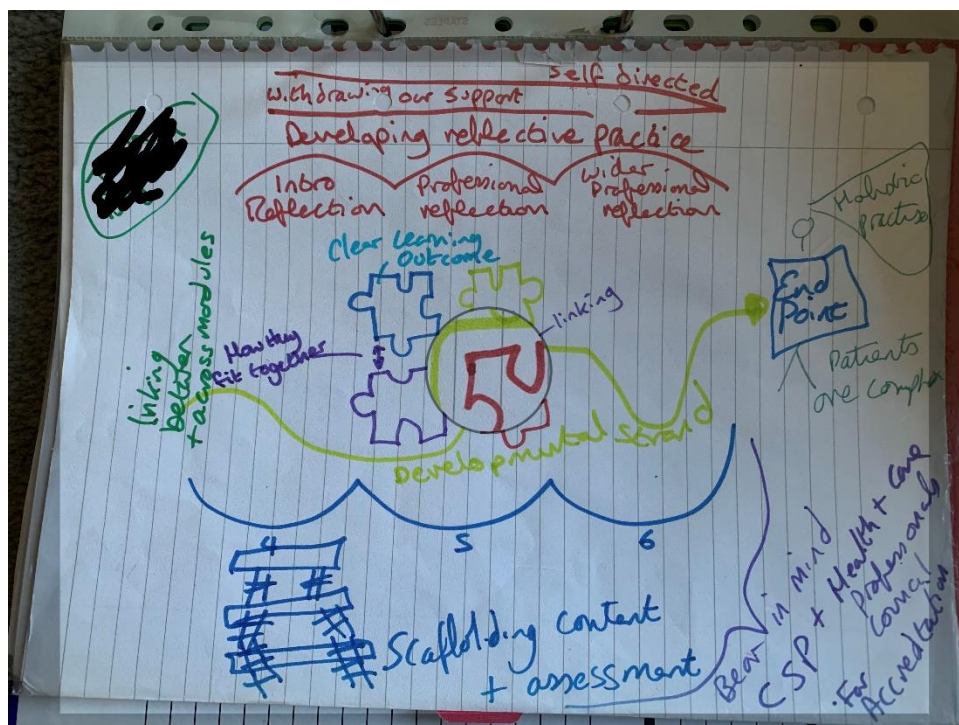


Figure 7: Draft Map/Model of Curriculum Design from the viewpoint of a Programme Leader

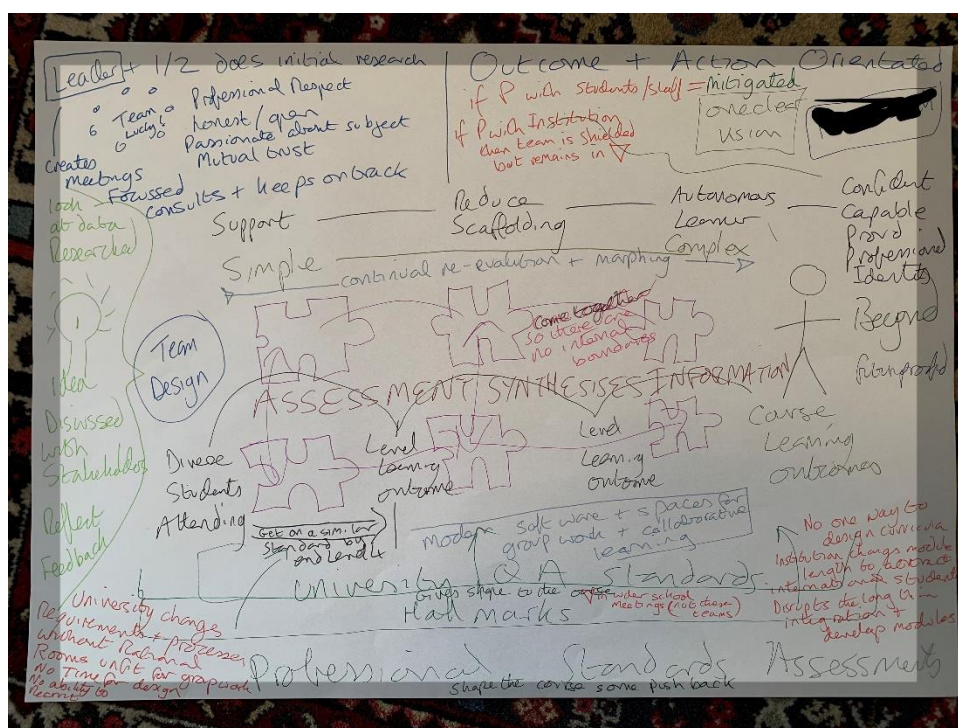


Figure 8: Whole Programme Team map - note the jigsaw metaphor was used by two out of three team members

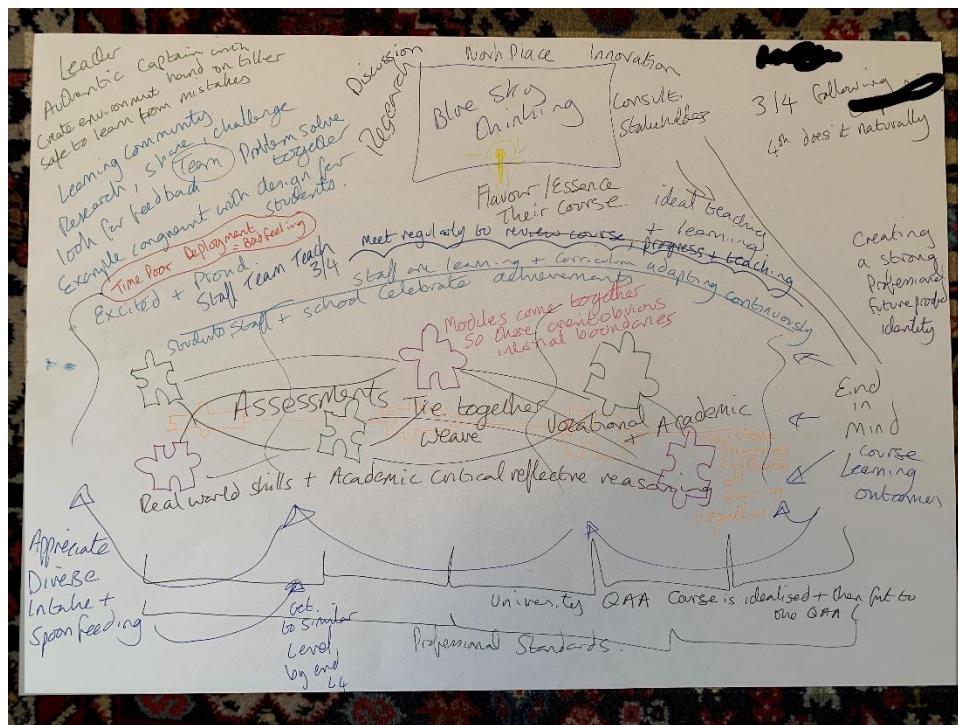


Figure 9: Institutional Map amalgamated into a single map utilising in vivo codes and metaphors

5.1.2 Process

Figure 10 shows the core theme of process and underpinning codes. Each stage of the process is described in the sections that follow.

CD Process

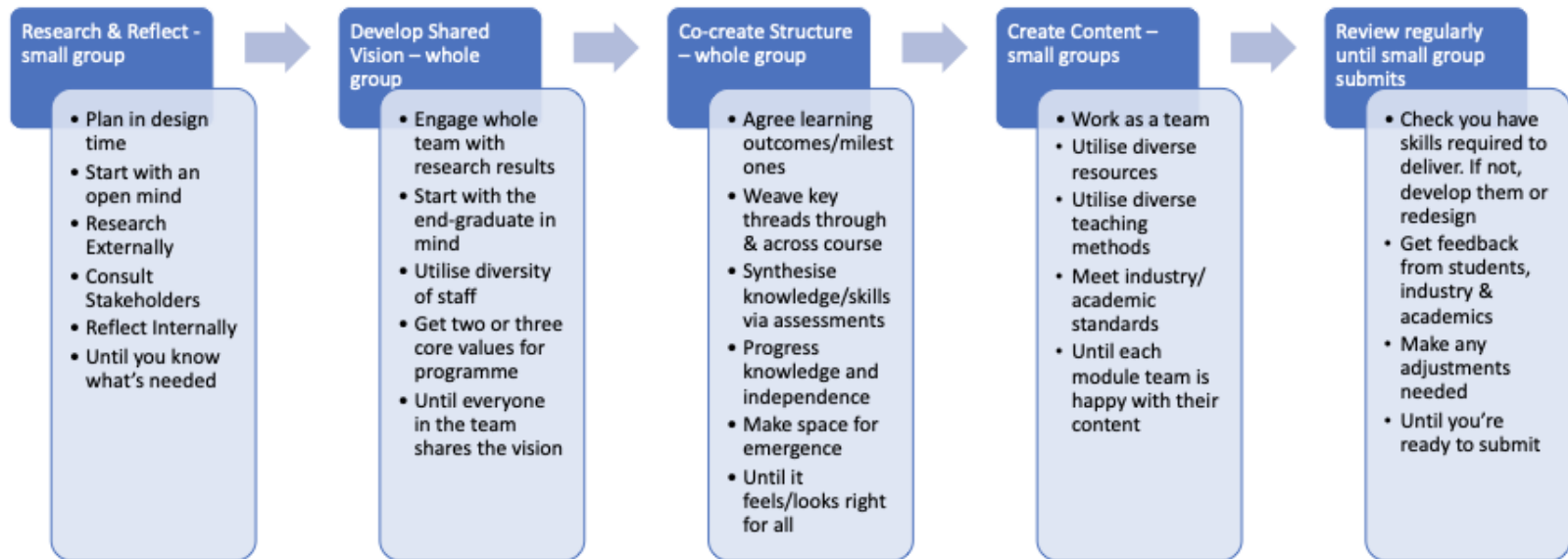


Figure 10: Curriculum Design Process with subcategories

While participants indicated that the principles in should be in operation all the time during the design and delivery of the curriculum, there was also a specific process to the CD that emerged from the interviews.

The start point is around research and reflection. It is important to note that there was a distinct division in the study between teams that were happy and motivated about the process, and those that felt that to engage in CD was a burden and a difficulty. Teams that are happy with CD talk about engaging in the research and reflection and they do this before they start redesigning their courses. Having an open mind and a willingness to change was seen as key, with planning starting early to mitigate colleagues being time poor: *'It'll be 18 months in the making'* (Programme Team, Health).

Where CD was not working well, time paucity and unwillingness to change were seen as problems in engaging the whole team in the process: *'The priority was on getting things ready on time rather than on consulting the team'* (Programme Team, Social Science).

Those participants not happy with the CD process in their institution saw this research as being what ought to happen but didn't:

'In my experience [consulting with stakeholders] does tend to be pretty much in theory. Students who have gone through existing courses, employers... although...that really is quite token.' (Programme Team, Education)

'You tend to then lean on what's already been done. The standard way of working was an element of cut and paste. Having sat on a lot of programme approval events the result is that you get a lot of curriculum that is quite poorly thought out.' (Programme Team, Education)

The second step in the process is around the development of a single shared model or vision for the curriculum, something that the whole team agrees on. This meant staff being open-minded, moving away from what they had done in the past and engaging the whole team with the research that had been undertaken.

'We didn't know then how far reaching the changes would be but we wanted to look at everything. See what we had and work out what we wanted.' (Programme Lead, Social Science)

One team member tells how the wider team needed to understand the *'why in regard to the proposed changes'*:

'It's a massive amount of effort. The people who are doing it have to be convinced that you need to change ... not everybody was completely on side with it but I think more people are now.' (Programme Team, Social Science)

The findings indicate that working together encourages dialogue between staff members, and this would *'ensure that the idealised graduate is one that they all sign up to.'* Using industry specialists and academic staff means that both sides of the curriculum are advocated for.

'You'll be looking holistically at the whole programme. Are we too practical? Do we need some more academic? The skills of the staff I think are really important.' (Programme Leader, Social Science)

Those teams who say they are happy, suggest that they *'distil the essence of the course'*, *'get one coherent story'* and *'deliberate'* about how they would *'like this programme to feel'*.

'Once we've got our core theme and our milestones then as we design assessments or modules we can ask 'does this fit the essence that we want for this course?'
(Programme Team, Health)

Once the shared vision for the curriculum is agreed, then the team can co-create the structure which is the third stage in the process. From the idealised graduate and shared vision, the team agrees course learning outcomes and then works backwards covering what students need to have learned by the end of each level in order to integrate the required skills/knowledge. Teams say that all other learning outcomes should feed into the course learning outcomes. This helps to create the coherence of the programme.

'What are the course learning outcomes? ... Level six learning outcomes should exemplify the overall course learning outcomes ... progress those year learning outcomes down to the level five learning outcomes, and then down to the level four learning outcomes, and that's what we've got ... vertical and horizontal integration.' (Programme Leader, Social Science)

When not done like this it *'can be a case of fitting together pieces'* and there can be a lack of agreement which can cause issues.

'While there is always a programme leader and there's module leaders, if the programme leader was expecting to do things in isolation, then you don't get your constructive alignment. It doesn't work. Because you have individuals doing things that don't always fit together.' (Programme Leader, Education)

Where teams have not had or have not made the time to develop one shared vision and one person does the *'donkey work'* this can lead to a sense of injustice and demoralisation in the

team. The leader of one team who had experienced intense time pressure blamed other team members as being *'ambitious to the detriment of others'* as well as *'time frames and everyone being on leave means everyone's asking us to tell them what to do.'*

In teams where the design process was felt to have worked well the participants talked about creating one coherent experience for students.

'We wove skills across different modules, had cross module assessments. We got rid of isolated modules and ensured that everything seemed to be a part of a whole.'
(Programme Lead, Social Science)

This of course does not always happen which can result in a *'fragmented curriculum'*:

'They may be delegated a module to write and that's fragmented and where the lack of coherence can come in. Course teams aren't working together.' (Teaching and Learning Lead)

This is the stage when creative assessments are designed to connect and consolidate knowledge and skills needed within industry.

'We looked at the skills we wanted our end product to have and how to weave those skills into the other areas of knowledge through assessment.' (Programme Leader, Social Science)

Alongside the assessments was the notion of knowledge progression and developing independent learning and practice skills for the students. Those teams who had a process for CD spoke about each year moving students through different levels.

'We worked backwards from our vision of our end-product, what they needed at Level 6, what we needed to have covered and where they needed to be by the end of Level 5. What they needed to have done in Level 5 to get them to that level. What they needed in Level 4 etc. Then the module leaders and their teams went off and created modules that fulfilled those needs.' (Programme Leader, Social Science)

This progression may be subtle:

'In that first year you're quite nurturing, you'll really engage with them. As they move into the second year there are points where you definitely have to see them, but you're there to go, "Well that's great, you're doing that well". As we're moving through, we start just looking at core pieces for them and saying, "No, you have these skills, we've given you that feedback, you need to now judge that feedback yourself and develop yourself.' (Programme Team, Health)

But by level 6 teams expect students to be more self-organising:

'I understand the students would perceive an assessment overload if they are doing six units and all of them have a coursework deadline about halfway through the year but actually if students are taking responsibility for their own learning, they know all of those are due then, they don't have to wait until that week to work on their assessment it's a balancing act.' (Teaching and Learning Lead).

As well as setting expectations for students, staff teams said it was important to build in vagueness and space for things they couldn't know until delivery started. This is a

way staff have of designing in feedback and reflection and the opportunity to act on it.

'There's an end goal; the way we get to that is different every year, it's very fluid. We sort of drop things that we don't need to do and pick up things that we need to do more of for this particular cohort.'

(Programme Team, Education).

Especially in the first year after revalidation, there was a need to make space to address any unseen problems.

'We needed to have that flexibility in our curriculum... so we can change our assignments without necessarily going through lengthy processes. That flexibility was vital so we can respond quickly to problems and issues.'

(Programme Team, Social Science)

Some teams seem to have built-in flexibility to respond to new information:

'We'll have something up our sleeve so that if they really have got this and they're secure in this, we can then, during that lesson, move them on to something else.' (Programme Lead, Education)

Before this structural stage of the CD process is finished, there seems to be something intuitive that happens across teams that is described in different ways and with different metaphors but can be distilled into; the curriculum looks/feels about right.

'It's bringing all those together and then looking at them to make sure that they complement each other, there is no overlap, there is a good diversity... there're no holes there.' Programme Team, Science)

'That's probably the point at which we feel, yeah, we've done it.' (Programme Team, Social Science)

When there isn't teamwork involved in CD and one individual leads it, they still have an intuitive sense when it is done but this is an individual rather than one that connects a diverse team.

'When I wake up in the morning and I don't think 'Oh I've forgotten something' then I know the course will work.' (Programme Leader, Health)

When the team agrees that it feels right, it is time to go away and create the content. If the team doesn't all agree then the leader will, as one participant said 'draw a line in the sand' and the team moves on. The consensus across the participants was that ideally the teams should agree, even if there is compromise.

'It's a win, win thing. There's compromise, of course, but we feel we own it and [it's] quite important to have that something you own.' (Programme Team, Science)

The penultimate stage in the process is about creating the content. The suggestions were that this is ideally done in pairs or small groups but for smaller courses may be done by an individual. What seemed to be important was for the team to keep their shared vision in mind, work together and then share the ideas.

'It's about throwing ideas into the melting pot and swilling them around and then pulling them out into something that we all feel is contributing to the overall curriculum.' (Programme Team, Social Science)

Alongside this, the key messages in this stage were about resources, skills and teaching approaches.

'We looked critically at ourselves and whether we were able to teach a course like this, whether we had the skills or the resources. ... We didn't want to create

something that looked good on paper but wasn't feasible to deliver.' (Programme Lead, Social Science)

Key to content development is making sure that materials are up to date and that the curriculum has experts leading the way.

'A colleague who's a doctor recently joined us. So he, together with another member of staff, has developed a unit between them that's half practical, half theoretical, and he's very much driving the agenda of the academic side of the course.' (Programme team, Health)

The participants on courses with external accreditation recognised that students come onto their courses in order to further specific careers and need the curriculum to accredit them:

'It's not just the academic understanding of the subject area, but also the professional body's statutory requirement or equivalent.' (Teaching and Learning Lead)

By working together in this way, these teams say that they know what each of them is doing and why. Those teams who are not following a shared approach say that it shows in the experience of students.

'Within a course team what you want is a consistent message for students, a consistency around the ethos of the course, the identity of the course, the rationale around the course, why you're doing certain things. And where course teams don't have agreed philosophy then you end up with conflict. One member of staff says one thing, another member of staff says another thing, and students, they pick up on those conflicts and on those confusions.' (Teaching and Learning Lead)

5.1.2.1 Small team review and submit

Once the module teams are confident that they have met the requirements the design process can move onto the final stage of the process: review. This is where the whole team, or the smaller leadership team, reviews what they've created and gets feedback from stakeholders. Key elements at this stage were found to be again about resources, this time, do you have them, and can it be delivered?

'When you have thrown ideas around and had that process of discounting some, either because they can't be achieved within the resources that we have, or the timetable constraints, what's left are those other priorities that we know we can deliver.' (Programme Team, Social Science)

When these questions have been answered, the design then needs to go out for wider feedback from *'as many stakeholders as possible but definitely, students and industry partners'*. The findings suggest that this is usually led by the small team although all colleagues may be involved. Those teams that have not had a positive experience of institutional support during revalidation still advocate for the CD principle of the institution valuing teaching and learning.

'There should be this discussion going on all the time about, "What is teaching and learning? What do we expect it to consist of? What's the kind of values we've got?" But that kind of discussion, it's not there in the approval process.' (Programme Team, Education)

After submission, the teams talk about this being the beginning and that the real learning starts with delivery.

'There is never a situation where a curriculum is developed and it stays there. It's an ongoing, fluid,

organic process which has multiple contributors.'
(Programme Leader, Education)

'It moves from 2D to 3D and then you see how it all starts to kind of join together and just as you're delivering something, I'm thinking of analogies of architects plans, knowing you've got the 2D thing and then you've got the 3D and it's not until you live in the damn house you kind of go, "I wish I'd put my bathroom there."' (Programme team, Science)

This CD process was described by those who were engaging in it and alluded to by those who were not. There seemed to be a consensus around what people should be doing and for the most part, want to be doing. So why were some teams reporting that they are doing it and some are saying that they are not doing it and blaming the institution or their colleagues or the students or themselves?

As discussed in section 4.3.3, after the 15th interview it became clear there was a missing piece in the emerging model. The core CD principles and process that had emerged so far seemed to be espoused by the majority of interviewees and agreed upon across multiple levels and different institutions. Why were some staff doing what they wanted to do around CD and others not?

Following a theoretical insight, the transcripts were re-coded for orientation towards the espoused principles and process. From this exploration, a third core category of Alignment emerged: Were the individuals able to align their own behaviour and that of their colleagues with the principles and process that they aspired to?

In the institutions who took part in this study, teaching and learning leads were entrusted with the CD process across the institution. The programme leads were engaged in

directing the CD process and collecting and processing the information to submit. The data indicated that some individuals and teams were able to do the kind of CD they wanted to do; their behaviours were aligned to the principles and processes they espoused. Others were not and were unhappy with aspects of their CD process as a result.

5.1.3 Alignment

Through examining those statements that indicated alignment and those that indicated misalignment with the espoused CD principles and process, three main areas emerged as ways in which participants were attempting to create the conditions for alignment. Some were doing it as individual leaders; others were using their professional ethics to align around and to drive their CD and others were attempting to align from an institutional level.

Alignment

Individual	Professional Culture	Institutional
<ul style="list-style-type: none">• Leaders create a design for CD• They demonstrate the CD principles• They create the conditions to support the CD process• They take responsibility for creating congruence between the programme design and the team behaviour	<ul style="list-style-type: none">• The team meet as an academic team the way they would in the workplace.• They demonstrate the CD principles• They take responsibility for creating congruence between behaviour in the university and behaviour in industry	<ul style="list-style-type: none">• Leaders create a design for CD• They demonstrate the CD principles• They create the conditions to support the CD process• They take responsibility for creating the conditions for congruence between Institutional design and Programme design

Figure 11: Curriculum Design Category: Alignment

Even when teams stated that they did not have institutional support for good CD, some individual leaders were able to create alignment between the principles and processes and behaviours.

'You will have someone who will lead but they're not the boss in a conventional hierarchy, they're a coordinator. They might say, "Meeting this time. This is what we're going to discuss." So you're setting agendas and things to keep the focus so it doesn't get too random, but it will be something because we're all coming to it as equals, I would say, in terms of what we're bringing to that table.' (Programme Team, Science).

A leader within the institution can protect a programme team from being interrupted by organisational processes and protect the CD process.

'What there is amongst the staff is a real sense of being lucky to work where we work with the amount of freedom that we have. The management structure here is hideous at the top but at school level we are still quite protected ... by our immediate Line Manager, who is very trusting.' (Programme Team, Education)

'I think [good CD] came from trust from the Head of School and having someone who is in control of a school actually trust you to do something and to not micromanage and tell you how things need to fit together, I think is incredibly valuable.' (Programme Leader, Science).

It was clear that programme leaders are key in CD planning. Good programme leaders fostered trusting relationships by being open to suggestions and taking on board feedback from

all team members. This developed a sense of openness and transparency.

For example, a programme leader may have been listening to all voices and demonstrating appreciating colleagues but they could also take a leadership role.

'There has to be somebody in charge with a vision, particularly if you have got a team where there is perhaps some disagreement about how things should be. ... "I hear all your viewpoints. And in light of all of that we're gonna do it this way." ... a line in the sand.'
(Programme Leader Education)

If something wasn't working, they took steps to change it:

'I took over something that wasn't planned. There was no year planning. No one knew what each of the modules were about. No one knew when each of the assessments were handed in. No one was celebrating or understanding the stories of that year. Whilst there was documentation on a shelf collecting dust related to learning outcomes and so forth, they weren't being articulated within that story of those courses. So I had to reiterate, "What do we want to achieve here?"' (Programme Leader, Social Science)

This leadership was noticed and welcomed by those who experienced the before and after.

'Our new leader is a breath of fresh air.' (Programme Team, Social Science)

And when this wasn't happening then the lack of leadership was clear and the impacts were clear.

'We asked two of the course leaders to give five minutes about an innovative thing they did in their course that should be applicable or of interest to the whole course

leader community and it was interesting because one or two of them who had perhaps been here a bit longer and aren't so interested in change said, "Well I don't see what that has to do with my course." (Teaching and Learning Lead)

A programme leader needs to have strong people management skills because in all four institutions they did not have line management or performance management of their team.

'So I'm academic support for three people but I'm not their line manager so ... I have no teeth in terms of if they're really underperforming.' (Programme Leader, Health)

But those whose behaviours were aligned, particularly those who had taken on a shared vision for CD, were able to do something to change the culture and to mitigate these issues:

'It's very simple management to be honest ... I had a team of six last year and 50% sickness, long term sick. I had one tutor who would deliver all the modules for one cohort in one year. This year so far, touch wood, by-the-way I'm touching all this wood round at me, you've got no sickness whatsoever.' (Programme Leader, Social Science)

Individuals, at different levels in HE, can foster the alignment needed for others to demonstrate the CD principles and carry out the CD process outlined in earlier findings. They actively create the conditions for this to happen or mitigate the problems that might be coming from the wider institution.

The Education and Health teams said they used their professional ethics to align the CD and delivery with what they aspired to and espoused as good practice. The quotes are made up of 12 different participants from four different

teams and are referred to as Health or Education plus their position in the team. This alignment wasn't led only by a single leader but rather a few ex-industry professionals coming together in the programme team and using their industry ethics or their personal combined professional ethics to create the cultures they wanted.

'Being in professional practice gives us a set of transferable skills.' (Programme Team, Health)

'We'll switch and change things and nudge things and move things around, and if content didn't work last year, we'll move it. I see that as a very school-teacher type of approach, but because so many of us come from that background, that is the way we work.' (Programme Team, Education)

They used the same skills and experience to create a culture of openness and feedback and demonstrate professional trust.

'It's having a dialogue with colleagues based on our experience and our professional knowledge. We work together; we collaborate on all the units within the department.' (Programme Leader, Education)

'I am confident that they know what they're talking about and so I wouldn't be so closely involved with the content.' (Programme Leader, Education)

They were driven by their desire to train critical, reflective practitioners.

'It's about getting that balance between the hands-on clinical skills as well as those clinical reasoning skills, that ability to critique and review the literature that's out there around practice, that ability to be thinkers for themselves, to be starting to kind of develop that autonomy in their own thinking

a little bit, their ability to review what's available to them.' (Programme Team, Health)

They were professionally interested in research and appreciated working together.

'It feels like there are a lot of great things going on in the course and I often say to my colleagues, we say to each other, "I wish that we could do the course and I wish that I could go to all their lectures."'
(Programme Team, Health)

'In part it comes from the fact that everybody has been in clinical practice, you'll have needed support from others in difficult situations. Whatever the situation is it could be you, therefore behave in a manner you'd like to be recipient of.' (Programme Team, Health)

Programme teams with a strong professional culture bring those cultural norms and practices to bear on the way they work together, design and deliver their curricula. Even when they don't have institutional support and don't talk about strong leadership, and even when they cannot follow the CD process the way they would like to, they refer to their professional practice, professional respect and professional ethics to ensure that they are taking steps to act in ways that are congruent with CD Principles.

In one institution, there was an attempt to align the institutional approach to CD through a university wide programme. Two of the teaching and learning leads said they had created the conditions that allowed for the principles and process of CD to occur as a natural by-product of the university processes. These two teaching and learning leads, from one institution, had a shared vision for CD and their institutional process was a mirror image of the process espoused in this data for good CD.

'There was a lot of early ownership in the draft writing between us and our deputy vice chancellor.' (Teaching and Learning Lead)

'If anyone is a programme lead or course director, it should be a clearly identified role and it should hold some esteem ... so we actually made the course director role a grade 9 role that people had to apply for.' (Teaching and Learning Lead)

There was one teaching and learning lead who was working with other school leaders, although without a single shared design for CD, who talked of changes that they were hoping to make.

'We're in the second phase of a portfolio review where we are looking at each course individually and all the data that we have available to us on that course.' (Teaching and Learning Lead)

Another talked of the problems they experienced in CD and what they wished was happening.

'We've incrementally sort of got slowly bogged down into teaching ways that we don't really want to teach, in spaces that are quite uninspiring, with staff who don't really want to be here and students who sort of want to be here but don't really want to be doing this in this moment.' (Teaching and Learning Lead)

And there was one who talked theoretically about what might need to happen but didn't talk about what they or their team did.

'From an institutional strategic level to a certain extent, we set certain priorities. That might be actually that we need to have a focus on working in the industry and employability. It might be that we need to

join up the relationship between teaching and research.' (Teaching and Learning Lead)

The teaching and learning team that had a design for CD ensured that there was access to research and time to undertake the reflection and planning.

'There's also a research group specifically focused around education and one of the streams is research in higher education.' (Teaching and Learning Lead)

'We have to provide, not just the framework upon which we process or progress that, but we also have to provide the time.' (Teaching and Learning Lead)

Those teams experiencing institutional alignment spoke about ways in which the institution was supporting CD.

'I think it's pretty rare for a Deputy Vice Chancellor to be involved in course development discussions, but we invited him along and he came along, three hours of his time on two or three occasions, which is significant for somebody at that level. He was using it to see what needed to be in place in terms of infrastructure.'
(Programme Team, Social Science)

Management responsibility was highlighted as a factor that affected the ability to design and deliver the curriculum.

'We didn't give them direct line management responsibility, but we gave them direct reporting responsibility. We wanted them to work very collegiately and build relationships that were meaningful, open and critical. There will always be situations where there are staff that just do not engage in that process. We wanted them to be able to report that and it be dealt with without them dealing with it.' (Teaching and Learning Lead)

A culture that was open to feedback and professional appreciation was also highlighted as a key factor.

'That culture comes from resourcing it. Building a real strategic priority to have excellence in our teaching staff.' (Teaching and Learning Lead)

'It's having staff model what you want the students to be. It's making sure you have a culture of building expertise in staff and within the institution.' (Teaching and Learning Lead)

The teaching and learning leads in the institutions where the teams state they are not happy with the way CD is being led, say what they'd like to have happen but not what they do to enable this.

'They [Programme Leaders] need a sort of community so that they can learn from each other.' (Teaching and Learning Lead)

'So what we would like is for course leaders to take that sort of data [module evaluations and NSS] and look at it and think about what that says about their course.' (Teaching and Learning Lead)

'There's plenty we can do to get it into the discussions and into our institutional agenda. I would love to see it happen over the next five years, to start building up to thinking that we're not just paying lip service to curriculum.' (Teaching and Learning Lead)

The attitude of the teaching and learning leads seemed to be reflected in the teams within their institutions. Those with a shared vision for CD seemed to demonstrate the CD principles, where the students are at the heart of the activity and teaching and learning is a priority.

'We had one of their [Teaching and Learning] team come and help us a bit with our blue sky thinking early on. She was able to come at it with a really detailed and in-depth knowledge of the pedagogy around it and helped us take our ideas and centre it around course design.'

(Programme Team, Health)

Those institutions without a shared vision who didn't talk about the actions they took had programme teams reporting that this was experienced at the design level.

'The management input seemed to go in slight, sort of, fads. The management never appeared to have a clear idea about what they thought good teaching and learning was.' (Programme Team, Education)

'The mind-set from the people that influence within the faculty ... is such that efficiency means lectures. It means doing things once to lots of people and getting it done, which is a massive retrograde step and it's not forward-thinking.' (Programme Leader, Science)

What seems important at an institutional level is that when individuals higher up in the institution act together to have a design for CD then the teaching and learning lead talks about what they are doing and why and can transmit this to their programme teams and leaders. They are also able to change policy accordingly. When individuals higher up in the institution don't have a shared design then their actions aren't coordinated and changes happen that are not coherent and this is also transmitted to programme leaders and teams.

There is a set of principles that leaders and team members advocate for good CD and there is a process that leaders and team members advocate as being useful to follow for good CD. In order for staff to be happy with CD, there needs to be

alignment between their behaviours and the CD principles and processes.

This alignment can come from different sources:

- When University leaders take part in the process of developing a shared design for CD, this can create alignment between the institution and the programme team leaders.
- Even if University leaders do not have a blueprint for CD, a programme leader may create the conditions for people to behave in alignment with CD principles and processes.
- Even if University leaders do not have a blueprint for CD and CD is not supported at an institutional level, one or two leaders within a team who have strong professional ethics and standards, can use these to create a culture of behavioural alignment to good CD principles and process - and CD can flourish.

This concludes the findings for the empirical half of this study. The next section shares the methodological findings that came from applying CLI to uncover a model of CD and to inquire into my own process before, during and after the interviews.

5.2 Clean Language Interviewing – findings from this study

Through the reflective journey of this study, I have been able to codify the tacit skills involved in the process of conducting a series of CL interviews in a research setting. I will use the metaphor of rock climbing for the way that I personally engage with this model.

5.2.1 Coding in-the-moment - a model for the tacit skills in CLI

I am calling the whole skillset, 'coding in-the-moment' and this skillset has four subcategories:

- A. **Tethering** - Aligning the purpose, the frame and the starting question prior to the interview. Staying tethered to these three plus the exact words shared by the interviewee.
- B. **Parcelling out** - Identifying key elements of each sentence, using these as in vivo codes and treating them like 'parcels' relating them to one another to form visual/spatial schema.
- C. **Navigating** - Having a range of suitable content-free codes to code in-the-moment - to inquire into, extend and build relationships between in vivo codes.
- D. **Modelling** - Using these content-free and in vivo codes, along with the purpose of the interviews and the visual spatial schema to build a model of this interview data to decide where to inquire next. Checking the model during the interview with regular repeating back and pausing.

5.2.1.1 Tethering

A key CLI finding that emerged while I was engaged in, and reflecting upon, this project was how various aspects of the CLI process fit together, in particular the relationships between:

- the project purpose,
- the frame that is given to participants and
- the starting question.

The first part of this model is about how I tethered myself to these three.

Metaphor Model for Tethering in CLI

When I am engaged in CLI, I am like an agile rock climber who is tethered to the top of a cliff face by a clear pin and I am at the bottom. The rock face is the data I'm collecting and the purpose for the interviews is what I am tethered to - i.e. the purpose determines the direction in which I am climbing and the only direction in which I can climb safely.

The purpose - including how I want to use the data following the research - helps to shape my starting point, the first question I ask my interviewees. As information is shared, I can begin to see and feel the shape of the specific terrain belonging to an individual interviewee all the while climbing only within the terrain of my purpose.

It is crucial to align the purpose, the interview frame, and the starting question. This tethers my attention and allows me to tether the interviewee's attention.

Using the purpose for this interview as a tether

The overall purpose of using interviews for data collection is to gather information from key informants who have personal experiences, attitudes, perceptions and beliefs related to the topic of interest (Lincoln and Guba, 1985). Prior to embarking on an interview, the overall purpose for the interviews and how the data will be used need to be clear. The interview process and the specific interview method should be congruent with the purpose.

In this study, the purpose was to uncover the current mental models of those involved in CD with an idea that uncovering their thinking might enhance the practice of those embarking

on CD in the future. During the interview process I was constantly asking myself, 'Do I know enough about what this person has said to know what I can 'do' with the information?'

Framing the Interview

According to this 'tethered to a rock face' model, the way I framed an interview also belongs to the dataset; it is part of what the interviewee was responding to and so it has shaped the 'rock face' that they presumably were scanning for experience to share with me. My framing this included:

- The information I sent to interviewees by email in advance, which included the purpose for the interview, the reasons behind the research and how their data would be used (see Appendix I)
- What I said to the interviewee just before I asked the starting question, such as, 'Is there anything you'd like to know before we begin?' followed by the content of my answers to their questions. In this study the starting question was 'Curriculum design, for you, is like what?'

These frames were instrumental in engaging the participants and in training their attention to where I wanted it to be.

Starting Question

Having got clear about my purpose and what the information would be used for, and having framed the interview to the participants, it was important that the starting question was aligned and congruent with these. When a researcher chooses what aspect of an interviewee's experience to explore, the initial question can make all the difference as it sets the direction of the first part, if not all, of the interview. For example, in this piece of research, if I had

been interested in uncovering people's knowledge about CD with a purpose of uncovering what is known about the theory, I could have asked, 'What is curriculum design?' Or 'What do you know about curriculum design?' This would have trained participants' attention to the concept of CD. However, what I was interested in was their model for the design process as a whole. I needed a starting question that would elicit an overall model and so I asked them for a self-generated (autogenic) metaphor. I asked, 'Curriculum design, for you, is like what?' I was asking for a present continuous, embodied experience of CD. I wanted them to consider the overall process and to give me a metaphor that would encapsulate the entire process.

'I would say it's like a bit of a jigsaw puzzle is the best way to describe it, trying to fit it all together.'
(Programme Lead, Health)

'For me, the design of the curriculum is a spiral.'
(Programme Leader, Education)

'I think I'm still a novice at CD ... and when we started revalidation, I felt quite mystified about what the process would be ... Really the only thing that I could draw on at that initial stage was Chomsky's theories ... a language acquisition device.' (Programme Lead, Health)

I didn't always get a metaphor, but I did always get their model for the overall process.

'It's a bringing together of many different aspects ... about maintaining the integrity of what we think we should be doing, rather than responding to what is perhaps required and demanded.' (Programme Team, Education)

When I used this starter question, I got very little theory in the answers I received; almost 100% was about their personal experience.

'For me, it's like setting out on a journey. You can do a degree of preparation before you go, but there is a big element of the unknown and elements of surprise and things that you will pick up and discard, things that you will pick up and keep along the journey.' (Programme Team, Social Science)

The only variations were when I was asked to clarify what part of the process I was after.

'I think I don't follow the question. The process of designing a curriculum? ... or how I see a curriculum developing?' (Programme Leader, Science)

Here I would reformulate and say something like: The process of designing the curriculum would work, designing it is like what?

5.2.1.2 Parcelling out

This is a CLI skill which may be particular to myself, but it certainly is key to the way I conducted these interviews.

Using in vivo codes during the interviews

As noted in Chapter 4, during this study it became clear to me how much I was coding during the interviews: categorising and building structure and looking for patterns and relationships. I was using the actual words spoken, in vivo codes, a term used in a form of qualitative data analysis that places emphasis on the actual spoken words of the participants (Neuman, 2003).

For example, one interviewee said:

*'I think it's the **mapping out** of the **milestones** on that **journey** isn't it? **Rather than** the complete ... **the complete journey** and **every step** should be **taken**, but I think we have **left enough space for interpretation** by the **students** given the **diverse range** of students that have come to us in terms of **global outlook** or in terms of **pathways**, or **initial academic achievement**.'*

In this example I have emboldened the words that formed my in vivo codes. I came to these codes initially as they stand for the main parts of the response.

Parcelling out the sentence

The term 'parcelling out' was initially shared by Grove (Grove and Panzer, 1989) as a technique for trainee CL therapists to understand and develop clients' metaphor landscapes. It was his play on the word 'parsing' which means breaking down a sentence into its component parts (nouns, verbs, adverbs etc.) so it's meaning can be understood, while 'parcelling' is about treating the parts of the sentence almost like objects. When someone is parsing, they are looking for the structure of a sentence whereas when they're parcelling, they're treating the elements of the sentence like parcels: turning the sentence into a visual-spatial schema or model which is as close as possible to the client's first-person perspective.

I realised during reflection that I was using in vivo codes and using Grove's parcelling out technique in all my interviews. It is a key function of the way I conduct interviews. In the above example, I imagined the in vivo codes as being separate parcels (see Figure 12).



Figure 12: In vivo codes as parcels

As I applied this parcelling process, along with in vivo coding, I was asking myself an underlying question, 'How does this work?'

The creation of visual/spatial schema with those in vivo parcels

The next step in this process was to turn the in vivo parcels into a visual-spatial schema demonstrating the interviewee's process of 'mapping out' (see Figure 13).

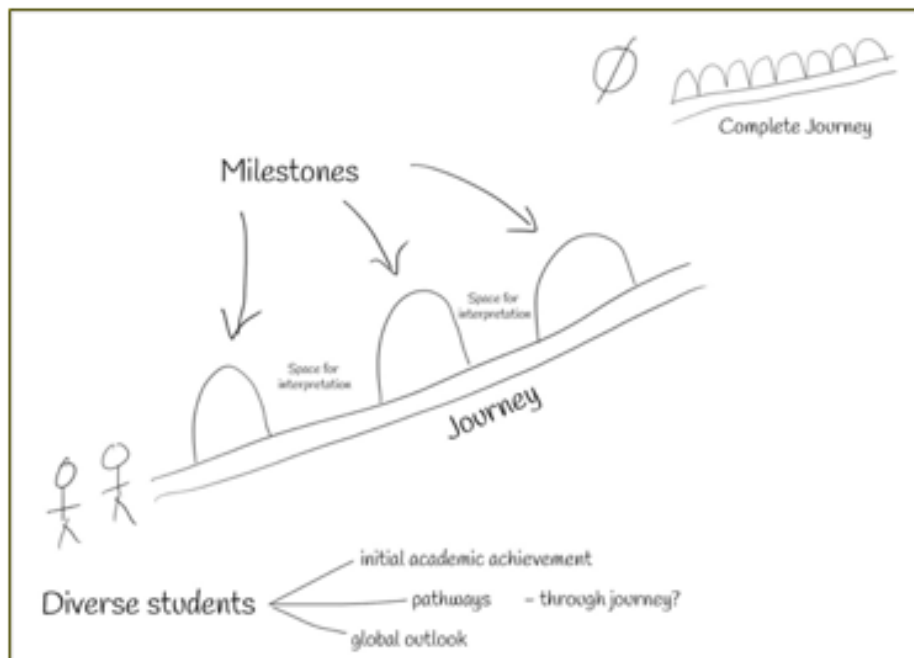


Figure 13: Turning in vivo codes into visual schema

Summary of visual spatial map in words:

- This interviewee's *metaphor* for CD is that of a **journey**. (Although the interviewee did not explicitly say 'my metaphor for the curriculum is that of a journey', it is reasonable to assume this, as it was their response to the first question I asked, 'Curriculum design, for you, is like what?' - which is an invitation to metaphor.)
- During CD there is an *activity* called **mapping out**.
- Within the metaphor the *things* that they map are **milestones**. (The interviewee made three downward gestures as she spoke about mapping out milestones so I inferred there were three, knowing I would ask how many later.)
- There is an *undesired activity* called **mapping out every step of the complete journey**. (The words 'rather than' are what indicates that this is undesired.)

- There is a *desirable activity* called **leaving enough space** in the mapping out **for interpretation**. (This is the other half of the comparison – rather than do X you should do Y.)
- They leave this space *given* they have a **diverse range of students**.
- The students are diverse in **global outlook** and **initial academic achievement**.
- In terms of **pathways** – I wondered if this could mean they will have a diverse way of going through that journey but I didn't know that yet, hence the note and question mark on the diagram.

This level of analysis was happening as soon as the interviewee had spoken. Even though I was still engaged with the descriptive in vivo codes, I was forming the parcels and then the schema in my mind's eye. I was actively analysing how the different parts of the response related to one another and how they fitted together from the interviewee's perspective. I was using everything that the participant had told me to create my model of their mental model from their perspective.

From this added visual spatial layer of implicit structure, I was developing a schema of the experience that stayed grounded in the words of the interviewee and therefore close to their experience. I was also deciding which aspect was most salient given the research objective.

Using interviewees' gestures to aid parcelling out and creation of schema

When the interviewee talked about the mapping out of milestones, this was accompanied by a gesture: she moved her right hand from her left shoulder out to her right in front

of her and marked out a couple of points along that line as she said the word 'milestones'. I interpreted this gesture as demonstrating the direction of that journey and I visualised a line in the area where the gesture was happening with marks representing milestones along that line. As another example, when a programme leader said, 'The curriculum is a spiral' they indicated with their hand where the spiral was in relation to them and to the different aspects of CD.

While I was aware at the start of the research that referring to gestures and lines of sight are important for helping to engage interviewees with their own thinking, this study showed that paying attention to gestures is important for building up a model on the fly. The gestures helped me to make sense of the in vivo codes in relation to one another and aided my parcelling out of the data. I was actively attending to gestures that demonstrated the spatial nature of the interviewees' mental models. I particularly noticed this when I had to interview by telephone and I couldn't use this visual aid.

Notetaking to aid parcelling out and creation of schema

As discussed in Section 3.3.1.3 my notetaking took the form of diagrams and visual schema. I started by making a stick figure for the interviewee and placing key words or sketches around the figure demonstrating how they were organising their thinking. Rather than longhand notes I wrote 'headings' of a sentence, making sure these were the interviewee's exact words so that when I used them back, it was easier for the interviewee to recognise them and so that they could hook directly back into their experience as they were experiencing it. I keep different coloured pens in my pack; however, during this study I tended to use one colour for data that

they were positive about and red for problems or for aspects to be avoided or mitigated against. Note-taking in this way was helping me to create a 2D representation of the 3D model, built answer by answer, of the interviewees' mental models as seen from their perspective. This aided me to code the data I had and to uncover gaps in the model that I could inquire into.

Tethering to the purpose and the data constrains the salience attributed to the parcelled out words

Salience has been introduced in 3.3.1.4 and tethers the interviewer to the purpose, to what has just been said and parcelled out within this current interview and to any categories or models that have emerged from earlier interviews.

To take another example from this study:

'Our discussions and our relationships are very good. I think we understand each other, and we all respect each other's opinions.' (Programme Team Social Science)

When I heard this sentence, I first parcelled it out so I could see the different elements in relation to one another and what had gone before in this interview. In relation to models that had emerged from previous interviews, the in vivo code, 'relationships are very good', stood out as an important factor in good CD; it had been mentioned in over 90% of the interviews so far. This then moved from an in vivo code to something more like a category and worth inquiring further into with some clean questions. I also recognised that the terms 'very good', 'understand' and 'respect' were vague and didn't describe behaviours that people would be able to emulate to achieve the results they may want, so I needed to inquire further if I wanted to get data that would serve my purpose. I also recognised that

this was the third time this interviewee had mentioned 'respect' as being a resource to their team or their CD and so this also stood out as salient to this individual and therefore worth further inquiry.

When I am tethered to top of the cliff face and data emerges that seems salient to me, it is like I put pins or pitons in places I'd like to come back to. Each piece of data that I receive is another step, either to understanding the rock face (the individual interviewee) or to taking me closer to the top of the cliff (the purpose for the interviews). Once I have a draft schema and notice which in vivo codes seem salient, I then have a series of content-free codes that help me to decide which question to ask. A content-free code is one which indicates the class of information that has been shared such as whether it is a piece of evidence and describes tangible behaviours or an inference which describes thoughts or beliefs.

5.2.1.3 Navigating

Returning to the rock-climbing metaphor, an interviewee may start by giving an overview of the rock face, as in CD is the *'mapping out milestones on a journey'*, or CD is *'something that makes a positive experience for the student in terms of is it enjoyable, does it relate clinically and is it accessible'*, the former being metaphorical and the latter a more conceptual answer to the same question. They may begin by saying where they are rather than answering the question, as in, *'We had a curriculum re-design at the tail-end of last year, last academic year'*. They may describe an idealised, wished-for rock face, such as, *'In the ideal world, I think of it as creating a journey for students'*. Whatever their response - whether it is useful for the interviewer's purpose or not - it is a 'way in' to their mental model and so it forms the first part of the map the

interviewer will need to navigate by. The tools needed for this kind of navigation are somewhat different to usual. The interviewer needs to classify - or code - the information given (in relation to the purpose) and then to use this coding to help them to decide where to go next.

When the interviewee gives an overview, the interviewer can simply ask clean questions of their response, '*What kind of mapping out?*' or, with the more conceptual response, they may repeat back to support the interviewee to know where they are going and then ask a developing question such as, 'And that's positive in terms of it is enjoyable, relates clinically and is accessible, and what kind of enjoyable?' When an interviewee spoke about '*in the ideal world*', I inferred that this was not what was happening for them currently so I asked them some questions to find out more about their desired outcome and CD in '*the ideal world*' and knowing that I will need to shift their attention to a new area of the rockface shortly, with a question like 'and when that's in the ideal world, what is it like here?' CL interviewers must do this repeatedly, gradually building the map of the terrain as they go.

Once the data is parcelled out and I know where I am and where the interviewee is then I can move my attention to navigating around the schema I've made.

Coding and interrogating those codes

I already knew that there are some content-free codes that all CL interviewers use to help them to decide which Clean Language question to ask next such as whether the information presented is a process, and if it is a process, was it at the beginning, middle or end? They will note whether a piece of data is a metaphor or a concept or a description of reality. The new finding was the extent to which I was using a relatively simple set of codes to give me great agility to

decide what to inquire into next and how to move around the data and to expand areas that I anticipated had more to offer.

There is a long list of codes I could include here but for convenience I am listing those that seemed most pertinent and which I used most in this study:

1. Evidence versus Inference
2. Sequence: Antecedent and Consequence
3. Orientation: Problem, Desired Outcome, Resource, Action

Content-free code: Evidence vs Inference

To ensure that I was meeting my purpose of finding data on how to enhance the practice of CD, I needed to know whether an *in vivo* code used by an interviewee was a concept/inference or whether it described something tangible or behavioural. If it was an inference, and I wanted to keep my model of what the interviewee means as closely tethered to their experience as possible, then I needed to use a clean question to inquire further into that code to uncover the behavioural meaning behind the inferential word. By asking for evidence, I can have a more accurate idea of what they're talking about.

For example, when an interviewee said, *'We meet regularly as a whole staff team'*, I coded *'whole staff team'* as evidence. I can imagine that if this ended up as a category, someone else could interpret it accurately. However, I coded *'meet regularly'* as inference because without asking clarification questions I wouldn't know what the interviewee meant by *'regularly'*. They might mean once a term or once a week. This was important as I wouldn't want *'regular staff meetings'* as one of my core categories, only to find later that this means completely different things to different

people. To enrich my data, I was able to ask specific questions to get the missing pieces of evidential information.

'And you meet regularly as a whole staff team. How often is 'regularly'?'

'Oh, every Friday morning 10-12 without fail.'

Conversely, if an interviewee was giving evidence without any inferences, this could potentially lead to me making incorrect inferences. For example, when an interviewee said, *'We've changed our grade for Programme Leader from an 8 to a 9'*, I coded this as evidence; I could look up exactly what this means but what I didn't know was why they were telling me this. I didn't know what this shift in scale meant to them in relation to CD. Therefore, I directed their attention towards the inference of their evidence:

'So when you've changed the grade from an 8 to a 9, what difference does this make?'

'It means that it's a valued job, a respected step in an academic career and it also means hours are assigned to someone to carry out this role. It gives them the clout to make things happen.'

Now I knew how come the interviewee thought this change was important and I could factor into my data the reasons the institution had created it.

Content-free code: Sequence: Antecedent and Consequence

As well as coding for evidence and inference, I was also training attention on the antecedents or the consequences of an action, by asking questions such as, 'Where does that come from?' or 'What happens after that?' Or 'What is the impact of this?' These codes and the questions that flowed

from them allowed me to redirect attention in the interview without altering the data or adding in any assumptions.

To return to the earlier example...

'I think it's the mapping out of the milestones on that journey isn't it? Rather than the complete...the complete journey and every step should be taken, but I think we have left enough space for interpretation by the students given the diverse range of students that have come to us in terms of global outlook or in terms of pathways, or initial academic achievement.'

After parcelling out the in vivo codes and assessing the sentence for salience, I was able to enquire into the process of the activity of *mapping out* by asking for the antecedent:

'And what happens just before the mapping out of those milestones?'

And I could direct their attention to the consequences of leaving enough space:

'And when you have left enough space, then what happens?'

**Content-free codes for orientation towards
phenomena: problem, desired outcome, resource,
action**

I wanted this research to enhance the practice of curricula design and therefore it was important for me to code what I was listening to according to whether it was something that was:

- **A problem:** something they had and didn't want.
- **A desired outcome:** something they wanted but didn't have.

- **A resource:** something they had and wanted to keep.
- **An action:** something they were doing in order to ensure they were getting what they wanted.

I was coding what was being said and then logically working out what else had to be true for what they had just said to make sense (Grove and Panzer, 1989). For example, when an interviewee said *'Obviously we should be meeting regularly but that's outside of my influence.'* I coded that there's a desired outcome of *'meeting regularly'* and a current problem of that being *'outside my influence'*. To find out more about what meeting regularly would get him and more about this desired outcome, I asked, 'And if you were meeting regularly, what would that give you?' I was also able to find out his perceived current reality, was actually happening, given he didn't have his desired outcome: 'And when you should be meeting regularly, and it's outside of your influence, what is happening instead?' To learn how the 'problem' could be mitigated I asked, 'And when you should be meeting regularly and that is outside of your influence, what would you like to have happen?'

These simple content-free codes were firstly informing me on a range of useful questions I could ask next to inquire into or to expand the in vivo codes. Secondly, they were supporting me to build up a model of the interviewee's experience directly from their words. All of the in vivo codes could then fit together to create a model of what was being shared and to support me to know what I could ask next to gather more information without adding in my own content.

The reason these content-free codes are so important to me as an interviewer is that they demonstrate gaps or areas where I can legitimately put my attention while still keeping my attention and the attention of the interviewee on the interviewee's own first-person experience.

For example, the codes of problem, desired outcome, resource and action allowed me to (1) learn an interviewee's classification of the information they were sharing:

- A. Something undesirable that was happening.
- B. Something desirable that wasn't happening.
- C. Something desirable that was happening.
- D. An action they were taking to ensure C.

... and then (2) to ask an appropriate clean question to learn about any of the other three categories. If something undesirable was happening (A) then what would they like to have happen? (B). If something desirable was happening (C) then what actions were being taken to ensure this? (D).

If an interviewee shared an inference, it was legitimate, according to the rules of CLI, for me to ask about evidence as it was an implied element of what was said. For example, if they said they were a team who *'respect one another'* I could ask: *'What do you see or hear that lets you know that you 'respect one another?'*. If they shared the start of a process, I could ask about the next step. If they shared a state of being, I could legitimately ask about the antecedent for this state. These codes give great facility in moving around the data set and finding areas that serve the purpose for the interviews, stay close to the interviewee's experience and allowing me to navigate in many directions depending on what I have decided is most salient at this point in the interview.

Table 6 demonstrates the in vivo codes and how I applied content free codes and how this allows the interviewer to make choices about where to inquire next.

<p>In vivo code: word or phrase</p>	<p>Possible Content-free Codes: Problem, Desired Outcome, Resource, Action Inference, Evidence Antecedent, Consequence Metaphor Process Behavioural, Concept</p>	<p>Interviewer action: Possible areas for further inquiry – the interviewer's questions ask for different classes of information from the interviewee</p>
<p><i>Staff don't turn up to group meetings</i></p>	<p>Problem Behavioural Non-specific</p>	<p>And <i>when they don't turn up to meetings...</i></p> <p>Evidence: Which meetings? How many staff don't turn up?</p> <p>Consequence: <i>Then what happens?</i></p> <p>Antecedent: <i>Where does the not turning up come from?</i></p> <p>Metaphor: <i>When staff don't turn up, that's like what?</i></p> <p>Inference: <i>What does it mean when they don't turn up?</i></p>

<p><i>Programme teams should be thinking at the whole course level</i></p>	<p>The word 'should' means it is coded as a Desired Outcome</p> <p>Concept</p> <p>Part of a process</p>	<p>Evidence: <i>What would let you know that programme teams were thinking at the whole course level?</i></p> <p><i>What would you see or hear?</i></p> <p>Clean Question to expand the in vivo code:</p> <p><i>What kind of thinking?</i></p> <p>Consequence: <i>what would that give you?</i></p> <p>Antecedent: <i>What needs to happen before they think at the whole course level?</i></p>
<p><i>We're a close-knit team</i></p>	<p>Resource</p> <p>Metaphor</p> <p>Inference</p>	<p>Clean Question to expand the in vivo code:</p> <p><i>What kind of close-knit?</i></p> <p>Antecedent: <i>Where does the close-knit come from?</i></p> <p>Consequence: <i>When you're close-knit what happens next?</i></p> <p>Evidence: <i>and when you're close-knit, what do you see or hear that lets you know you're close knit?</i></p>

Table 6: Multi-coding in the moment and how it supports the interviewer to code and analyse data during a live interview

Using adjacency to navigate around the interview data

The next concept underpinning my CLI practice was that of adjacency. This is the concept that allowed me to move nimbly around interview data, in order to inquire into areas that I had identified earlier as worthy of further inquiry.

By forming visual spatial models of the information and using content-free codes to clarify what kinds of information I had and what kinds of information were implied but not exposed yet, meant that I always had somewhere to go for my next question. Then, like the rock climber, I had the ability to move to any in vivo code and to expand any part of that information by asking a question that directed their attention to a category adjacent to the one already being shared.

Staying adjacent meant that all interview questions could stay close to the data shared. I could stay in one place and explore in more detail. I could move left or right or up or down. When I found something interesting that I knew I'd want to investigate in a short while, I would knock in a piton so I could easily come back to it later. I was building a coherent, consistent route between an interviewee's first-person experience and the purpose I'd pinned to the top of the rock face.

For example, when the interviewee said, *'It's the mapping out of milestones'*, I coded this statement as an action (something they were doing that they were happy with), a metaphor, and a process. Once these basic codes were established, then there were lots of ways I could respond. Like the rock climber, I could move in almost any direction. I could:

- Ask a clean question simply to accept and extend the code: 'What kind of milestones?' or 'Is there anything else about that mapping?'
- Train their attention to evidence-based clarification: 'How many milestones are there?' or 'When does this mapping out happen?'

- Ask for the source of this process: 'Where does the mapping out come from?'
- Ask for the consequence of this part of the process: 'And it's the mapping out of the milestones, what happens next?'

Each of these moves accepts and extends (Walker, 2014) the information available, building up the model incrementally whilst minimally adding the interviewer's bias or assumptions.

5.2.1.4 Modelling

During each interview, each of the stages, tethering, parcelling out and navigating are in service of building a model of the participant's concerns with and experience of CD. I was building a visual, spatial model of the interviewee's experience from their perspective and was tracking this model in space and also through note taking.

Through the reflection on these skills of CLI, other aspects of the process I have described in Section 4 became clearer. Specifically, it became clear why repeating back and pausing are so important in CLI. Words and phrases are being coded sometimes in multiple ways and repeating back relieved some of my cognitive load. It allowed time for me to hear the words themselves again, to attend to the visual spatial schema and decide which question would be most salient and would best serve the purpose. Repeating back several keywords enabled precision coding so I could choose exactly which piece of information to ask about and expand upon. Every so often I needed to check with the interviewee that I was building an accurate model of their experience by noting the reaction of the interviewee when I repeated back key elements (see Appendix V for an example).

At the beginning of an interview, I was actively engaging with the participant to understand what they were saying and how the elements fitted together. Through observations and note-taking, I was attempting, during the interview, to develop a second person map of a first-person experience (Nehyba and Lawley, 2020) orientating the map in relation to the gestures used by the interviewee.

5.2.1.5 Summary of the skills of tethering, coding, navigating, and modelling within CLI

- A. Tethering** - Aligning the purpose, the frame, and the starting question prior to the interview.
- B. Parcelling out** - Identifying key elements of each sentence and using these as in vivo codes and then treating them like 'parcels' and relating them to one another to form visual/spatial schema.
- C. Navigating** - Having a range of suitable content-free codes to code in-the-moment - to inquire into, extend and build relationships between in vivo codes
- D. Modelling** - Using these codes, along with the purpose of the interviews and the visual spatial schema to build a model of this specific interview and to decide where to inquire next. Checking the model during the interview with regular repeating back and pausing.

Chapter 6: Discussion

As noted in Chapter 5, there are two types of findings: the findings from the data about CD, and the reflections on the method of data collection, CLI, and how it is being used within this GTM research. These will be presented separately to maintain a clear distinction for the reader.

This chapter elaborates on the analysis, interpretation and synthesis of the findings, as presented in the last chapter, in relation to the extant literature. The empirical and methodological objectives of this study were, with a sample of HE employees engaged in CD, to:

1. Develop a model to advance the practice of CD
2. Explore a set of strategies to advance the practice of CLI as a research tool

The study used a qualitative research design, collecting data through in-depth CL interviews. Thirty-four first interviews and thirteen second interviews were conducted between November 2017 and November 2020. The data was coded twice, initially in-the-moment following a CLI approach, and then the transcripts were coded and analysed following a GTM approach (see Chapter 4). The study was based on the research objectives above and the following research questions that emerged during the study:

Empirical

1. What are the ideal principles and processes for designing curricula as stated by those involved in CD?
2. What is preventing alignment between CD in HE and these principles and processes?
3. What are the conditions for successful CD and how can alignment with these conditions be achieved?

Methodological

1. How does coding in-the-moment support CL interviewers to navigate and inquire into interview data during interviews?
2. What are the commonalities and differences between CLI and intensive interviewing as used in GTM?
3. What benefits does CLI bring to the GTM researcher?

6.1 Recap of Findings

Core Categories	Sub-categories				
<i>Empirical</i>					
CD Principles	Keep student at heart of process	Appreciate colleagues	Make time to reflect and create	Synthesize theory and practice	Be congruent
CD Process	Research and reflect	Develop shared vision	Co-create structure	Create content	Review
Alignment	Individual	Professional Culture	Institutional		
<i>Methodological</i>					
Coding in-the-moment	Tethering	Parcelling Out	Navigating	Modelling	

Table 7: Summary of overall findings

Through the utilisation and linkage to literature the findings will be discussed. In relation to the empirical findings the purpose is to create a holistic picture of CD from the integration of the three elements of principles,

process and alignment. Following this, the discussion will move on to the methodological findings and how CLI and coding in-the-moment differ from or extend the current guidance on intensive interviewing for GTM.

The discussion takes into consideration the extant literature on CD and on approaches to interviewing as this study follows a classical Grounded Theory method, conducting the literature review during the integrative phase. This chapter recaps the key findings of each core category in relation to existing literature. By relating the emergent concepts to the literature, it can be seen how the literature strengthens or confirms the key findings as well as the ways in which the key findings extend what we know from the literature or even contradict the literature, leading to avenues for further research.

6.2 Discussion of Empirical Findings: Curriculum Design Principles and Curriculum Design Process

To uncover these findings, this study asked participants about their overall models for CD. This resulted in 34 complex individual models from which have emerged a general simple set of principles (see Figure 4) and a clear process for engaging in CD (see Figure 8). Chaudhary and Kalia (2015) found that CD is a complex but systematic process. The findings of this study recognise the complexity and use simple rules or principles to bring structure to it.

There is minimal literature on the overall structure for higher education curriculum development. Bovill and Woolmer (2019) note that the key frameworks that do dominate the limited discussions are focussed on the following authors: Bernstein's (1975; 2000) work on what counts as valid knowledge; Biggs' (1996) constructive alignment model; Barnett and Coate's (2004) knowing, acting and being

framework; and Fraser and Bosanquet's (2006) academic staff definitions of higher education curriculum. Some of these texts are relatively old and do not necessarily help staff to decide what they should do when designing a strong curriculum (Bovill and Woolmer, 2019). There is plentiful research on assessment strategies in Higher Education (HE) (Rust, 2002), but models of how they should fit together with other aspects of CD are scarce. This is confirmed in the findings of this study where, in two out of the four institutions, the staff explicitly state that there is '*no design for CD*' and in a third, the teaching and learning lead refers only to what should happen and not once mentions what their department does to facilitate this happening.

As well as there being a lack of '*overall*' direction for CD there is also a lack of systematic evaluation of curriculum planning and what happens in practice (Banta, Pike and Hansen, 2009). In theorising about the findings, and the literature, the two are possibly interlinked; if researchers are not evaluating the overall curriculum effectiveness, then how can they develop a model for a strong overall CD? Unless there is evidence-based research, it will be a struggle to convince academics and university leaders to invest substantial time and effort in ensuring curricula are well designed and fit for purpose (Bovill, Bulley and Morss, 2011).

O'Neill (2015) examines models of CD, each emphasising different aspects of CD. She looks at the history of curriculum models and notes that curriculum developers in the US and in Europe have historically been criticised for their '*over emphasis on learning objectives*' and for using very '*technical means-to-end*' reasoning (O'Neill, 2020, p.63). However, when carefully worded and consistently communicated to students and faculty, learning outcomes that reflect the learning processes within students, adhere to

disciplinary norms and expectations, and show flexibility in application, are a useful template on which to base further curriculum reform (Biggs and Tang, 2007; O'Neill, 2015). The findings of this study suggest that learning outcomes are just one part of the overall puzzle of CD and although integral, they need to fit into a wider picture which the findings in this study provide.

6.2.1 Core category CD Principles

Figure 6 offers a recap of the initial core category principles with the five subcategories and their details.

CD Principles

Keep student at heart of process	Appreciate colleagues	Make time to reflect & create	Synthesize theory & practice	Be congruent
<ul style="list-style-type: none"> • Student experience from prospectus to graduation • Space assessments from student perspective • Build independent learning skills 	<ul style="list-style-type: none"> • Ensure all voices are heard • Value academic and non-academic contributions • Lead a culture of openness and feedback 	<ul style="list-style-type: none"> • Programme Teams need to make time for CD • Institutions need to make time for CD • Value T&L as much as research 	<ul style="list-style-type: none"> • Research industry and academic • Balance researchers and practitioners • Build in early opportunities for synthesis 	<ul style="list-style-type: none"> • Have a design for CD • Make design process congruent with course outcomes • Align each endeavour with overall course outcomes

Figure 6: CD Principles

6.2.1.1 Keep the student at the heart of the curriculum

In HE, where both research and students are generally central to activities, it is particularly during CD that keeping the student at the heart is most important. Applying this principle during design reminds the design team that this programme is for the students and that whilst there is an

opportunity to bring research into the teaching sphere, it must not dominate it. This finding is echoed in the literature which states that higher education needs to support our turbulent world by creating learner-centred programmes that 'produce graduates better prepared for their future' (Khan and Law, 2015, p.75).

Using several different phrases, the participants stated that the student should be at the heart of the design process. Some participants considered students as ideal graduates and started the design process with '*the end in mind*', reverse engineering the curriculum as a series of engagements leading to that '*end product*'. Other participants suggested taking an individual or group of individuals and imagining them going through the curriculum, getting an embodied sense of what was needed at each stage. Participants in this study said that students need to be at the heart of CD because they are the point within the curriculum where all the different aspects come together, the student is the only element where '*all of the different threads meet*' and are '*tied together*'.

Barnett and Coate (2004) acknowledge that the current complex and uncertain world calls for curricula with the students at the heart and this shows up in these findings. The findings indicate that if the CD process is connected and congruent with the learning outcomes then staff believe that this is a better experience for the students. Neves and Hillman (2016) conducted a UK engagement survey which set out to measure students' engagement with their studies on several themes. They indicated that those students who interacted most with other students and with staff reported most positively on being well prepared for the world of work. This ties in with the literature that there are several factors that influence curricula including changes in industry, emergent skills desirable in a modern working world

and changes in institutional ideas about what curricula are for (Gosper and Ifenthaler 2014). Keeping students at the heart of the design process is congruent with creating a connected curriculum (Fung, 2017) and is also a way to consciously bring students to the foreground to mitigate past issues in which the student was neglected in HE endeavours (McKenna, 2013).

Keeping students at the heart was particularly important to participants in this study when thinking about getting individual students with varying educational attainment to become one cohesive cohort, up to date with the technological and academic demands of a degree, by the end of the first year (Krause and Coates, 2008). There has been significant interest in the development of support for students' transition to learning in higher education and with their experience of first year (Taylor, 2008; Nicol, 2009; Gibney et al, 2010; Brooman and Darwent, 2012). Continuity in a curriculum provides students opportunities to revisit knowledge and skills in more depth as they progress through the years. Students succeed best 'when such skills (higher order) are reinforced throughout their educational programme, when they are required to synthesize knowledge and skills learned in different places' (Hutchings, 1996, p.7).

While keeping students at the heart of the curriculum is confirmed in much of the literature, caution is expressed by McKenna (2013), who argues that this can cause blind spots; academics need to be focussing on the great body of knowledge that the student wishes to gain access to and by over focussing on the student, they may miss the opportunity for subject centred teaching. The findings are not at odds with this caution; although they keep the students at the heart, the findings related to the process, which encourage adherence to the latest research on the subject, the industry

and the pedagogy of teaching and learning, emphasise that these are brought together and are met in the student but not led by the student.

6.2.1.2 Appreciate colleagues

Oliver and Plewes (2002) propose that CD shouldn't be a rational process, it should be a social practice, engaging in interpersonal micro-politics and referring to historical practice. In CD, there is an interesting dichotomy around appreciating colleagues in that a programme team usually works together over several years whereas a student only works with their cohort of colleagues for the duration of their programme, it is likely that the appreciation of colleagues in the staff team has an impact on many cohorts of students. In Chickering and Gamson's (1991) well-referenced principles of good practice in HE, they emphasise that curricula should (1) encourage contacts between students and faculty and (2) develop reciprocity and cooperation among students. Yet many students feel isolated in higher education, particularly in the early years (Read, Archer and Leathwood, 2003). These findings speak to the congruence of staff demonstrating the behaviours that they want students to follow, and about developing and demonstrating good teamwork as a desirable workplace skill.

Participants also talk about leading by example in terms of demonstrating good relationships between themselves. One programme lead deliberately co-teaches with a left-wing colleague, balancing her right-wing views in order to demonstrate plurality of perspectives. By drawing on the expertise of different team members, such an approach allows a design-thinking framework to inform a coherent vision while acknowledging the diversity of capability within academic communities (Burrell et al., 2015). The findings by Burrell et al. (2015, p.760) were very similar to the findings in

this study with one of their participants reporting similar benefits: 'We draw on people's individual expertise which results in a kind of collective benefit and we learn from each other... and each lecturer has their own field of expertise ... and all together we can bring the best for one unit.' This quote from their study is similar in appreciation to one from this study: *'I am slightly in awe of my colleagues who have all these research credentials and lots of publications and PhD's and so on, but whenever the topic has come up, they're in awe of my clinical expertise and so I think that's where the mutual respect comes from.'* Collaboration seems to be improved by this mutual respect.

This study was undertaken within the University Alliance group whose website states: 'Alliance universities work with partners to address real-world challenges, and to deliver research activities that directly benefit people, communities, businesses and wider society; across the UK and around the world' (University Alliance, 2017). Participants in this study referred to the 'real world' demand for teamwork skills in their graduates and how to build this into assessments to ensure students had these skills. The ability to work with someone unlike you - someone with different skills and expertise - for a common goal requires an ability to appreciate colleagues (Adolph, Kruchten and Hall, 2012). The participants spoke about the need for diverse members of staff to appreciate one another and to connect through the design of the curriculum. These findings echo those of Druzhinia et al. (2018) who concluded that to develop a well-balanced curriculum, a balance between specialist research knowledge and specialist real-world knowledge is required. This study finds that to be congruent with this outcome, HE staff state that they need to be leading the way by appreciating one another and working together well.

Appreciating others could mean that team members are more motivated to work for the benefits of others (including students), are more receptive to others' perspectives and better able to incorporate those perspectives into their work (Vogus et al., 2014). This could then be related to keeping students at the heart of the curriculum and being open to different views of what that means to different colleagues and then, for the good of the students, to find a common agreement that respects the different perspectives through prosocial motivation (Vogus et al., 2014). Adolph, Kruchten and Hall (2012) note that when a team stops working in an appreciative trusting culture, this reduces communication, and the team is unable to reflect together on feedback and individuals lack personal strength to engage with others, this is confirmed in these findings that staff appreciation is important. They need to get together and reconcile their perspectives (McCarthy, 1995) which is confirmed and advocated for in these findings during the '*develop a single vision, blue sky thinking*' section of CD. There is one example in this data set where a participant's first interview is one full of negativity where they describe 50% absence and nobody talking to anybody else and then, after a change in management and an adoption of the institutional shared design for CD, their second interview suggests a transformation has taken place. When the team gets together to get a shared design for CD, and the new programme leader instigates good team management, the relationships between the individuals transform and they are able to appreciate one another again.

6.2.1.3 Make time to reflect and create

The findings indicated that time was a crucial factor in undertaking CD that a team can be proud of. Whiting (2008) states that good interviewees are those who are available,

willing to be interviewed and have lived experiences and knowledge about the topic of interest. However, those with the lived experience, when invited to take part in this research, stated repeatedly that they did not have time to support research. This was despite the research being a topic they were actively involved in. Findings showed that being 'time poor' was cited by every team unhappy with CD as well as most of those who were happy with their process. With time as a scarce resource in HE (Voogt et al., 2011), and with it being an important resource for the CD process, the effective use of time needs to be evaluated. When exploring the sub-category of 'make time' it's important to note that the time must come from somewhere; whether that's in formal face-to-face meetings or informal thinking and creative time (Voogt et al., 2011). To develop professionally, programme teams need time to internalise new knowledge and skills and change their beliefs. It also takes time to develop a curriculum that is both internally and externally consistent. From a practical perspective, it is therefore important that institutional leaders and programme leaders ensure there is enough time for the design process to take place (Voogt, PierTERS and Handelzalts, 2016).

Bens, Kolomitro and Han (2020) state that curriculum development, as a process, should continually strive to find new and effective ways to offer students learning experiences that are intellectually challenging and personally inspiring. This striving and reflecting all take time and effort and this will either need to come on top of the normal workload, as is mentioned by many in the findings, or time needs to be allocated for this kind of development. The findings indicate that time is crucial to leaders being able to lead CD effectively, to teams being able to engage in CD and for teams to be able to engage in constructing new tools and new outcomes - new embodiments of knowledge, new

relationships, rules, communities of practice and new connections - new social practices (Knight, 2002). To demonstrate their commitment to the time required for reflection and creation, staff can make that time in their own schedules. For an institution to be congruent with this outcome then the institution must make time in staff schedules for reflection and creativity. Researching in school learning communities, the findings of Stoll et al (2006) indicate that when institutions provide practical conditions such as adequate time and space, then teachers are much more likely to engage actively in the activities required of them.

It is not only time; it is also the willingness to be open to the feedback that comes from authentic reflection. Feedback is a key factor in reflection within these findings and requires trust and an atmosphere of openness. It also takes time and resource to pay attention to what has happened as well as what needs to happen next. There is feedback following research into teaching and learning and industry needs, feedback from students and alumni, feedback from staff and administrators etc. - and this feedback enables educators to reflect on old and to learn new mental models (Duffy, 2003). Keeping students at the heart of the curriculum is partly about ensuring that the students are encouraged and supported to make time to reflect on extant knowledge and to '*create new knowledge*'. One of the things that participants recommend is that they engage in the same process that they want their students to emulate. This is an example of the staff needing resources in order for them to engage in the same standards of behaviour that they want from their students (Fung, 2017). Without the provision of and the prioritisation of time to reflect and create, the staff would be attempting to lead the students with incongruent

behaviour. The findings speak to this time provision being crucial to CD.

6.2.1.4 Synthesise theory and practice

All the participants spoke of their CD preparing students for work and 60% of participants in this study spoke about their curricula having the aim to create reflective practitioners capable of critical thinking. The fact that all participants were from within the University Alliance Group may explain the requirement to synthesise theory and practice so strongly. The Alliance's own website states that: 'Alliance universities are helping to build the economy of the future with their leading research and close links with business. They are growing graduates who are amongst the most employable and enterprising in the country' (University Alliance, 2017).

It is crucial that professional programmes produce students with the ability to put into practice what they have learned in the classroom (Wrenn and Wrenn 2009). If synthesising theory and practice are crucial to the curricula of the University Alliance then that synthesis should be happening at the design level to be congruent with this outcome. Fung (2017) advocate that the curriculum should be connecting the students with research and these findings confirm that idea of connecting different aspects of research and different researchers across members of the design team.

There is increasing evidence that universities' engagement in work-based learning is proving effective in contributing to the development of self-managing practitioners and self-directed learners in line with the needs of the 'knowledge economy', and in facilitating personal growth and development (Lester and Costley, 2010, p.10). Participants in this study who were positive about their CD said that

they encourage students to make that connection from the start of the curriculum. They say they do this through module design, creative use of assessments and by linking information across modules and through the course of the curriculum.

Educators in professional, service-related fields require this from their students, not only to learn the theory but to be able to apply the wider theoretical framework in practice (Wrenn and Wrenn 2009). Fung (2017) recommends supporting students in their preparation for the world of work by designing some student learning activities that mirror the messy ways in which learning takes place in the workplace (p.92) which is also what the teams I studied recommended.

These findings extend this notion from applying to students to applying to staff so as to promote this activity in students. Participants advocated that during the design process they should '*lean into one another*' and make those connections themselves, utilising one another as resources for widening their understanding of how the theory and the practice are connected.

6.2.1.5 Be Congruent

As the staff engage in these principles they are behaving and thinking, during the design period, congruently with what they state that they want the students to be behaving and thinking during the delivery. There may be some ways that a specific programme team wants to be congruent with the outcomes of their curriculum. For example, a hospitality team used the hospitality requirements of the university as a context for showcasing the students' talents. The staff celebrated one another's and students' achievements with events demonstrating that they would do for themselves what

they did for the outside world. This team tied these events in with assessments for the students ensuring that every activity was aligned with the curriculum outcomes. In a different science team, they had an outcome for their curriculum team to be innovative and entrepreneurial. In order to be congruent with their curriculum, the staff looked for and engaged with other departments and outside agencies to find opportunities to be creative and to develop new products for the market.

Wrenn and Wrenn (2009) talk about how, as professional educators, staff must take the roles of learner and teacher in the classroom and the field and need to lead their students to integrate theory and practice. This confirms the findings that staff lead the way with their behaviour for what they want from their students. The term congruence obviously has no value unless you know what to be congruent with. The values you hold and the purpose that you believe the curriculum is for will shape what it means to be congruent in this context. There can be conflicting purposes to a curriculum, including whether it is thought about as a process or a product (Knight, 2002) and this may be one of the reasons that there are conflicting approaches to CD and to what it means to be aligned to or congruent with the curriculum. In these findings being congruent refers not just to staff behaviour but also to congruence or, in the literature, alignment, between, for example, subject learning outcomes and course curricula through a process such as curriculum mapping (Lam and Tsui, 2013). Khan and Law (2015, p.66) state that regardless of the educational programme or the specific institution, it is designing an 'appropriate' curriculum which is the foundation stone for high quality programmes.

The findings in this study do not correspond to a specific philosophy about education or the relationship between

academia and the workplace. Rather they are about the CD process and principles which could apply to many different curriculum models. Khan and Law's (2015, p.66) 'appropriate' would correspond to the subcategory of congruence in this study. These findings are about the engagement in the thinking and the activities that participants say need to have happened for a programme to have '*a coherent story*'.

6.2.1.6 Summary

In the findings on CD principles there is some form of connection at the heart of each principle as well as congruent connection between what staff do during design of the curricula and what students are expected to do during delivery of the curricula. Although not always using the same word, the literature, and the findings from this study, allude to connectivity at the heart of the CD process that staff undergo and the curriculum process that the student undertakes. Furner and Kumar (2007, p.186) noted that 'an integrated curriculum provides opportunities for more relevant, less fragmented, and more stimulating experiences for learners'. The emphasis in the literature is on creating connection for the students whereas these findings stress the connection required in the mental models and the behaviours of the design team.

6.2.2 Core category CD Process

The core category of CD process from these findings is a simple five-stage process outlining a series of activities for the CD team to engage in from inception to submission of a revalidated programme prior to delivery. During each stage the CD principles need to be enacted, keeping the students at the heart, appreciating colleagues, making time to reflect and create, synthesising theory and practice and aiming to be an example of what they are creating.

CD Process

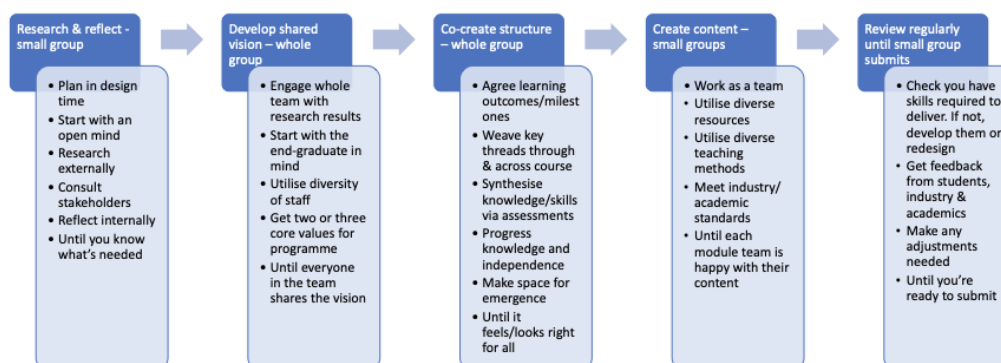


Figure 10: CD Process

Another way of describing the CD process that emerged from this study would be thus:

A small group leads a research and reflection process on the subject, industry, teaching and learning and gathers key findings. Then the whole group reflects on these findings and imagines, dreams up, engages in blue sky thinking and together they develop a shared vision for their curriculum. During these visioning sessions, participants say that they can argue about philosophical differences, but everything is in relation to what they found as they researched during the previous stage. The whole group then creates a structure for the curriculum. During this stage they are getting a shared mental model for how the whole process works. From here they go away singly or in pairs or small groups and write the content. (This is completely different from examples where it isn't working well, and staff say they go away and write their modules separately and then try to 'crowbar them in at the end.') Finally, a small group takes the leadership role

of checking and submitting the design through the Institutional QA processes.

The CD process that emerged from the data has five stages and this discussion will reflect on each stage comparing it with the extant literature.

6.2.2.1 Small team research and reflect

According to the findings, there need to be leaders who research and reflect on the current trends. This might be utilising research from the institution but will also mean specific research relevant to this curriculum, in this subject, for these staff members. CD, in the words of one of this study's participants *'is an active thing. It's a changing thing. It's a strategic thing. It's a moving thing'*.

The curriculum needs to be up to date, responsive to changes in industry which require students to have different skills for them to be employable and to be able to serve industry in the future (McGoldrick, 2002). Literature about what it means for a curriculum to be 'good' suggests that there is little general agreement and this stage in CD is where at the micro level, these team members create their own agreement (Carey, 2013). Several comments about keeping the students at the heart of the process are about futureproofing them for industry. The ever-changing nature of the world outside of academia certainly calls for innovation and a discovery phase in CD. The findings match the desire in the more recent literature for an agile, innovative curriculum (Studdart, Haywood and Doncheva, 2016) that future proofs the students preparing them to thrive in increasingly complex global workplaces (Milligan et al., 2020).

The starting point of programme design needs to be the consideration of the need for a programme, along with the development and articulation of a set of values and beliefs

that the programme team aspire to (O' Neill, 2015). This stage in O' Neill's model would cover the first two stages of the CD process from these findings. Being a research-based institution, the CD should be research-based and up to date, like all aspects of the curriculum itself (Fung, 2017).

By carrying out this research and reflection, this small group are creating a need and context analysis that can lead to the wider team understanding the areas in which curricula need updating and a shared need to have curricula that are fit for the current purposes and needs by multiple stakeholders (Voogt, PierTERS and Handelzalts, 2016). The reason it is a small team, rather than the whole team, may be to do with the need for leaders or coaches who use this research expertise to guide the design process and ensure that any conflicts in the wider group are aired but that the process keeps moving (Binkhorst et al., 2015; Erickson et al., 2005).

HE staff may collectively hold certain beliefs about how staff will behave, what they will and will not do and therefore what is possible, and this might make it difficult for them to think or act in ways that don't fit these models and therefore difficult to accommodate new ideas (Duffy, 2003). When two or three staff want to innovate change, especially if they are in the minority, they may get together into a small social group to develop their outcome and begin to instigate change (Centola et al., 2018). It is easier when there is innovation at leadership level and alignment between teaching and learning leads, institutional senior leadership as well as programme leaders so that a small group of leaders can develop new shared models of what's expected in a task of CD and then to cascade that message to their teams.

This study suggests that a small team who actively engage in research and reflection, prior to the start of the visioning stage of CD, are setting the tone for and demonstrating through their behaviour, the values of CD. They are reflecting openly, gathering knowledge and feedback from diverse sources, sharing models for curricula, thinking about the latest research in teaching and learning as well as in their subject and industry. This degree of diligence is what sets the tone for the rest of the CD process.

6.2.2.2 Whole team develops one shared vision

The findings show that the CD process requires the whole team to be involved in developing one clear model or vision for the curriculum. The whole team will have the key learnings from the research phase that went before and will now know what is required of graduates, the latest shifts in thinking and skills in their subject, as well as ideas and discoveries in teaching and learning and technology. Burrell et al (2015, p.760) investigated whether a team approach was more effective for curriculum development and defined a team as more than two people with different expertise working together to produce a collective outcome. In their paper, they state that, 'All participants interviewed were unanimous in the view that it is better to work in a team than as an individual... When you are working in a team it takes longer ... but there's less trial-and-error process than you have as an individual whereas the team approach can actually do that very quickly.' This is supported by Fung (2017) who states that a connected curriculum framework promotes the value of rich dialogue across academic peers. According to the findings in this study this collective endeavour should start at the very beginning. One difference between the conclusions of Burrell et al (2015) and this study is that their collective endeavour is on writing units

whereas this CD process refers to the programme level of design.

Having one vision connects all the team members with a common mental model. Fiore, Salas and Cannon-Bowers (2001, p.313) assert that members of effective teams possess a shared set of knowledge that facilitates their interactions, and that 'highly effective' teams must hold compatible knowledge structures. In this sense the curriculum is connecting the staff around one clear shared model. To develop a single vision, a team need to follow a process to elicit and align the mental models of the knowledge structures, held by members of a team, that allow them to form accurate explanations and expectations for the task and in turn coordinate their actions and adapt their behaviour to fulfil that task (Converse, Cannon-Bowers and Salas, 1993). Having one vision means that at the start of the design process, the team are encouraged to express any fears or dissent between them which then leads to efficiency and wellbeing further along the process (Manley, Jackson, and McKenzie, 2019). Although in this study, I did not find talk of the safety and trust around the single vision, the process itself has a meta-message that people's contributions are valued, and that collaboration is possible and desirable in this programme team.

The principle of 'keeping the students at the heart of the curriculum' is also at work here as the team can visualise an idealised student or group of students and use 'backwards design' (Steele et al., 2020, p.700). The participants in this study used phrases such as, *'There's an end point, we all know where we've got to get to'* and *'I think we all have a vision of ... that qualifying graduate, what skills should they have, what strengths should they have'* and once they've visualised that graduate, then the team work out what kind

of curriculum they would need to create the transferable skills for a graduate like that (Steele et al., 2020).

To attain the congruence desired in the CD principles and alignment between learning outcomes and the idealised graduate and assessments and modules, there needs to be a template to align to. By having one shared vision for the curriculum, this allows the possibility for congruence with the outcome for the students which is that they experience their programme as one joined up and coherent programme. This then allows the team to align their modules and their activities and assessments with one another. The concept of a learning community that embraces shared values and visions then leads to 'binding norms of behaviour that the staff supports' (Hord, 1997, p.3) The process of creating a shared vision, within this study, can be a binding activity which that helps to tie programme teams together by a common foundational value.

Within this study there were some different ideas about how to represent this one clear vision. One team had a shared intellectual metaphor of Chomsky's language acquisition device which allowed them to resonate with how the design process could be like a blank slate and they could redesign it from scratch in ways that they knew pedagogically would work for their students and their subject. Another team had a shared model of their idealised graduate as a colleague working in their professional industry and they aligned all their activities with this symbolised ideal, checking that they were the activities this graduate needed to have gone through before they would have the *'skills and strengths the team had agreed were desirable'*. One team had a few key words that they wanted to be represented in every activity: *'fun'*; *'rigorous'*; *'dynamic'*. They wanted every aspect of the course to be engaging to their students and for their students to experience their learning as *'fun'*. They wanted academic

'rigour' and for their students to be recognised as being able to reflect on ideas critically and not see the world in black and white. It was also important, for this course, that all their work and their techniques were up to date and reflected the current dynamics in the industry they served. This meant that they expected aspects of their curriculum to be updated within a single cycle before the next validation and needed to leave space in their design for this evolution.

Within the literature on CD there isn't a great deal written on how to create a vision. To address the challenge of coherence in curriculum organisation, Ornstein and Hunkins (2009) note that attention should be given to the curriculum's: A) Scope, B) Sequence, C) Continuity, D) Integration, E) Articulation and F) Balance. Dempster, Benfield and Francis (2012) recommend drawing a visual image of the curriculum image, as a team exercise, to assist in developing a curriculum's coherence and transparency using a course intensive design approach. The findings in this study indicate that everyone has an individual coherent, embodied metaphor for CD and the similarity in models across teams aligned with the CD principles and process suggests these are becoming embodied across the team (Heracleous and Jacobs 2008).

It is during this stage of CD that staff must be able to voice differences of opinions and to be able to move from dissent to discussion to curiosity and collaboration. The team interaction will be most effective if the individuals feel able to speak openly and share ideas and information with one another (Stoll et al., 2006). In this open atmosphere then any differences in visions or potential conflicts between ideals or the structure/content of specific modules can be aired and settled at the point of design rather than delivery (Grossman, Wineburg, and Woolworth, 2001). The CD principle of appreciating

colleagues comes into play here as this appreciation is what allows staff to connect their ideas with someone else's and to grow bridges between ideas as well as to make clear distinctions or to resolve conflict where there is enduring dissent. To go through this stage, staff need to be open to creativity and that means having the space to take on new information, learning and feedback from colleagues (McGoldrick 2002).

These findings confirm and extend the literature that one shared vision allows the design team to organise alignment prior to developing a structure for the curriculum. They are aligning on their values and the end goal for their curriculum. This alignment has a number of benefits and teams with clear goals and ambitions tend to start directly with the actual design task, while teams with less clear goals need more structure and clarification of what is expected of them (Handelzalts, 2019).

6.2.2.3 Whole team co-creates structure

Although each of the steps in this process was mentioned as critical, in many ways this stage, with the whole team agreeing the structure of the course, is where so many of the CD principles come into play and the initial two stages pay dividends. Getting the whole team together to design the overall structure is how teams use the single vision to create a skeletal model that is congruent with their course vision. This is how they ensure that there are not overlaps or areas of repetition and it is in this phase that they create the links across modules running simultaneously and through the curriculum over time.

'There has to be the fact that the parts do inter-relate and interact, ...more of a matrix really .. where they

all inter-relate and .. there will be cohesion between all the parts' (Programme Team, Science).

Ownership is important in curriculum delivery and bringing the whole team together and being in one space so that they all have their say on decisions that affect the programme may help them develop a sense of ownership of the curriculum (Geijsel et al., 2003). In these findings the ownership should begin with the single vision and continue. This is a time to appreciate diversity of colleagues and to engage in the social process of CD (Oliver and Plewes, 2002) to ensure that the theory and practice are synthesised throughout the curriculum in an integrated way (Wrenn and Wrenn, 2009). By bringing together the different teachers with different knowledge domains, each individual brings their own pedagogical content knowledge (Angeli and Valanides, 2009a) into a shared space and they create a shared model for how they are going to present, weave together and assess the shared whole.

As a programme is a complex set of activities and as a curriculum can be conceptualised as 'a dynamic and interactive process of teaching and learning' (Fraser and Bosanquet, 2006, p.8), then its evaluation strategy needs to be systematic and multifaceted. It is important that there is a holistic overview at key points in time on how the programme is experienced by the different stakeholders. In these findings this is done by 'keeping the students at the heart of the process'. 60% of participants stated that during this whole team time, designing and planning in assessments were a top priority. This is when staff link the research done in stage 1 to agree the focus of and structures for the assessments they develop. Assessments are key connectors within the curriculum and an opportunity to promote the skills that the staff want students to develop.

'We're testing both their team-working and their individual skills and it works really well.' (Programme Leader, Science)

Assessments are said by participants to consolidate connections as well as to inspire creativity. For this reason, there needs to be a whole team perspective to ensure that assessments synthesise those aspects that are important in the curriculum (Ali, 2018) and that they are well placed across the academic year (Mutch and Brown, 2001; Mutch, 2002; Ornstein and Hunkins, 2009). This confirms the call from Guskey (2003) that assessments be used to align the team with their valued learning goals.

These shared models of assessments are used, within this study and according to the literature, to connect different aspects of learning for the student. They connect the quality of the curriculum to the institutional quality assurance standards and summative assessment connects the student to how their attainment fits in with the general attainment of those around them (Mutch and Brown, 2001; Bloxham and Boyd, 2008). Formative assessments connect the student with their own development and to their path of becoming a reflective practitioner and refer to assessments that are specifically intended to generate feedback on performance to improve and accelerate learning (Sadler, 1998). One of the functions of the CD process is to ensure that students move from *'handholding to independent learners'*. Assessments can be designed in, congruently, by the whole team with a view to empowering students as self-regulated learners (Nicol and MacFarlane-Dick, 2006).

Diamond (1998, p.85) state that *'most curricula are unfocused... There is a notable absence of structure and coherence'* and an incoherent curriculum leads to the students experiencing that fragmentation (Burrell et al., 2015;

Handelzalts et al, 2019). This is confirmed by these findings and this whole team stage of the CD process was not experienced by all the participants and teams and was an aspiration rather than an actuality.

6.2.2.4 Small teams create content

Small teams go away and write content that is congruent with the vision and the shared structure that they co-created. CD should make links laterally across modules as well as a forward flow from beginning to end to ensure it takes the students on the learning journey desired (Aldrich, 2015) and this is confirmed in these findings. In one of the programme teams, lecturers were actively encouraged to team teach in diverse pairs. This is an opportunity for practical and academic staff to collaborate and synthesise their skills. A study by Kramer, Polifroni, and Organek (1986) showed that students taught by a practicing faculty member scored higher on professional characteristics (including autonomy, self-concept, and self-esteem) than did students taught by non-practising faculty. This result may be ameliorated by mixing the industry specialist and the academic and at least to demonstrate the 'appreciate colleagues' principle. Bovill and Woolmer (2019) argue for learning to be a process rather than focussed on the outcome and one way of achieving this kind of innovation is to provide students opportunities for co-creating the curricula as they are developing. Brooman et al, (2015) found that student contribution, at least in the form of feedback part way through a design, was a useful addition. This is confirmed in the findings that those participants aligned with CD principles and process involve the students before and during CD and those who are not aligned talk of paying it '*lip service*'.

6.2.2.5 Small team review

Ornstein and Hunkins (2009) advocate that while redesigning curricula, CD teams need to reflect on their philosophy, research the latest models of CD, consider their students' needs, sketch out various designs for their curriculum and cross-check their aims, outcomes, experience and vision. Confirming that approach, this stage is where a small team takes responsibility for reflecting on what has been created and for checking back against the research, the professional standards, university standards, the course vision and the shared course structure – all the time keeping the student in mind and at the heart of the process. This is a stage for getting student feedback on the CD and works best for teams who are open to and interested in student voice and able to welcome feedback, even if it goes against their hard work so far (Brooman et al., 2015). Within this study those staff following the full five stage process, were also ensuring that they had the skills to deliver the curriculum they aspired to delivering and if not, they set themselves tasks.

'We looked at the skills for our own team ... where we identified areas for retraining and development ... where we had gaps in terms of what we need to deliver.' (Programme Team, Social Science)

This review process will have been happening iteratively through the other stages, but participants concurred that a small group is needed to get all the information back through the university processes for revalidation. This is the stage where the small team are checking that there is congruence between the activities, the learning outcomes, the single vision and the research.

6.2.2.6 Summary

The CD process that emerged within this study has 5 stages that need to be undertaken and connected to bring together the multiple elements needed to ensure that the curriculum is owned by a connected staff team and fit for purpose for the students. The process has some elements of linearity and a definite order, but there are also links and threads and cycles back through the process as the design progresses. An interconnected spiral is a fitting model for this process showing how the levels affect one another. Lam and Tsui (2013) talk about a spiral curriculum that facilitates complex learning in a logical progression and this is an overall spiral model for the design process. The findings suggest that all five of the CD principles need to be operating at all points within the design process.

As stated earlier, the students connect the curriculum as the curriculum connects the divergent aspects of HE. Where there are disconnects or fragmentations in the design process, these will show up later in the experience of the students. The students are the litmus test of the congruence between design and delivery.

If the staff do not have a shared coherent model for the curriculum, then the students can not follow a shared coherent curriculum (Fung, 2017). If the students are not following a shared coherent model for the curriculum then the curriculum is not creating cohesion across the divergent aspects of HE. Within this study there was one institution where participants stated that there was congruence between the institutional approach to CD, the programme leader level and the programme team level. In all the other institutions the participants describe good CD as happening *despite* the institution rather than because of it. The organisation of

those Higher Education institutions seems to be incongruent with the espoused principles and process of CD.

6.2.2.7 Connection as a central emerging theme in Curriculum Design Principles and Process

In his forward to Fung (2017, p.vi), Barnett states that there are no less than twelve dimensions of connectedness; that the curriculum needs to be fundamentally creating connections between:

1. Disciplines.
2. The academy and the wider world.
3. Research and teaching.
4. Theory and practice.
5. The student and teacher/lecturer/professor.
6. The student in her/his interior being - and in his/her being in the wider world.
7. The student and other students.
8. The student and her/his disciplines - that is, being authentically and intimately connected epistemologically and ontologically.
9. The various components of the curriculum.
10. The student's own multiple understandings of and perspectives on the world.
11. Different areas - or components - of the complex organisation that constitutes the university.
12. Different aspects of the wider society, especially those associated with society's learning processes.

Taking each of these statements and mapping out all the connections mentioned can produce a diagram like this:



Figure 14: An illustration of Barnett's 12 dimensions of connectedness (Fung, 2017)

The findings from this study reflect Barnett's twelve dimensions of connection, where the model that emerges from the analysis is one of connection at every level from the institutional approach to CD all the way to the delivery of the curriculum. The findings indicate that positive statements from participants about CD are about connection and about staff themselves connecting with one another and the research and making connections in ways that they want the students to behave when engaging with the curriculum. The negative statements refer to behaviours or processes

that mean there is disconnection between staff, working in silos and fragmentation in the design of the curriculum that can lead to fragmentation experienced by the students.

Referring back to Figure 12, there are factors that come up in this study that are not represented in the diagram I made of Barnett's 12 dimensions. I took the various elements and combined them with the findings of this study to show how the CD process uncovered can connect all the elements as it occurs and ensure that the student is at its heart:



Figure 15: Barnett's 12 dimensions of Connection and the CD findings from this study

The curriculum can be seen as an equipoise, connecting the diverse interests of higher education and developing confident, competent reflective graduates and at the same time serving to bring together divergent researchers and specialists so that the HE industry is developing connected, competent, reflective professionals. In one team where they are happy with their CD process and are aligned to the principles and process, they have created multidisciplinary modules for their second- and third-year students.

From these findings, when CD embodies the principles and follows the process then this connection is taking place from the beginning of design to the delivery. CD is about connection between staff, synthesis of their ideas and expertise, reflection and creativity at a professional level and this is then experienced at the student level. The behaviour and experience of the staff is aligned with the behaviours and experiences staff want for their students.

When the CD does not embody the principles and does not follow the process that this study has revealed, this kind of connection is not present, and this can lead to fragmentation and stagnation. The professional engagement of the staff with one another and with the design of the curriculum becomes misaligned with what the staff want for and from their students.

Comparing the five principles and the five-stage process with the extant literature on CD illuminates the idea that central to the purpose of the curriculum is connection, that the curriculum is where all kinds of connections take place (Fung, 2017; Druzhinina et al., 2018; Aldrich, 2015). By reflecting on these principles and engaging with literature around CD in HE I am theorising on these principles as connectors:

1. **Keep Student at the Heart:** The student connects all aspects of the curriculum. Keeping them *at the heart*, reminds the design team that everything will be experienced by the students and that the curriculum needs to connect them with knowledge, skills, one another and their *journey*. Keeping *the end graduate in mind* connects the CD process to the outcome.
2. **Appreciate Colleagues:** CD connects diverse colleagues, and they work together to ensure that their *voices are all heard*, and their ideas and expertise connect within one *melting pot*. They get an opportunity to be *open* and *give one another feedback*.
3. **Make time to Reflect and Create:** This principle is about connecting the design team to:
 - a. What has been happening: staff feedback, NSS scores, graduate attainment, industry feedback.
 - b. What's required: industry partners, university standards, technological advances, academic advances in teaching and learning.
 - c. What is possible: Reflecting on team skills, engaging in professional development, bringing in resources to up-skill teaching and learning.
 - d. And finally, to connect each of these to actions that the team would like to do next.
4. **Synthesise Theory and Practice:** This principle cries out that connection is at the heart of CD, particularly within this group of participants at universities which specialise in bringing together the world of work, the world of academia and the latest in technology and 'real world' applications of ideas.

5. **Be Congruent:** This principle is about continually connecting behaviours and actions with your espoused values and with the outcomes of your actions.

Fung (2017) calls for a connected curriculum for HE, bringing together faculty, research, student education and real world' communities to connect in new and meaningful ways. She suggests that a connected curriculum opens areas for dialogue across faculty and between students and faculty. The findings confirm this aspiration and suggest that these connections are given value to students through their creation by staff. This is echoed by one participant:

'What comes through is how important communication is through all of that, communication within a small team, the wider team, to the students, between the students, between us and them, between us and our clinical colleagues, that open, honest, direct, sometimes, communication has to be central.' (Programme Team, Health)

Staff need to be in a strong relationship with one another to collaborate at their best and these relationships build through being aligned with the principles and through the process of CD. This in turn is congruent with what the literature says is important for student learning and means that staff are role-modelling good relationships for their students who in turn need good relationships to learn at their best (Felten and Lambert, 2020).

Platow et al (2015) argue that the leader should not have the role of providing answers but rather should be serving by making collective conversations possible. This is echoed in many team members happy with their CD, however the findings indicate that institutional leaders need to be holding the space for conversations around all the principles

and process of CD and creating the conditions within which these can be enacted.

Recently, a London-based University has adopted a Connected Curriculum as their 2016-2021 education strategy for students engaging with a research-based programme. This strategy was based on a having staff connect their research and then ensuring research is connected into every stage of the curriculum, from design to delivery is key to the students engaging fully during their programme (Fung, 2017, p.137):

1. Students connect with researchers and with the institution's research.
2. A through line of research activity is built into each programme.
3. Students make connections across subjects and out into the world.
4. Students connect academic learning with workplace learning.
5. Students learn to produce outputs - assessments directed at an audience.
6. Students connect with each other, across phases and with alumni.

Fung (2017) argues that researchers, educators, students and practitioners can all benefit from mutual engagement and dialogue and that institutions need to create times and spaces for this dialogue to happen. This supports the idea that institutions need to create this space and if they don't then strong leaders within the institution will need to create it within their sphere of influence.

For connectivity to happen then there must be alignment of processes and principles. According to Wiggins and McTighe (2012), alignment provides consistency for students and

supports more accurate construction of programme concepts. Alignment is the direct link between learning outcomes and course components: assessments, activities, and learning materials. A well-aligned programme means that all components of the course contribute to the learner's experience and lead them directly towards achieving the expected outcome.

6.2.3 Core category: Alignment

In this section, the key findings of the core category of Alignment are discussed in relation to the existing literature. The discussion of this core category relates to the sub-research questions:

- What is preventing alignment between HE and these principles and processes?
- What are the conditions for successful CD and how can alignment with these conditions be achieved?

This core category of alignment explores what it takes to be aligned with the CD principles and process. Three sub-categories for ways of achieving alignment under this core category are identified: individual, professional culture and institutional alignment.

6.2.3.1 Summary of key findings for alignment

Alignment

Individual	Professional culture	Institutional
<ul style="list-style-type: none">• Leaders create a design for CD• They demonstrate the CD principles• They create the conditions to support the CD process• They take responsibility for creating congruence between the programme design and the team behaviour	<ul style="list-style-type: none">• The team meet as an academic team the way they would in the workplace.• They demonstrate the CD principles• They take responsibility for creating congruence between behaviour in the university and behaviour in industry	<ul style="list-style-type: none">• Leaders create a design for CD• They demonstrate the CD principles• They create the conditions to support the CD process• They take responsibility for creating the conditions for congruence between Institutional design and Programme design

Figure 11: CD Alignment

The literature on CD states that alignment is important at all levels in CD with regard to purpose, learning outcomes and assessments (Barnett and Coate, 2004; Neumerski, 2013; Gosper and Ifenthaler, 2014; Fung, 2017; Bens, Kolomitro and Han, 2020). This discussion examines some of the reasons why HE institutions are misaligned with the CD principles and processes, and what might need to happen for alignment to occur. In the findings of this study and as confirmed in the literature, true alignment in CD, while aspirational, is not the natural state of being; rather, the default position appears to be that of misalignment. Some of the findings are about types of misalignments while others are about causes. The following discussion addresses types and causes of misalignments found in the literature, and considers whether it is individual, professional culture or institutional alignment that is involved, as appropriate.

When Meyers and Nulty (2009, p.566) apply their five CD principles they talk about combining the principles to ensure alignment between 'the learning environment we created, the thinking approaches students used and the learning outcomes they achieved'. Much of the literature talks about alignment between knowledge, skills and assessments across CD. The findings of this study suggest that this could usefully be extended to include the desirable behaviours of programme teams from the start of design to delivery and graduation, as advocated by Meyers and Nulty (2009).

In this and following sections, I am using the word alignment to refer to extended alignment; that is, alignment between CD principles, processes, and the behaviour of the CD team. The findings from this study provide evidence that also suggest that behavioural alignment is of three types: institutional, professional culture, and individual.

Reflecting on the findings, considering the literature, and comparing these findings with the concepts of misalignment between espoused principles of CD and their practice in CD in HE, this discussion creates a platform for theorising on where the various types of CD misalignment may come from. It suggests that there are conditions that foster and promote alignment - individually, as a professional work team, and as an institution. Scholars who have studied alignment have, for example, highlighted institutional leadership as a key factor in supporting successful CD (Barnett and Coate, 2004; Neumerski, 2013; Khan and Law, 2015). The findings suggest that individuals and teams may also create alignment within their own areas of influence.

6.2.3.2 Types and reasons for Curriculum Design misalignment

The curriculum is highly influenced by the social, physical, economic and cultural environment from which it emerges (O'Neill, 2015). This next section of the discussion will examine some of the possible disruptors that can cause CD factors in HE environments to be misaligned with the CD principles and process from this study.

6.2.3.2.1 No shared model for a curriculum or curriculum design

CD alignment is not possible without the existence of a shared model for CD. Hicks (2007, p.2) wrote that although curriculum was worthy of exploration and elaboration in a HE context, that there was a 'dearth' of writing on the subject. Fourteen years later this appears to still be the case. Gosper and Ifenthaler (2014) highlight that there is no single shared understanding of curriculum by theorists nor by practitioners in HE. This is echoed in this study's finding '*there is no design for CD*' and may be a reason why three of the four participating institutions are not creating the conditions for a specific design process to be supported or promoted. This lack of design may be negatively impacting on what the programme teams across an institution are delivering to students (Fraser and Bosanquet, 2006).

Although it wasn't strong enough to become a core theme, six participants referred to the tension around the purpose of the curriculum; was it to '*produce workers for industry*' or to '*create critical thinkers to innovate*'? If the purpose is too closely tied to the demands of employability, could this limit the ability of the curriculum to develop creative critical thinkers who can innovate in the world of work? The demands and opportunities provided by the workplace need to

be balanced by academic validity (Lester and Costley, 2010). This idea is examined in more detail in the discussion on managerialism.

There are some existing models which give ways of thinking about the curriculum. Knight (2002) separates the curriculum into four parts (content, organisation, teaching and learning methods, assessment) and three forms (planned, created and understood). The findings of this study echo the literature but suggest a change in the order, suggesting that for design teams to be aligned with the principles and process they need to start with their own research and learning, then take the student as the end point, and reverse engineer. The findings also confirm that in at least three institutions, there is no institutional design and there are no guidelines for CD.

There are some who believe that imposing a curriculum would limit academic freedom (Barnett and Coate, 2004). The findings in this study call for a design team to work effectively together to follow a process that engages them in academic research, collaborative thinking, the development of a structural plan, content plan and finally a review against outcomes. It is not a call for a specific, imposed curriculum but rather a call for diligence in practice.

The findings in this study demonstrate how leaders at different levels in the organisation mitigate the lack of institutional alignment in respect of good CD.

Individually, it appears that those leaders who demonstrate alignment with CD principles and process, but not, it appears, alignment to the institution, do this by developing a vision within their CD team resulting in one shared mental model for what the team are doing. For example, in one team,

each member speaks about starting with an idea and working backwards:

'It's looking at what the final product would be, so that would be, I guess, the sphere would be the first thing. This is what you're setting out to do and then you're popping the things in there.' (Programme Team, Science)

The professional teams in this study mitigate the lack of unity around CD in HE by aligning their curricula with their professional practice. They emphasise the idealised graduate/practitioner and use this as a point of alignment for the rest of their CD.

'We've all got to have a sense of responsibility to what we're producing at the other end.' (Programme Team, Health)

The institutional team that had a design for CD followed very closely the same CD principles and process that emerge from these findings; they started by developing a single vision for the curricula based on having researched and reflected as a small leadership group. They were not only aligned around one vision for curricula but were using an approach to development that aligns with the CD principles and process.

'As an academic unit you've got the literature [about curricula] around you in the last two years there has been a lot more research done so we've incorporated those ideas and thinking into guidance that we provide our staff'.' (Teaching and Learning Lead)

6.2.3.2.2 No alignment in Institutional approach to CD

Khan and Law (2015, p.73) list several reasons for why HE institutions do not have an integrated and aligned approach to CD:

- Culture of curriculum development (university culture can be rigid and less receptive to external feedback)
- Lack of strategic planning
- Limitation of resources (financial or human expertise)
- Leadership does not take it seriously and strategically
- No competition and lack of exigency from the beneficiaries (students, parents and industry)

They recommend that to have an integrative (e.g. aligned) approach to developing, implementing and evaluating curricula, HE institutions need to find a more appropriate way to engage with theories and designs (Khan and Law, 2015; O'Neill, 2015; Fung, 2017). This finds resonance in these findings; individuals and teams find the institutional approach at odds with CD principles and process.

'The university calendar does hinder and I have a real problem with that big gap between December and January.'

(Programme Lead, Social Science)

'Sometimes I feel it's a dumbing down to accept the masses.'

(Programme Team, Education)

To counter a lack of institutional cohesion, some individual leaders will develop a strong vision for CD and bring their team along with them.

'There has to be somebody in charge with a vision, particularly if you have got a team where there is perhaps some disagreement about how things

should be. ... "I hear all your viewpoints. And in light of all of that we're gonna do it this way" ... a line in the sand.' (Programme Leader Education)

Leaders at a school level demonstrate an integration of some of the key principles such as 'appreciating colleagues' and leading by example.

'The dean sent individual emails to every single member of staff to either say, "Congratulations on your module statistics" or, "Not as good as you could've done, but you've got the support with da-da-da let's see how that can be improved". He knows every staff, and he celebrates every staff achievement' (Programme Leader, Social Science)

Those teams with strong professional values lead by making teaching and learning central to the whole of design and delivery.

'It has to have the student at the heart of it, it has to be creative and thought-provoking and it has to be designed to take thinking forward. There has to be opportunities for reflecting, from the students' perspective, the delivery of it the design of it and the evaluation of it at the end. It's got to be a living process.' (Programme Lead, Education)

'It's what one of my colleagues' calls "1970s' work practices" here. We have a huge amount of independence, a huge amount of flexibility and the team works very well together. Nobody abuses that'. (Programme Team, Education).

The institution with a design for CD went to the literature and accessed the latest research to create their blueprint, confirming Kahn and Laws' (2015, p.73) proposal, that leadership 'take it seriously and strategically' and in this institution that appears to have happened. This is different

to the two institutions who specifically said that there was 'no design for CD' in their institutions and the one who didn't mention it at all.

'I mean we're an academic unit here, so we have to make sure that we are developing students to fit the future world that they're going to go into, so we need to be looking at data and information and what employers want and what the most recent literature says.' (Teaching and Learning Lead).

These findings find resonance in the literature and suggest that when the institutional practice is not aligned with the CD principles and process this damages the staff attitude to CD.

'...how many hours I'm sitting in front of marking something, that workload allocation is much higher on that than it is in something that is all about the relationships and actually making this course work.'
(Programme Team, Health)

6.2.3.2.3 Those in teaching and learning are not used to collaborating

Whereas there has, traditionally, been collaboration between research teams, the teaching role has often been the sole responsibility of the academic who is the discipline expert (Burrell et al., 2015). This is where, the findings suggest, they go away as individuals to write their own modules which are then 'crowbarred together'. These findings, reinforced by the literature, suggest that a team-based, collaborative approach to designing a teaching and learning programme will enhance cogence and coherence in the programme and in the student experience. Hayward (2000) recommends a democratic process of curriculum development be introduced, one that

makes provisions for all the roles and players to participate.

This is happening in some places; for example, one institution that aligned around the principles and process, created congruent conditions and brought in programme leaders to co-design the strategies for implementation. In this instance, the institutional leaders were behaving in a way and using a method that was an example of what they were proposing that the staff did during programme level CD. The institutional approach was congruent with the programme approach.

The findings in this study indicate that collaborating is a skill and a habit that is promoted by all those leaders and those professional teams aligned with CD and is felt as missing by those who are not.

'Universities are notorious at bringing together groups of individuals and have them work in a department and they're called a team but actually they have very little to do with each other and they don't really have any shared sense of purpose.' (Teaching and Learning Lead)

This suggests that staff value a collaboration and regret its absence in those institutions where it is not culturally embedded.

6.2.3.2.4 Time and resources are limited

Finding time and financial resources for CD has also been an issue. McGoldrick, in their 2002 study of practising academics' perceptions of CD, found that respondents said that limited resources in universities and manifestations of managerialism were thought to be the major limitations on creativity on CD, and that this manifested as erosion of space. In this study, similarly, one respondent noted that being expected to run like a business and losing the

administrative support that academics have previously enjoyed contributed to time paucity: *'the bureaucracy associated with being an academic seems to have mushroomed now'*.

Findings suggest that lack of time contributes to the erosion of space for thought, discussion, implementation and in turn to a diminishment of morale. Staff need space for creativity to reflect on and to engage in CD principles and process and this creativity requires resourcing with time (Tait, 2002). In this sense, alignment is at risk due to lack of time could HE be restructured to protect the time needed for creativity and design. This time paucity was reported by all participants in one form or another. It is mitigated somewhat in the institution aiming for alignment; they report assigning time to the role of Programme Lead in a formal way, that *'What you actually do is you hold that role in esteem by giving it time and space and value'*.

When time and resource is not made available at the institutional level then the findings indicate that for some leaders and teams, they create the time and space needed using informal approaches.

'I think that seems like a good summary of the curriculum design process that we've gone through ... just how important communication is through all of that ... communication within a small team, the wider team, to the students, between the students, between us and them, between us and our clinical colleagues.'
(Programme Team, Health)

'Our team leaders put a very big emphasis on the team dynamic. So, we do like, alongside the formal kind are ... informal [meetings].' (Programme team, Social Science)

6.2.3.2.5 A change in the student body?

One area that might be causing a misalignment between putting students at the heart of CD and staff behaviours is changes to the student body. Since 1995, an escalating demand for tertiary qualifications means that entry into degree programs, on average, has increased by 25% (OECD, 2013; Gosper and Ifenthaler, 2014). The widening inclusion programme set up following the UK government's white paper, 'The Future of Higher Education', led to the UK committing to doubling the numbers of students from disadvantaged backgrounds going into HE, baselined at 2009 levels (Jones and Thomas, 2005). The commitment to widen participation and encourage students from disadvantaged backgrounds into higher education has meant more students coming into the system, often with diverse learning experiences. This may have resulted in stretched staff teams doing more for their students, but with less resource (Johnson and Bolshakova, 2015). The study findings here indicate diverse academic ability across student cohorts. The design of first year curricula needs to address this. Individuals align their CD to the needs to these students with extra-curricula activities that close the gaps.

'We've got a student mentoring programme, which works very well, where year two and year three students will mentor new incoming students to aid the transition from FE to HE.' (Programme Lead, Science)

These findings also refer to students being very differently abled when they arrive at university:

'Not everybody that comes in has studied [the core subject], they have other disciplines in their A levels or BTECs.' (Programme Team, Social Science)

'Then there's the big variation in their academic achievement from work experience to B-tech to A levels'.
(Programme Team, Health)

There is a need in the first year to get all the students up to the same level:

'They need to be writing and thinking like an undergraduate level by the end of Level 4'. (Programme Team, Social Science)

Some leaders and teams align the CD process by designing in methods to bring students to an equal footing. This mitigates issues around diverse thinking styles and educational achievement. They get the students to work together and to develop teamwork skills to support one another, and some offer a variety of mediums that the students can work in.

'I'm very aware of the differences, the different students, all with different learning styles... I want them to be able to demonstrate that they're able to work at a final year level but to demonstrate that level in varying ways.' (Programme Lead, Social Science)

Some teams use their informal relationships to get student attitudes aligned with professional values.

'I always like to remind them you didn't make that choice...to do maybe sports science and go and have lots of time to go and explore the human body for all its intricacies ... you chose instead to actually learn about the human body in order to look after people and help people in the future. You've got keep reminding them.' (Programme Team, Health)

Others are worried about the differences between students but don't talk of actions they can take to change things and

are concerned that the desire to recruit more students of lower ability is damaging. They just notice the problems.

'The emphasis on getting students through their assessments and getting good NSS targets means that there is decrease in status of the body of knowledge.'

(Programme Team, Education)

In these findings, having children from families that haven't themselves accessed university has brought some misalignment in attitudes and expectations.

'We notice a pattern in our students' lives that many of their families perceive being at university as not doing anything. So, if there is a granny to go to hospital or a child who is at home ill, they are sent there. They stop coming to university. The people that work in their families aren't paid if they don't go. We understand what's behind it, but in terms of attitudinally to what University is, we discuss those kinds of aspects and how we can ameliorate them with what we do.' (Programme Team, Education)

There is an increasingly multicultural student body, particularly in those disciplines with a professional orientation (Cancela and Ayán, 2010). By its very nature, widening participation means that students will be coming into the HE sectors who may not be represented by those who are designing the curriculum; they may not know how to handle them or design a curriculum for suit this kind of student. The findings in this study indicate that the curriculum needs to be designed to accommodate a diverse student population and show that teams are responding to this inclusion programme. 90% of teams talk of this inclusivity as a desired outcome while 40% of those have specific actions they've designed into the curriculum or activities they use in delivery that reflect the diversity of students at the start

of the programme. The findings do not speak of the need for the design team to represent the diversity of student, but they do mention the need to update research sources to be more diverse.

The study findings suggest that staff who are aligned with principles and process are creating strong relationships between the team members and role modelling these relationships for their students. This may be particularly important for the changing student body as having strong relationships is important for first-generation college students. This cohort of students brings significant capacities to college but can also face long-standing inequities and barriers to attaining their educational aspirations (Felton and Lambert, 2020).

6.2.3.2.6 Performativity influencing curriculum design

As well as the student body changing, universities are coming under the influence of performativity, with teaching and learning being measured as outputs and used in marketing across the globe (Barnett, Parry and Coate, 2001). Burton-Jones (2003) talks of the new knowledge capitalism with the need for the updating of knowledge to be a life-long pursuit. For programmes that engage with a 21st century student, there is a need to help them develop their knowledge capital. Since performativity first began to be discussed in the literature, a different call is now being placed on academic staff (Locke, 2015), with implications for the framing of modern programmes. This performativity agenda can create tensions. On the one hand there is the commitment to learning and creating contexts for critical thinking, on the other, there is the need to perform well within the targets set by the university (Todd et al., 2015). Universities are becoming defined by their place in the marketplace and their students

are seen as demanding customers rather than willing learners (Molesworth, Nixon, and Scullion, 2009). One team member who was not happy with CD in his team noticed *'there's been a dumbing down of higher education in terms of assessment'*. Others wondered whether *'pandering to the NSS scores'* meant *'students aren't allowed to fail'*. Those teams that are aligned say they design their CD regardless of these performativity issues and that good CD is the best way forward in the long term; *'our NSS are shouting on our behalf'*. Those with institutional alignment may use the NSS but only to spur them on to greater achievements.

'We looked at our course and it wasn't good enough. We got reasonably good NSS but in my opinion that's easy to get... Our students were more capable than the grades they were getting, and we all wanted to be part of a course that was better. That offered better.'
(Programme Lead, Social Science)

Macfarlane (2016) argues that the performativity agenda means that students are being required to engage in specific forms of learning that are more easily assessed by their tutors, and more likely to fulfil the institutional targets. He argues that this violates their rights as adults to learn as they see fit even if that means not interacting with others or turning up on time for compulsory lectures. Whatever the personal or philosophical position on performativity, institutions are being measured, and programmes are being required to perform to specific standards. The findings appear to place emphasis on assessed team skills and this reinforces MacFarlane (2016). It is part of the connection between academia and industry and particularly important to this kind of institution. Programme Leaders connecting industry and academia emphasise this aspect.

'It's a collaborative learning unit where students are put into small groups and they have to self-teach based around case study-based approaches over the course of a year ... so we're testing both their team-working and their individual skills and it works really well.'
(Programme Lead, Science).

This leader acknowledges that some students do not like this, but he puts skill before the desire for a specific way of learning. *'Students didn't like it in the first year... "Well, why am I being assessed by my peers?" and all that kind of stuff. We got over that and we found ways around that.'*

6.2.3.2.7 A change in the expectations of students as customers

Another area where CD alignment may be important is UK student fees and their impact on student expectations of their lecturers and programmes (Leathwood and O'Connell 2003). The introduction of tuition fees in 1998 under the then Labour government and their increase to £9,250 a year in 2012 following the Browne (2010) review, brings students into the role of paying customers for the programmes that they buy. Some researchers argue that a lacklustre lecture or an unengaging classroom are no longer acceptable to a fee-paying customer (Fung, 2017). Striving to support people to learn in universities is not a new concept (OECD, 2013) but since the onset of the 2012 fee regime, universities are focusing even harder on ensuring that excellent teaching and learning is experienced in Higher Education. Universities UK (2014) report an on-going need for the sector to demonstrate its value to students.

Universities now need to consider whether the consumer orientation of the student could be lowering their academic performance (Bunce, Baird and Jones, 2017). This could be a

call on programme teams to adopt a plan for CD in a way that they have not done before. One team uses their aligned voices to work with the students on shared expectations about the curriculum, as well as ensuring that there is no fragmentation in the staff voice.

'We're very consciously competent at making sure that the students know that we talk to each other, so they perceive it [the curriculum] as a whole, rather than piecemeal.' (Programme Team, Education)

As one programme lead said, the bulk of the university income comes from the students, so aligning around the student could be a logical step.

This study suggests that part of the outcome for the curriculum is that students are expected to become self-directed, reflective practitioners. They are expected to synthesise research, knowledge, skills and thinking and develop independent learning. There is agreement that through the levels four, five and six, students move from 'handholding to independent learners'. There appears to be an agreement that students with diverse educational attainment should be at a similar level by the time they finish level four. Some staff reported that student expectations have changed, that more students are being 'spoon-fed' during 'A' Levels and B-tech, and are arriving with lower independent learning skills than in previous years.

'[20 years ago] there was a real independence amongst the students and willingness to learn and what have you. As time went on, there became more of a desire for spoon-feeding, an instant gratification, which is, "Tell me the answer. I wanna know the answer now.' (Programme Leader, Social Science)

This blaming of the students for not wanting or being able to synthesise the different parts of the curriculum seemed greater among those whose overall CD process was not aligned with all the principles and the process.

'We have incredibly passive students.' (Programme Team, Education)

Those happy with their CD appear to talk more about building those independent learning skills during the structure stage of the CD process.

'We always talk about what we're doing with the students, and we want to know what they want and what they like but there's always the issue about what's the academic validity in having something introduced versus the popularity contest.' (Programme Lead, Science)

'Then they're transitioning into more a PBL approach ... where students are becoming more self-sufficient to have case scenario information and think for themselves ... moving from scaffolding into facilitating into independence.' (Programme Lead, Health)

6.2.3.2.8 Lack of training in CD and programme leadership

All four institutions provide some form of centre for teaching and learning, however the institution that is attempting to align all its practice with CD principles and process appears to be thinking more systemically about how to get programme leaders involved, taking action to ensure that there is a culture change around developing the skills for good CD.

'The staff are supported to be active through our staff development sessions ... that includes elements of course design. We have a learning and teaching

conference to encourage staff to be active, proactive, curious, and design really good up-to-date courses. We also have curriculum innovation projects, so we fund staff to work in partnership with students to design innovative curricula linked to the principles [of good CD].' (Teaching and Learning Lead)

Leading a programme in an institution where programme leaders are given the job to do with no 'time, space or extra resource' is quite a big ask especially when teaching loads have increased, along with pressure to deliver significant research outputs (Kenny, 2018). This can then result in programme leaders competing for the time and attention of the staff. When there are competing demands that create fragmentation amongst staff, it is difficult to create a coherent, connected, creative design process (McGoldrick, 2002). The findings similarly talk about the lack of training for programme leaders:

'You need someone that's actually willing to listen to everyone and not just go gung-ho at one structure... a person that leads it, that's willing to take it forward, listens to everyone.... I was kind of dumped into it early on... I've never had a course on it. It's not something you get taught.' (Programme lead, Science)

Oliver and Plewes (2002) studied a range of CD teams and assessed them for effectiveness. Their findings indicate that it's more a case of orientation to group norms rather than derivation of course design from first principles. This means that unless a leader has the personal qualities to change the culture around CD, they are likely to be at the mercy of the competing demands on staff time and resource. This reinforces the findings from this study, that without a leader setting the group norms to be aligned with CD principles and process, then the group will align around the

norms rather than aligning around what they know to be good practice. Oliver and Plewes say that Biggs' (1996) constructive alignment was noticeably absent in their study of CD teams, and this indicates that a lack of training leaves teams without a central academic theory underpinning the alignment of their CD.

One programme leader in a team that is aligned with CD principles and process, despite being in an institution with *'no unified design for CD'*, says that although he had no training in CD, the trust of a leader higher up in the school supported him to develop his professional skills.

'I guess for me having the opportunity to be able to be independent and to take real ownership of the course and do with it what I want ... it came from trust from the then Head of School ... and having someone who is in control of a school actually trust you to do something and to not micromanage and tell you how things need to fit together, I think is incredibly valuable.'
(Programme Lead, Science)

Another said that two leaders in their team made all the difference.

'I feel that there are one or two leading and the rest of us fall in line.' (Programme Team, Health)

Those who are aligned to CD principles and process must actively create their own approach to CD without support and as a programme leader, this respondent also reported other ways that he found to create his own skills and development programme.

'Being external examiners means that we can see best practice in other institutions typically and try and bring that back, and equally we hope that our external examiners do the same.' (Programme Lead, Science)

This indicates that there are some leaders in HE who will forge their own path, even though the institution does not necessarily make it easy for them.

6.2.3.2.9 Managerialism eroding the space for good Curriculum Design

Being asked to be a manager and put effort into marketing to students rather than teaching them, is a problem that comes up in the literature. It is confirmed in these findings and may be one of the reasons teams talk so much about 'luck'. Becher and Trowler (2001, p.185) outline some key features of 'managerialism' as applied to an HE context as follows:

- 'An orientation towards the customer and the "market" rather than the producer.
- An emphasis on individualism and an acceptance of the status quo.
- The management of change is seen primarily as a top-down activity with staff adopting a passive role.
- In education, knowledge and learning are conceived as being atomistic, mechanistic and explicit in character.'

Becher and Trowler (Ibid.) resonate with the findings of this study and refer to a shift in the institution towards the market, and away from student and academic priorities. The programme leads have to work to mitigate these misalignments:

'The mind-set from the people that influence within the faculty is such that efficiency means lectures. It means doing things once to lots of people and getting it done, which is a massive retrograde step and it's not forward-

thinking or putting the student at the centre of their experience.' (Programme Lead, Science)

Managerialism is symptomatic of an attempt to substitute market responsiveness for one of professional control (Anthony et al., 1994). This comes up in this study as the tension between NSS scores and rankings, and academic rigour. Knights and McCage (2001) note that inherent contradictions have manifested in organisations in quests for control versus cooperation. These kinds of tensions come up in CD at all levels:

'It's not putting the student at the centre. It's difficult to understand what's at the centre, but I suspect it has pound signs in front of it.' (Programme Team, Science)

Those teams that are aligned with CD principles and process appear to attenuate these issues and realign their behaviour to their values. Some individual leaders do this through leaning into their external accreditation:

'We've got, externally, a good accreditation process.' (Programme Lead, Social Science)

Or through their professional values:

'I'm a big believer in "programmes should be developed as teams". While there is always a programme leader, if the programme leader was expecting to do things in isolation, then you don't get your constructive alignment.' (Programme lead, Social Science)

'A lot of us hold quite strong views and a lot of us are research-active in the fields that are challenging to the Government's agenda.' (Programme team, Social Science)

Some teams use their professional culture to lead the process despite what the university or government says:

'I see that as a very school-teacher type of approach, but because so many of us come from that background, that is the way we work. So the weaving isn't set, it's all quite fluid. Although we have the silos that are written, it's very fluid here how we manage things.'
(Programme Team, Education)

Those that are unhappy appear to need more of a steer from the institution:

'The university gave you no training on any of the [CD] systems, it was very much just like "well there you are, get on with it," sink or swim kind of thing. My experience of [CD] when I started at this university was it was very loose and there was very little on structured thinking about curriculum.' (Programme Team, Education)

The findings suggest that this makes it easier for everyone to manage the complexities of HE when it is done at an institutional level.

6.2.3.2.10 Recruiting the right people into programme teams isn't in the hands of those in charge of leading Curriculum Design

As Vroom (2007, p.372) observes, 'research and teaching are two very different kinds of activities, each requiring its own set of skills, not all of which are compatible with one another.' The findings of this study indicate that programme leaders need a balanced team willing to create a strong learning environment, but have little influence to create this team. All the teams who are positive about CD in their institution and in their programme say that they have a

'great' team and when asked where that comes from, they reply, 'we're lucky'.

Where there is a strong individual leader without mention of support from the wider institution, those leaders have strategies to take a team and get them to align around CD:

'I know the strengths of the staff that are on the team, I know the weaknesses, I know who I can turn to in a push, I know people that need to be handled in a particularly sensitive way. There's no one on my team who makes me shudder, which I think is always a good marker, and I'd like to think that one of the things that runs throughout the whole team is mutual respect.'

(Programme Lead, Science)

It seems that one or two leaders can be enough to create a new or protected culture, even when the wider institution promotes different norms (Centola et al., 2018) but recruiting the right leaders into post would mean creating a job specification that emphasised leadership and management skills.

An issue in creating and maintaining the team dynamic is that programme leaders do not have control over who they recruit to work within the team. This means that someone may come in who does not share the team values or want to take the same student-centred approach with cohesion and balance at the heart of the curriculum. This may be the source of the repeated theme of 'lucky' in relation to 'good' teams within this study.

Staff are recruited according to their research and their specialism, according to what they know rather than for the job of teaching students and creating a positive learning environment and being a great member of a 'lucky' team.

'I do find.. that we have staff who are extremely academic; excellent at research but not good at classroom management.' (Programme Lead, Social Science)

There is one example of a programme that went from being dysfunctional to functional between the start and the completion of data collection. This lead was able to give a first-hand account of what was needed to get the team aligned around the principle 'appreciate colleagues':

'I inherit ...a dysfunctional team who didn't agree with each other. They wouldn't meet; they wouldn't talk to each in meetings because historically they were upset with different people's opinions. They didn't discuss; they didn't listen. So you can imagine it wasn't a particularly great environment ... It's those basics which are so important. So what I start to tell them, "In these meetings, this is an environment where we can critically discuss the performance of the course; the students and us. If we've got disagreements with each other, we need to bring them out. If we're not happy with each other we need to be saying so. If you've got different opinions, we need to be speaking in a calm manner."' (Programme lead, Social Science)

This team went from being misaligned to aligned around the principles and process within six months, demonstrating that it is possible. One team member interviewed before and after the transformation described the new leader as being a 'breath of fresh air'.

6.2.3.2.11 Research valued over teaching and learning

One explanation for the lack of attention to overall CD could be that it was only recently considered an area worthy of attention within HE institutions. Burrell et al (2015) state

that it is only since the late 1990s and early 2000s that teaching skills were thought to be a requirement of those teaching HE students. Academic development centres and centres for teaching and learning introduced diplomas and degrees in teaching for HE teachers, specifically to upskill the workforce (Butcher and Stoncel, 2012). This is confirmed in the findings when one teaching and learning lead talk about CD being hampered by those who had been in post a long time: *'One or two of them who had perhaps been here a bit longer and aren't so interested in change'*, reflecting that it might be easier in the future when they've had a chance to:

'Get rid of some dead wood through voluntary redundancy.' (Teaching and Learning Lead)

Prior to this shift, there was a narrow perspective of research-led teaching with the curriculum structured round the research interests of the staff in a department (Griffiths, 2004; Healey, 2005). Some participants mention that there has been a tendency for HE to hire people because of their research and their specialism not because of their ability to work well in a team and to teach effectively. Throughout the data, participants mention that the institutions value research over teaching and learning and this may be having detrimental impact on attitudes to CD. Parker (2008) found that most universities in the UK require research excellence for the more prestigious grades (e.g. professor) whilst teaching maybe associated with lower status and lack of promotion opportunities (Young, 2006). These findings are confirmed as some participants say colleagues are prioritising research above CD.

'A lot of them are very research-focused and therefore couldn't really give a damn about the teaching, as long as it's actually minimum.' (Programme Leader, Science)

Individual leaders achieve this alignment through emphasising the need to stay future-focussed and therefore in touch with the subject research.

'A great teacher can make the most boring research relevant and a bad teacher can destroy any interest our students have in a key subject.' (Programme Lead, Social Science)

Professional teams value the teaching and learning because it is what supports students, who may become future colleagues, to be the best professionals they can be.

'The overall design of the curriculum is a mixture of a student-centred approach to higher education mixed with being a discipline expert, and how do you effectively get your students engaged with your discipline if you don't understand how students learn? If you don't think about new ways of getting students engaged and bringing them on board, then they're not engaged with your discipline, they're just learning the stuff you tell them.' (Programme Lead, Education)

The institution attempting to be aligned with CD all the way through the levels finds innovative ways to get their staff teams researching the latest ideas around teaching and learning.

'[Programme Teams] have to respond to emergent teaching and learning literature and pedagogic literature... I mean we're an academic unit here so we have to make sure that we are developing students to fit the future world.' (Teaching and Learning Lead)

6.2.3.3 Bringing teaching and learning in line with research - Teaching Excellence Framework

The issue of research being valued over teaching and learning is one area that HE policy in the UK is attempting to rectify and the rating of universities changed again with the introduction of the Teaching Excellence Framework (TEF) (2016), which in some ways aimed to shift the balance between research and teaching quality (ibid). According to Robinson and Hilli (2016), the new TEF proposes measuring the standards at an HEI through the adoption of existing measures, which include: student satisfaction, measured by institutional NSS performance; student employability outcomes, measured by the Graduate Outcomes Survey (DLHE) and data on earning figures; and retention and performance, measured by progression data and degree awards. This gives added weight to institutions wanting to ensure that their curricula provide student satisfaction and in-work progression. However, the introduction of the new measures has led to some staff members to feel that the quality of research is still being valued over the quality of teaching and learning (Robinson and Hilli, 2016).

While the introduction of the TEF may have shifted the focus from research to teaching quality, the REF and the TEF both reward universities on the results of their performance, creating targets to be reached. Institutions are already being measured on key performance indicators which may well be putting management and academic agendas in competition and potentially risking a downgrading of the learning agenda (Cribb and Gewirtz, 2013). There is a chance the programme leaders may be spending more time thinking about hitting their targets and teaching students to pass exams and rate them highly in the National Student Survey rather than on engaging them in challenging and developmental education

(ibid). This may be a factor in misalignment in CD, and the findings speak to a lack of rewarding and resourcing teaching, learning and creativity in CD. Individual leaders correct this alignment with having social rewards such as checking in with one another and strong social bonds. These show up in the experience of the team members.

'I'd say at least half of the team are classed as good friends. Everyone's a good colleague which is a great situation to be in.' (Programme Team, Social Science)

Professional teams do it through informal routes:

'When we have department meetings, there's always a question about, "Has anybody got anything new? Is anybody doing anything different? Is anybody engaging with outside people or inside people in a new way that you want to share?" A sharing, supportive community is very influential on how effective we think we are.'
(Programme Lead, Education)

This is confirmed in the literature and there are many who do experience a gulf between how well teaching and learning is rewarded compared to research and an improvement in the status of teaching and learning is welcomed (Robinson and Hilli, 2016). The institution aiming to address these inequalities and align CD with research is directly engaging in strategic conversations in this area.

'It's not really until about 1950s or '60s that people started to realise that understanding the science of learning and teaching was really important. And we're still a long way off from getting that parity to say, "Well actually, your discipline research is really important, but we also think it's important that you understand the process of learning and teaching." So to make all those ingredients come together, we have to

change the rhetoric around conversations related to the design of curriculum.' (Teaching and Learning Lead)

6.2.3.4 What does this discussion tell us about alignment in CD?

Leadership requires a group to move from concepts to practice (Platow et al., 2015), particularly in relation to CD. To move from aspiring CD principles and process to embodying them, the leader, and then the group, will have to change their mental models about what is possible in CD and their behaviours too. They may need to engage in critical reflection on CD in their team or school, which Barnett and Coates (2004) argue that scholars are reluctant to do. These findings amplify the literature with examples of how leaders can create alignment at programme and institutional levels through: strong leadership; creating local alignment with the leaders' vision; creating alignment to their professional culture; or applying the CD principles and process strategically across the institution.

One word of caution is to recall that these findings constitute the thinking of this group of 34 people involved in CD. Early in this research process the ethics committee reflected that it was not ethical to separate the groups into those performing well and those who were not performing well under NSS standards and the TEF (2016). These guidelines have been adhered to. While the CD principles and process may make sense and are reinforced in the literature as conditions to aspire to, Levitt and Dubnar (2014) in their popular book *Freakonomics*, remind us that the social world is complex and things that make sense do not always have the outcomes that we assume. We cannot assume, therefore, that aligning with the CD principles and process will increase the quality of the programme.

Recommendations from these findings can be found in Table 8.

Type/Cause of Misalignment	Impact	Recommendations from these findings
No shared model for CD	Incoherence in academic institutions and no conviction behind a specific path.	Institutions should research and reflect on CD and create one shared vision for their institution.
No aligned approach to CD	Lack of institutional coherence means that each department or programme needs to create from scratch, leading to fragmentation and lack of goodwill from busy staff teams.	Institutions should engage heads of schools and programme leaders in a shared vision for CD and in co-designing a shared approach that makes it easier for staff to do what is required.
Those in teaching not being used to collaborating	Staff are used to working in silos and do not have the habits or skills or peer challenge.	Institutions need to lead on CD training. Leaders need training in supporting good team dynamics and the practice of giving and receiving feedback.
Limited time and resources	This is impacted by the factors above and is likely to always be an issue in HE.	Institutional leader to build into job descriptions design time, reflection and staff learning. Programme Leaders make one regular time to meet for reflection, learning and design that suits the majority timetable.

Change in student body	Diverse students without the cultural capital of HE practice and expectations stretch the abilities of staff teams.	Staff teams need time, space and training to learn to adapt as the student body changes. Institutions need to source best practice research in inclusivity and apply policies institutionally to back up changes.
Performativity influencing CD	Concerns that there is a dumbing down of standards. Those teams aligned with CD principles and practice do not allude to this.	By using good CD to be an equipoise between competing demands in HE then the quality of CD should return excellent NSS scores and university ranking.
Change in expectations of students	Students may become more passive consumers, and staff do not have skills to motivate them.	All staff to be 'on message' to students and a shared model for CD which means students learn to adapt to a new cohesive learning culture and move from 'handholding' to 'independent thinkers'.
Lack of training in CD	There is an element of 'luck' and passivity in whether you are in a good or a bad programme team.	Programme leader should be a role that is a step in the institutional career progression, and good resources for staff training in these

		skills based on research.
Managerialism eroding space for CD	This is a concern for those not aligned with CD principles and process.	Ensure that the institution is able to create the conditions for staff to prioritise CD and balance it with research and have administrators to administer so as not to squander skills.
Recruitment misaligned with CD	There is an element of luck to get the balance and the skills right in a programme team.	Give the team an opportunity to write job descriptions and to recruit for balance in their programme team.
Research valued over teaching and learning	When faced with limited resources, the institution rewards research staff who then make this their priority.	Make programme leader role a step in the career ladder and give it time and resource.
Bringing teaching and learning in line with research	All academics are required to have some form of training in teaching and learning.	Make the skills of teaching and learning promotable so that they are not a chore to be endured but a skill to be prized.

Table 8: Recommendation from these findings on Alignment around Curriculum Design in HE

6.2.3.5 How do the core categories of CD

Principles, Process and Alignment interact?

'What is surely clear is that the university has to accept its own responsibility to think seriously about the matter: just what is it to be a university in the 21st century?' (Barnett, 2011, p.454)

This section of the discussion explores how the three elements of the model that emerged through this study interact to create the participants' experience of CD in HE. Meyers and Nulty (2009, p.574) want curricula that 'cohere together and conspire to oblige the students to engage with their learning in a deep manner'. This study indicates that the CD process needs to cohere and to conspire for staff to engage with their own learning in a deep manner and use that professional learning space (Stoll et al, 2006) to create an optimal learning experience for their students. In their study on collaborative design teams, Burrell et al (2015) found that their participants supported the idea that a combined top-down and bottom-up approach is the best way forward to facilitate collaborative projects like CD and this is confirmed in these findings.

Looking at processes in HE that support staff to have agency in designing their curricula the way that they see is best, Annala et al, (2021) found that whether CD was organised at institutional or at departmental level, the levels of agency remain the same. This is confirmed in these findings, that so long as there is a leader creating the conditions for alignment then the rest of the team can enact the principles and process.

Research by Neumerski (2013) demonstrates that improving teaching rests in the hands of the leader as well as being distributed across leaders in the institution, and that a strong leader is needed to create the conditions so that staff are empowered to make their own decisions. This is confirmed in these findings, such that individual leaders can create the conditions to align with CD principles and process but that they need to work harder to do this despite the institution. Ideally if the institutional leader and programme leaders and teams are aligned then CD is likely to be more effective.

When the principles and process are doing their job of connecting research, industry, teaching and learning altogether in one curriculum that combines everything for the student, then the alignment category ensures one more level of connection. Alignment joins the behaviours of the leaders and the teams to their aspirations. When leadership at institution and programme level is connected to, and aligned with, the principles and processes then staff can work collaboratively and collegiately and efforts are well coordinated (Darling-Hammond, 2009; Darling-Hammond et al., 2009; Wiles, 2009; Neumerski, 2013).

This connection and alignment begin with a leader or a small group of leaders and is cascaded down. For programme leaders they may have a great CD process within their team despite lack of CD leadership from the wider institution. If the leader is at institutional level, then this connection and alignment may be more systemic. A proactive, collaborative effort between all academics to develop processes that support and sustain leadership development and recognition in learning and teaching (Quinlan, 2014) is required in HE, reinforced by these findings. Leadership is urgently needed at all levels of the organisation (Marron and Cunniff, 2014). To recruit leaders who can job-craft CD into their day-to-day activities may mean actively recruiting people who are open to this experience (Kim, Baek and Shin, 2020). Today's educational leader is dealing with complex issues daily, and economic realities are forcing the educational leadership to become more creative and innovative (Marron and Cunniff, 2014). This study gives a model that could be adapted at different levels in an institution.

In one of the four institutions in this study, the teaching and learning lead had been involved with senior managers in the institution to develop a single design for CD. Interestingly, the process that they had followed at an

institutional level contained all the principles and process espoused across all interviews for good CD in this study. All of this change requires leadership to instigate that change, and leadership is itself a social process (Platow et al., 2015). This institutional leadership team researched the subject, shared the research and reflected, with wider programme leaders, on what was and was not working within their institution; they jointly built one shared vision of an idealised approach to CD in their institution. They are an example of a small team going against the norms of the institution and effecting wider change (Centola et al., 2018). They co-created the shape of the institutional approach to CD. While this is an ideal level of connection, programme leaders cannot wait around until this happens for them. When there is misalignment between the institution and the team, the programme may need to create their own microworld and apply those principles in a smaller space.

This design work takes time and mental labour and Voogt, PierTERS and Handelzalts (2016) reported that several studies showed that reducing workload was a critical factor in the work of design teams. This is supported by the findings in that the one institution in this study, with a design for CD, created time in the work schedule for programme leaders to allow them to create this time formally and informally. The programme teams from this one institution who are following this CD all concurred that the time was crucial and made all the difference. There were six references from these teams where programme team members, rather than leaders, said that they were struggling with work/life balance in the new CD process where they were meeting weekly. One recommendation could be to confirm Voogt, PierTERS and Handelzalts (2016) that this reduction of workload needs to apply to teams as well as leaders.

Institutions need to be aware that to have connected, aligned CD, they need to create the conditions that make this easier. Although researching the learning communities of secondary rather than tertiary education, the work of Becuwe et al. (2016) supports the findings from this study. They recommend that institutions provide a supportive attitude towards the programme teams engaging in the design process, and that this attitude be visible in the institutional policy. The institution with a design for CD in this study spoke of making the role of programme leader a valuable step in career progression as well as it being a post people applied for making their positive attitude visible. They also recommend providing time and status for a leader to support the design team which again fits with institutional findings. Finally, they recommend providing time for the design team to do that design work which fits with the principle that CD requires time and resource.

Analysis of these findings, and engaging with the literature around these findings, has allowed a model to emerge about what the curriculum is for, why the CD process needs to be this way, and what institutions and programme leaders can do to ensure they are designing curricula in a way that is aligned to curricula outcomes. A key question for any organisation is: what is the purpose of the work of this team? (Hart and Buiting 2012). When the project, as in this study, is CD, then the purpose is to build collaboratively a curriculum that supports students to become critically-thinking graduates with confident, competent professional identities.

Transformational change takes time, is multidimensional, involving individuals and organisations (Fullan, 2003; Scott, 1988). It is best achieved when there is evidence about the benefits of the innovation (Nicol and Draper, 2009). It was beyond the scope of this study to assess the

impact or effectiveness of the attempted transformation of CD that happened at one institution. The only thing that can be said with certainty is that those involved in that particular transformation rarely talked about problems or desired outcomes, only about the actions they were taking together to achieve a common goal. This ties in with calls in the literature to treat CD design and institutional leadership as a strategic goal, and key to creating the conditions for good CD.

'Be congruent' emerged as the final subcategory within the CD principles, and while it is a core value in this study, analysis of the findings related to the overall principles, process and alignment suggests that there is a fundamental generalised principle of 'congruence' that can be expressed as leading by example. If they want students to be connecting research, subject and industry knowledge and skills, then staff need to be doing this during design. If they want programme teams doing this during design, then institutional teams need to be doing this during the design of their approach to CD. If the leaders want their teams or students developing teamwork skills and connecting with colleagues, then they had better be engaging in teamwork skills and connecting with their own diverse colleagues, leading from this position, in congruence with what they are asking of others.

In the curriculum literature, learning goals, outcomes and assessment methods should be carefully aligned (Asunda, 2010; Asunda and Ware, 2015). These findings and this study extend this congruence principle to the behaviours and interactions of the staff during the design process and to the behaviours and interactions of institutional leaders in their approach to CD across their institution.

This study was interested in uncovering what was happening in CD with a hope that uncovering a model for CD would improve the practice. The findings indicate that while different individuals and groups have found ways to align themselves with most or all the CD principles and process, what is most effective is when there is alignment throughout the institution. A change in institutional approach to CD means whole organisational change. Literature suggests that if an institution wants to engage adults in a transformational change, they need to create the conditions where adults can engage in their own learning, free from coercion and free to critically reflect on assumptions (Mezirow, 1997). This means the institution finding a way to engage those interested in an invitation-based approach (Mezick et al, 2015). This was confirmed in this study as one of the ways of engaging programme leaders.

Ideally leaders would want to engage in a process involving the CD principles and process as they should be interested continuous professional learning, (Hackman and Wageman, 2007) and in challenging their own assumptions and any limiting beliefs they have about CD. Those individuals who have managed to align to CD principles and process are dissenting (Morrison, 2006) from the norms of the organisation, as, in their words, the organisation is not aligned with the principles and process that staff understand are necessary for good CD and for connected teaching and learning. Where the institution is not aligned with the CD principles and process, then staff are managing a bind in that there are competing priorities and the organisation is not creating the necessary conditions for ensuring the CD process is prioritised. In the cases where individual leaders are following CD principles and processes then they are using their personal agency, or their professional culture to make a stand to enshrine good CD regardless of the lack of

necessary conditions to make this easy. To do this they arrange opportunities for casual exchanges and updates of information, whereas those with CD processes supported by their institution follow a more formal weekly meeting programme.

If an institution is unwilling or unable to take a systematic approach to CD then potentially individual programme leaders could use their autonomy and create their own conditions (Warren, 2003) for aligning with the CD principles and process. This is confirmed in these findings:

'My line manager trusts me to make the best decision for our course and the students. We are protected from the wider administration. I don't get micromanaged. We are like a separate unit over here and just do things our way.' (Programme Lead, Science)

Individual leaders will not always have the support of the wider institution and if they want to align to CD principles and process, they will need something to support them. One concept is that they will need a sense of agency (Bandura, 2018); that is the ability to act and to make their own decisions regardless of the structures and norms around them. In this study, the teams who are happy with their CD and have managed to find ways to align to the principles and process either have an individual who has agency to act, or they also have a professional culture that they bring to bear on their behaviour, aligning with the principles despite the structures in the wider system rather than because of them. The field of positive deviance (Wishik and Vynckt, 1976; Spreitzer and Sonenshein, 2004), while outside of the scope of this study, may have something to offer to those wanting to challenge the norms of their institution. In this field, researchers explore how it is that some individuals and groups can enact different behaviours to achieve different results while others, with observably similar

resources do not (Sternin and Choo, 2000; Marsh et al., 2004). In this study, individuals and groups from a similar set of institutions, with similar kinds of student intake are having quite different experiences when it comes to being able to align around CD principles and process.

If enough members of a programme team, a school or a department wish to deviate from the norms around CD or to align themselves more closely to the CD principles and process then Robinson and O'Leary-Kelly (1998) suggest that deviance can be a contagious action in a work group. As Centola et al. (2018) note, a small group of individuals can change culture from within.

'If we want our students to engage in rich, creative learning experiences that lead to mastery, then we must provide educators with rich, creative learning experiences that lead to mastery.' Calvert (2016, p.10)

6.3 Discussion of key findings on Clean Language Interviewing

Within this research project, I decided to use my data elicitation tool of choice, Clean Language Interviewing (CLI) (Nehyba and Lawley, 2020, Linder-Pelz and Lawley, 2015), within a Grounded Theory Methodology (GTM) (Glaser and Strauss, 1967) approach. I am utilising this study to reflect on CLI as a tool used to uncover a set of strategies about CD. The discussion of CLI relates to the findings for the three sub-research questions:

1. How does coding in-the-moment support CL interviewers to navigate and inquire into interview data during interviews?
2. What are the commonalities and differences between CLI and intensive interviewing as used in GTM
3. What benefits does CLI bring to the GTM researcher?

This section will start with a detailed reflection on the activities underpinning a CLI approach to data collection. Many of the CLI findings are the result of introspection and don't have corresponding references in the extant CLI literature. The discussion of CLI has been developed by reflecting on the findings, revisiting the literature on intensive interviewing as used in GTM, and considering in what ways the emergent CLI model is similar or different to the interviewing guidelines used by GTM researchers. The chapter finishes with a summary of the ways in which CLI can enhance the practice of interviewing within a GTM project. These findings may well be interesting to any person using interviews in qualitative research. This discussion is limited to GTM as this is the approach that was used in this study.

6.3.1 Research sub-question 1: How does coding in-the-moment support CL interviewers to navigate and inquire into interview data during interviews?

Key findings from the application of CLI to this project were discussed in Section 5.2, and the core category: 'Coding in-the-moment' has four subcategories: Tethering, Parcelling out, Navigating and Modelling.

6.3.1.1 Core category: Coding in-the-moment

Coding can be deductive and inductive (Ligurgo et al., 2017) and the differences help to clarify the contribution of coding in-the-moment to the research context. A deductive approach involves a top-down approach to coding qualitative data. Researchers formulate pre-set coding schemes. Once the coding scheme is established, the researcher applies the codes to the text. An inductive approach is bottom-up. Codes are derived from the data and these codes are built and modified iteratively throughout the coding process.

During reflection I realised that I was employing a hybrid approach (Fereday and Muir-Cochrane, 2006). Coding in-the-moment has a pre-defined 'deductive' coding schema of content-free codes that apply to all clean interviews. Coding in-the-moment also uses an inductive process as codes emerge throughout an interview and are specific to that interviewee and this set of data. Inductive coding is embedded within CLI. The clean nature of the questions that interviewers are permitted to ask and the fact that they are limited to using words straight from the mouth of the interviewee mean that the interviewer needs to create codes on the fly. These codes are in vivo codes, also known as natural coding (Saldana, 2015) and aim to keep the data as close to the participants' own experience as possible.

6.3.1.1.1 Tethering

The first stage of coding in-the-moment showed up a methodical process of connecting and tethering that is followed by the CL interviewer as they create visual spatial schemas of the interviewees' information. During the CL Interview, the interviewer is continually assessing whether what has just been said is relevant to the purpose and how it fits with what's already been shared and needs also to decide whether to inquire further or to move to a different area of the interview. The interviewer is tethered between these points of attention. From this tethered position the interviewer is agilely able to navigate their way around the data set while, at the same time, only able to move in relation to those tethered points.

To use the metaphor of rock-climbing that came out in the findings, all moves during the interview are restricted in that the interviewer cannot move away from the rock face and they cannot easily jump to a different route or bring in anything from the outside. They stay adjacent to the data shared so far in the interview and its purpose. Adjacent in this context means 'close to' in that the interviewer can ask a classically clean question which accepts and extends (Walker 2014) what has just been said or can ask a contextually clean question to find out something that can be assumed to be true from the logic of what's just been said. Every question in a CL interview will later be checked and analysed for 'cleanness' (Linder-Pelz and Lawley, 2015) and any ideas that are brought in by the interviewer are classed as mildly or strongly leading and dismissed from the data set.

6.3.1.1.2 Parcelling Out

Parcelling out is a way for the interviewer to create visual spatial schema from the interviewee's description. Mandler

(2014) asserts that our knowledge is not, and cannot be, a list of unconnected facts but instead, all mental organisation is schematic in nature and our knowledge about a noun or an event is a small network of information. I accept this and I use 'schema' in a more perceptual sense. Using CLI, I am aiming to create schema while at the same time avoiding the temptation to embellish what I am hearing but instead using the gaps and logical implication in the information to prompt me to inquire further. During an interview, I am deliberately and mindfully building a schema so that the data heard coheres as the interview progresses. I utilise the gestures and lines of sight that participants use to express complex data (Konat and Juszczuk, 2015; Poggi, 2007) to build a visual spatial schema that closely matches the participant's internal perspective and the way that they organise their knowledge. My interview method is aligned with Bonacchi and Karpinski (2014) who advocate attending to all of the words, facial expressions, gestures, movements in space and proxemic behaviours as these come together to convey meaning.

Morgan (2018) urges researchers not simply to form visual models of meaning but to ensure that models are a self-conscious effort to explain connections among themes. With CLI we ask not just, 'What is going on here?' but also, 'How does this work?'. These findings show that I was asking these questions during, as well as after, interviews. I was exploring the function of each element of the interviewee's models and how these fitted together. The models elicited aim to describe how the whole experience works as an integrated knowledge and behavioural system that would enable someone acquiring this model to replicate similar results to the interviewee.

There is a definite two-way process of meaning making at work here. The interviewer is asking questions or repeating

back sections of the interview and the participant is not simply providing data but is also an active meaning-maker in the moment (Gray et al., 2007; Buetow, 2013). As the schema develop and the interviewer feeds this back to the interviewee they are able to detect logical or sequential gaps in their descriptions and the interviewee starts to fill in the missing data themselves. This is not a 'horizontal interaction' (Madriz, 2000, p.840) because the interviewer is still keeping tight control of which questions are asked and what parts of the interviewee response get explored, but it is certainly facilitated model building (Walker, 2014).

Another aid to parcelling out is to create the visual spatial schema on my note pad as I am listening to the interviewee. This means that I am coding parts of the interview and also how those parts interrelate to form a meaningful network of mental models (Mandler, 2014). What was new from these findings was how important this activity was to coding in-the-moment in terms of supporting the interviewer to record codes ready for navigation and inquiry.

Rubin and Rubin (2005) suggest allowing the participant to talk uninterrupted to increase the depth of answers and only then to go after specific points to increase the details. However, sometimes interrupting is necessary during long answers when the interviewee wanders far from the topic. Interrupting is also necessary to build these schemas and ensure that important aspects of the mental models are not missed. If done skillfully the participant will often start to 'self-correct', especially as they begin to see the 'shape' of their own thinking and the interviewer cleanly summarises key points and checks their emerging visual spatial schema with the interviewee.

6.3.1.1.3 Navigating

Following the identification of where the participant's attention is (by parcelling out), the interviewer then 'navigates' the data by either asking a classically clean question of any word, phrase or gesture used or moving to what is adjacent to, or implied by, what has just been said.

According to the Oxford Dictionary to navigate means 'to plan and direct the course of ship, plane, car etc., for example by using a map.' However, in CLI, navigating is not as straightforward as getting out a map, because the map is being created in-the-moment during the interview. Even the rock face metaphor falls slightly here because it presupposes that the interviewer can see the rock face and get a measure of it before they begin - even if it appears differently when it's close-up. But in CLI the rockface is unknown to the interviewer and only emerges through the questioning process. And when they do start questioning, they are bound by the rules of CL to accept and extend only what is presented.

The OODA loop (Enck 2012; Boyd 2018) can be applied to the rhythm of processing during a CL interview. Boyd developed this model for tracking the attention of fighter pilots and it refers to the practitioner observing, orientating, deciding and acting. During CLI, OODA loops are happening from the moment the starting question has been asked. The interviewer asks the question and immediately observes what they can see and hear. They orientate the words and gestures into a schematic, decide what is most salient, and act by asking a question.

The only control that a CL interviewer has is over her words and her actions. What the interviewee does with a question, where their attention goes and how they respond is down to the organisation of their own idiosyncratic, complex system

(Maturana and Varela, 1992). A question prompts a response, it does not specify it.

Dilley (2000, p.134) has a not dissimilar set of five protocols to the OODA loop for an interviewer to follow: listening/observing; comparing to what's already said and known; comparing to the questions prepared on the interview protocol; keeping an eye on time and adjusting accordingly; and offering information to prompt reflection or clarification. As described in the findings, I was using a range of content-free codes to aid my navigation, the most pertinent of which were:

1. Evidence versus Inference
2. Sequence: Antecedent and Consequence
3. Orientation: Problem, Desired Outcome, Resource, Action

I am calling this form of coding, content-free coding. The codes are not so much about the content of what's being said, but rather about the structure of what is being said. They make it possible for us to recognise different things and events (Johnson-Laird, 1987). The 'evidence' and 'inference' codes enable me to distinguish and ask about behaviours being referred to, or what meaning was being made of those behaviours. The 'antecedent' and 'consequence' codes ensured that I was able to sequence the complete CD process for each interviewee, and the 'problem', 'desired outcome', 'resource' and 'action' codes meant I could be sure which actions the interviewee considered were desirable and which were not.

It is important to have a few sets of content-free codes available since not all will be relevant to every research topic. As well as those content free codes mentioned above, I was also utilising meta-programme codes (Bandler and Grinder, 1975; Charvet, 1997; Tosey and Mathison, 2010),

representational system codes (Wood, 2006) and perceptual positions (Bateson, 1972; Slater and Ush, 1993).

As I undertook more interviews, and certainly once I had got to twelve interviews, the most salient codes for these interviews became apparent. For example, I could tell, within one or two questions, whether an interviewee's language was more orientated to Problem/Desired Outcome or mainly Action/Resource.

Charmaz (2006) warns against imposing previously agreed codes on data, encouraging researchers to keep pre-existing codes out of their minds and to allow the openness of open coding to spark ideas. However, making meaning from language always involves some sort of coding, albeit mostly unconsciously. For example, most of us code English language for past/present/future from word tense and other indicators without awareness that we are coding, whereas I am cognisant of the content-free codes I use and even more so since this study has forced me to make explicit what was tacit. These codes allow me to stay present to the data, minimally interpreting the content while noticing the structures in the patterns of language and gestures used by the interviewee. I am consciously parsing the data to mine it for more information. This in turn aids navigation and facilitates the interviewee to enrich rather than alter the data.

The sets of codes I used within this study are reminiscent of Glaser's 'coding families' (1978, p.75-82) but he doesn't offer these as codes that are defined in advance (a definitive coding family); they are used in the coding phase of GTM. However, he does suggest that the coding families that are utilised may change according to context and purpose.

The CL interviewer makes an informed choice whether to inquire into the language which indicates a code as it arises, to leave it until later or to decide that it isn't salient in this moment. Of course, the interviews are still transcribed and other patterns, not available to the interviewer during the interview, may still be revealed in coding and analysis of the transcript. This coding in-the-moment model refers only to the facility available to the clean interviewer during the interview.

As a result of the thinking I have done as part of this discussion, I have realised that one of the benefits of coding in-the-moment is that for each code there is almost always a corresponding classically or contextually clean question. If I coded something as an 'inference' I did not need to think about which question to ask; a 'go to' question would be, 'What did you see or hear that let you know...'. Or if my coding in-the-moment revealed that I didn't know the impact of some event, I could simply ask, 'Then what happened?'.

This ability to move nimbly around the data during an interview based on these codes, while tethered to the purpose and to what had already been said is what enabled me to not be seduced by my own assumptions and to keep an interviewee's attention close to *their* own experience throughout an interview. It also allowed me to infer what data was missing. For example, if I coded something as a problem, I could ask 'When (problem context), what would you like to have happen?' to determine a corresponding desired outcome (Way, 2013). In this way, the cognitive load of the interviewer is reduced. There's no need for an interview guide as there's rarely a need to generate new questions in the moment. And this in turn means that a CL interviewer can pay more attention to the interviewee and how their world is structured.

Linking with what I do to parcel out a response, I may interrogate a gesture during the interview. I may refer to this in words or by pointing towards a gesture. This draws the attention of the interviewee to what is likely an unconscious behaviour and then I ask an attribute question such as, 'What kind of ... is that ... ?' which can help hold the interviewee's attention on the experience (Buetow, 2013) and help them to recognise how this experience or sensation fits with their other mental models to build into a metaphor landscape. Bringing my attention to these gestures and referring to them in the interviewee's psyche space (Gendlin, 1962; Grove and Panzer, 1989; Petitmengin, 2006; Lawley and Tompkins, 2011) supports the interviewee to keep their attention on their current experience and how they are organising that experience and increases my ability to create visual spatial schema of that experience.

While we don't know exactly what other people are thinking (Murphy and Dingwall, 2003) we can, through careful coding in-the-moment, notice what they say and how they gesture and systematically build outwards from that data with clean questions to build up a model. The coherence of the model forces the interviewer to make sense of the experience from the participant's point of view (Nehyba and Lawley, 2020). The style of questioning and the fact that the model is being built from the interviewee's own words creates a reflective space for the interviewee to consider their own experience (Buetow, 2013).

Adjacency means: a: not distant b: having a common endpoint or border c: immediately preceding or following (Merriam-Webster Dictionary, 2021). In the context of CLI, adjacency means both the interviewer keeping their attention close to the interviewee's attention and asking questions that invite the interviewee to maintain attention on what they are currently attending to - in order to find out more meaning

(Buetow, 2013) or shift to an aspect close to what they've already described (Lawley and Tompkins, 2000; Way, 2013). The other way a CL interviewer may use the notion of adjacency is if they want to redirect the interviewee's attention nearer to the purpose of the interview. Table 11 illustrates how adjacency gives mindful choices during an interview.

What was said	Content free Code	Example of Q	Intention of code specific question	How adjacent is the question to what the participant is saying?
'We're a tight knit team.'	Inference Metaphor	'What kind of tight knit?' 'Is there anything else about the tight knit of that team?'	Ask for an extension of what's been said	Directly adjacent by inquiring into attributes of the metaphor.
'We need to meet regularly'	Inference Imperative Unspecified pronoun	'How often is 'regularly'?' ' 'Who is we?'	Moves attention from inference to evidence and from general to specific	Directly adjacent

'We need to meet regularly'	Inference Imperative Unspecified pronoun	'When you meet regularly, what happens next?' 'What happens before you can meet regularly?' 'Where does the need to meet come from?'	Switch attention from what an interviewee is currently attending to, to an antecedent, the source of something or to a consequence.	Somewhat adjacent: presupposed by the logic of the data and builds directly onto it but switches time frames to ones that the interviewee may not have been thinking about.
'We are writing modules in silos and crowbarring them together'	Problem Metaphor Process	'And what would you like it to be like?'	Finding out, when there's a problem, what the interviewee would like instead.	Less adjacent as it directs attention away from what interviewee is attending to

Table 9: *In vivo codes, adjacency, clean and contextually clean questions*

For example, when an interviewee said, 'We need to meet regularly', I coded 'we' as an indistinct pronoun, 'need' as an imperative and 'to meet regularly' as an inference. To stay adjacent to this statement I could ask, 'Who is we?' or 'How often is regularly', with the intention of moving from general to specific or inference to evidence. Alternatively, if I wanted to find the antecedents or consequences of meeting regularly, I could ask, 'When you meet regularly, what happens next?', 'What happens before you can meet regularly?', or 'Where does the need to meet come from?'. These questions would be slightly less adjacent. Although

there's a logic to them, they would take the interviewee's attention to time frames they may not have been considering; these questions move attention rather than keeping it where it is.

The concept of adjacency means that although the interviewer must stay close to the rockface, they can move in an agile way in almost any direction. Being able to orientate, as in the OODA loop (Enck 2012; Boyd 2018), is so important since it is a prerequisite to deciding which direction to go in next and managing the interview process.

In 'Doing Qualitative Research Differently', Hollway and Jefferson (2000) use a study by Gilchrist et al (1998), who reported the results of interviews with people about their fear of crime. Without knowing the interviewer's actual questions, we don't know what respondents were responding to; we cannot tell where the answers may have come from or how they may have been influenced or led by the question. Aguinis and Solarino (2019) call this a lack of methodological transparency. This, together with a lack of 'critical analysis of interviews as a method, including, for example recognising the presence of sampling and interviewer bias' (Young et al, 2018, p.18) can reduce confidence in the findings of some qualitative research. CLI helps to offset these concerns since the basic question set is well defined and the cleanness rating is a way to determine the degree to which the interviewer adheres to the CLI method.

Brinkman and Kvale (2005) suggest that researchers use typical content categories of specific memories to derive cues (e.g.: ongoing activity, location, persons, other people's and own affect). These categories are similar to the ones we pay attention to in CLI. However, nowhere in the literature are there instructions as to how, systematically, to respond once these had been identified. By using the

precise words used by the interviewee and by asking for attributes, evidence, antecedents and consequences etc. with non-leading questions, a CL interviewer can justify the method by which they expand and clarify the meaning of the interviewee's words.

The CL interviewer needs to bear in mind that CL interviews can present challenges for the interviewee. If a participant says, 'We're flexible within our team' and I ask, 'Where does that flexible come from?' finding an answer to that question can be demanding. It requests that the interviewee reflect on, clarify and possibly explain the meaning of their choice of words. Some interviewees may at first become a little self-conscious, but this recedes as it becomes clear the interviewer is genuinely interested in the interviewee's experience and that the aim of the interview is to help them describe their experience *in their own words*.

6.3.1.1.4 Modelling

Modelling, within this study was about building a generalised model of CD through exploring the mental models of individuals and groups involved in CD in HE. Carley and Palmquist (1992 p.607) represent mental models as a 'network of concepts and the relationships between them' and modelling in CLI is creating a second person model of that first person experience (Nehyba and Lawley, 2020) which elucidates the relationships between those concepts. These findings illuminate how the CL interviewer is building a model of the participant's first-person experience, answer by answer. This general overall model comes out of questioning each piece of data with the same overarching intention, to find out: 'How does this work?' (See Figure 6 in Section 4.3.4).

The interviewer then scans through this individual model for coherence and consistency. Checking for coherence supports the interviewer to look for gaps in a model, to ask for

evidence when there is inference or to find the 'befores' and 'afters' of a process. When the interview is coming towards its end, the interviewer can check for coherence by asking themselves whether they could explain the key points to a third party in a way that makes make logical sense. The way I am behaving within a single CL interview echoes the way I behave across a number of interviews in a GTM study.

Kvale and Brinkman (2009) discuss the interviewer attempting to verify their interpretations of the participant's data over the course of the interview. In CLI this is done by summarising the model elicited so far, which, within this study, happened two or three times during a one-hour interview. One of Kvale and Brinkman's (2009, p.192) criteria is that the interview should end up as a 'self-reliant story that hardly requires additional explanation'. When the interviewee has nothing more to add to the summarised model, that marks the saturation point that a CL interviewer is aiming for. This leads to a model for the participant's experience, their mental model for the interview topic.

The visual schema created throughout the interview mean there are two distinct descriptions of the interviewee's mental models: a transcript of the interview and a visual spatial model of the key areas shared and how they relate to one another. The latter was made possible through tethering, parcelling out and navigating through each of the OODA-like loops (Enck 2012; Boyd 2018). Each of these individual models are compared and contrasted with models from other interviews and help core categories, shapes and relationships to emerge from the data.

6.3.2.1 Intensive Interviewing as used in GTM

This section answers the sub-research question about the commonalities and differences between CLI and intensive

interviewing as used in GTM in order to be able to discuss what benefits CLI generally, and coding in-the-moment specifically, may add to the GTM researcher. While interviewing is not the only method of data gathering in GTM, it is a core method used (Glaser, 1998; Charmaz and Belgrave, 2012; Duffy et al., 2004). Intensive interviewing as recommended in GTM literature (Charmaz, 2006; Locke, 1996) is what will be compared with CLI in this discussion and will be referred to throughout this discussion as II in GTM.

6.3.2.1.1 Summary of commonalities and differences between II in GTM and CLI

Stage of the interview process	Similarities between II in GTM and CLI	Differences between II in GTM and CLI	
		GTM	CLI
Preparation	CLI and II in GTM need a clear purpose for their interviews primarily because they have such flexibility built into their methods.		
	CLI and II in GTM use purposive sampling		
	Ask questions that are easy for the interviewee to answer at the start.	Interviewer starts with non-confrontational questions.	Guiding principle to ask questions that match the logic of what has been said.
Intention	CLI and II in GTM gather data from		

	the participants perspective		
	CLI and II in GTM rely on interviews to build theories		
	CLI and II in GTM aim to use participants words	There is more flexibility on this within GTM	CLI strict protocols on in vivo codes and every question must earn its way into the data set
	CLI and II in GTM advocate to limit assumptions from the interviewer	II in GTM has an interview guide of non-assumptive questions and interviewers aim not to talk very much during their interviews	The interviewer limits assumptions by only asking clean and contextually clean questions
	CLI and II in GTM questions are intended to explore the topic AND the participant experience	Interviewer clarifies and extends the meaning of the interviewee's statements	Questions contain only the interviewee's own words.
Structure of interview	CLI and II in GTM have no fixed order to questions or agenda for answers.		
	Creativity and spontaneity are available in both CLI and II in GTM		CLI has a greater degree of control during the interview through coding in-the-moment
	CLI and II in GTM require flexibility	The interview guide prepares	CLI protocols, including

	for the interview to gather data and control to ensure the data is grounded in the experience of participants.	individuals for this before the interview	keeping tethered to the purpose and building a model, are adhered to rigorously throughout the interview.
During the interview	Both II in GTM and CLI researchers use salience as a way of deciding what aspect of their interviewee's data to ask about next.	This is developed in the coding process and asked about at follow up interviews.	This is developed during the interview and investigated by repeating back or asking clean questions to find out more.
	Gesture and non-verbal cues	II in GTM encourages noticing these for emphasis	CLI pays close attention to gestures and non-verbal cues in order to build visual spatial models of interviewee experience
	Questions are determined and introduced depending on the data in both CLI and II in GTM.	In II in GTM the questions are more likely to emerge between interviews after the coding	Questions are generated in-the-moment and dependent on data
	Both CLI and GTM follow up on anticipated areas of inquiries	.	CLI has a specific set of protocols for detecting gaps, implicit information, moving from inference to evidence and back again etc.

			<p>found in the findings.</p> <p>The questions form part of the dataset.</p>
Relationship with participant	Both CLI and II in GTM seek to build rapport with participants	People centred: aim to build rapport between interviewer and interviewee	Experience centred: aim to build rapport between the interviewee and their experience and between the interviewer and the experience of the interviewee.
	GTM and II in CLI are tools of social constructivist approaches. By using careful processes, grounded in and tethered to the data with a purpose of uncovering their concerns, then it is possible to uncover meaningful differences in how the world is experienced by others.		
	II in GTM and CLI state that how we collect data shapes the content elicited. Both disciplines follow processes to demonstrate theories are grounded in the data.		CLI researchers assess every question for cleanliness and ability to build a model of participant's experience. If CLI protocols are adhered to, then CLI can demonstrate that every question

			is grounded in the data.
Ending	Theoretical Saturation		
	Both CLI and II in GTM seek to protect the data from premature evaluation through reflection	GTM seeks to do this only through the reflection that comes from due diligence to the coding process	CLI interviewer seeks to be aware of their own responses and manage their own patterns as well as due diligence through the coding process during interviews.
	GTM and CLI rely on coding	In GTM this happens as the researcher reads the interview transcript	In CLI this happens during the interview itself.

Table 10: Summary of commonalities and differences between II in GTM and CLI

6.3.2.2 Commonalities and differences between II in GTM and CLI

Although the commonalities and differences between II in GTM and the principles of CLI and coding in-the-moment are methodological in nature, they only came to the fore during this forensic comparison part-way through the research project and therefore they are included as discussion. They highlight some of the ways that CLI departs from other qualitative interviewing processes and what it might bring to a GTM researcher.

6.3.2.2.1 Preparation

6.3.2.2.1.1 Having a purpose for the interview

All interviewers need to have a purpose for their interviews (Dilley, 2004) and to know what kinds of information they are after. Within CLI (Nehyba and Lawley, 2020) and GTM (Glaser, 1998) there is no specific problem in mind but rather interviews uncover the concerns or problems experienced by the participants. Knowing the research area or purpose of the study can be clear but the content of what will be found is unknown (Charmaz, 2004; Glaser, 1992). Dilley (2000) recommends that the interviewer read around the context of the interview in order to familiarise themselves and to feel more comfortable with it and able to ask deep questions. This would not be recommended in CLI nor in classical Grounded Theory, as this would be more likely to create a matrix of expectations in the interviewer's mind and in CLI the protocol is to enter an interview having done as little premature theorisation as possible. Having a purpose is a commonality between CLI and GTM, along with the notion of having a destination in mind with no concept of the content that will be uncovered.

6.3.2.2.1.2 Using sampling to invite participants

With GTM the sampling process is purposive and ideally the study continues to select interviewees until saturation point is reached (Glaser, 1998; Thomson, 2010). Sampling continues until the researcher senses they have reached a level of saturation, that is that no new categories are emerging from the data (Guest, Bunce and Johnson, 2006; Mason, 2010). In CLI, as it has been used in business and educational change projects (Walker, 2014) and academic research (Tosey, Lawley and Meese, 2014), the sampling of an overall research process is also purposive, although there

are no processes specific to CLI that require purposive sampling.

6.3.2.2.1.3 Constructivism

Constructivism (Hayes and Oppenheim, 1997) is central to the philosophy of many proponents of CL but it doesn't have to be. CLI has also been used in a more positive framework in, for example, critical incident and police interviewing. The 'clean' in CL was specifically chosen to support the questioner to remember to keep the receiver and their data safe from being 'contaminated' by the meaning that the interviewer will be constructing in their own system (Grove and Panzer, 1989; Lawley and Tompkins, 2000; Walker, 2014). Constructivism is not necessarily at the heart of all GTM (O'Conner et al, 2018) although it is core to Charmaz's work (Charmaz, 2006). GTM and CLI both aim to uncover how an individual or groups of individuals are making sense of their experience. What both approaches have in common is the idea that by using careful processes, grounded in and tethered to the data of participants, with a purpose of uncovering their concerns, it is possible to uncover meaningful differences in how the world is experienced by others. Both approaches recognise that the way we go about collecting knowledge is a form of construction (Kim, 2001).

The position that CLI takes, as opposed to other ways of viewing the data, can be seen in Buetow's (2013) take on Kvale's (1994) metaphors for reflecting on the underlying architecture of interviewing. Kvale describes a Traveller who is negotiating meaning with participants and a Miner who is uncovering nuggets of participant meaning. Buetow's contribution is another metaphor, that of the Cleaner who seeks to cleanse the interviewer's questions of bias. The constructivist difference is that the Cleaner uses clean questions to help the participant to clarify their own meaning and shows 'fidelity to the capacity of the informant

to achieve and communicate understanding within the interview' (Buetow, 2013, p.53). This subtle but crucial difference is what prompts the CL interviewer to inquire into codes during interviews to make participants' meaning manifest.

6.3.2.2.2 Starting

6.3.2.2.2.1 Intention to gather participants' concerns and experience

Grounded Theory researchers emphasise the importance of understanding the participants' perspective, meaning and experience from the inside of those participants (Charmaz, 2004, p.24). This is certainly an aim of CL in general. Grove and Panzer (1989) suggest that CL is ideally suited for developing the participant's 'matrix of experience' and in discerning the language they use to refer to their personal reality. Both approaches are in opposition to other forms of qualitative interviewing who recommend students to develop interview questions 'grounded in the literature' rather than in the experience of the participants (Jacob and Furgerson, 2012). The first objective of CL is for participants' natural language to manifest itself without the need to alter it to suit the interviewer. The second objective is that the interviewer uses their questions as a facilitatory language to keep the participant accessing the experience relevant to the purpose. Classical clean questions are unusual in this respect since they preclude the use of the interviewer's personal pronouns. They do not include words such as 'tell me about ...' or 'I'm curious to know ...' (Grove and Panzer, 1989, p.8).

Both II in GTM and CLI would come under the same criticisms for relying on interviews to build theories when interviews are not always accurate reflections of what happens in fact (Atkinson and Silverman, 1997). CL recognises that people

often operate from inference about a situation rather than evidence (Walker, 2014) and that eliciting inferences can be an important part of understanding the interviewee's way of making sense of the world. Both GTM and CLI remind researchers not to 'assume that interview data links to previous lived experience' but rather to assume that this is that individual's perspective in this moment under these research conditions (Charmaz, 2004, p.78; Glaser 2007). The two approaches are closely aligned with these values.

6.3.2.2.2 Use participants' words

While both II in GTM and CLI aim to use a participant's own words about their concerns and experience (Glaser, 1978; Grove and Panzer, 1989), Grounded Theory researchers are given more leeway to frame certain questions to direct the attention of the interviewee to specific aspects of their experience. Charmaz (2014, p.29) suggests that the interviewer may frame certain questions to allow or encourage interviewees to make disclosures, for example, 'Some people have mentioned having _____ experience. Have you experienced something like that?' In CLI, question would be counted as 'strongly leading' according to the cleanness rating (Linder-Peltz and Lawley, 2015) since it puts the situation into the mind of the interviewee and relies on them to not acquiesce to the suggestion (Podsakoff et al., 2003). This question could be cleaned up by ensuring that a range of other participants' responses are presented or by omitting any mention of other participants' experiences and simply asking, 'And have you had any other kinds of experience?'. Within CLI the interviewer is careful not to introduce any suggestion about how things were or could or should have been, since that will inevitably create a leading intervention. Rather the intention is just to train attention on a topic or relationship that the interviewee can expand

on and to accept what emerges as data valid to the experience of the interviewee at that moment.

6.3.2.2.2.3 Limit assumptions

In order to ensure that the data gathered is coming from the participant's own experience, both GTM and CLI approaches advocate the limiting of interviewer assumptions so that interviewees 'describes their worlds in their own terms' (Rubin and Rubin, 2005, p.2). Classical Grounded Theory (Glaser and Strauss, 1967) limits the influence of assumptions by making a prime directive that the research is all about the concerns of the participant and by using methodological processes such as coding and constant comparison which aid the researcher in keeping their attention on those concerns and away from their own assumptions. In the findings in this study, coding in-the-moment limits assumptions by keeping the interviewer's attention tethered to the purpose and the data and all questions need to earn their way into the data set. With the addition of coding in-the-moment, CLI provides a systematic method for keeping assumptions out during the interview and then the cleanness rating (Linder-Pelz and Lawley, 2015) allows researchers to detect their own intrusive thoughts and ensure that these assumptions are either not evident in our questions or answers to leading questions can be removed and not unintentionally reproduced as though they are participant data (Mack, 2005).

Creating an interview guide (Karp, 2009) is one way that GTM helps to ensure that questions asked during interviews explore the topic and the participants' idiosyncratic experience of the topic. Rubin and Rubin (2005, p.98) recommend using such guides to bring interviews back on target if they drift. To do this, Charmaz (2004) suggests that the interviewer creates the guide and aims to reduce the assumptions they are making and ensure that the questions

get the kind of information the researcher intends to get by subjecting the guide to reflective scrutiny. Kvale and Brinkman (2009, p.195) state that the intensive interviewer should clarify and extend the meaning of an interviewee's statements, putting them to the participant so that they may be confirmed or disconfirmed. This is subtly different to the practice in CLI of repeating back elements of the interviewee descriptions for them to add to or reject. CLI is stricter and provides more protocols for keeping assumptions at bay than II in GTM.

6.3.2.2.3 Structure of Interview

6.3.2.2.2.1 No fixed order to questions

II in GTM is used to learn about people, in depth, on their own terms and in the context of their situation (Engel and Schutt, 2014); to 'listen to people as they describe how they understand the worlds in which they live and work' (Rubin and Rubin, 2005, p.3). Two key features are that there is no fixed order to the questions and no agenda for the interviewee's answers, rather there is an expectation that the interviewees will use their own words and answer from their own minds (Showkat and Parveen, 2017; Schutt and Nestor, 2018). Decker and Van Winkle (1996, p.45) emphasise this point in their study saying that 'We went to great lengths to ensure that each person we interviewed felt they had received the opportunity to tell their story in their own words'. These principles equally apply in CLI as there is no fixed order to questions and no agenda for the interviewee's answers (Grove and Panzer, 1989; Nehyba and Lawley, 2020). The interviewer is interested in the individual's concerns, ideas and experiences in the area for investigation.

6.3.2.2.2 Creativity and Spontaneity

During II in GTM, there is room for creativity and for spontaneous decision making at every step of the research process (Gray et al., 2007). Interviewers are encouraged to allow unanticipated statements and stories to emerge (Charmaz, 2004). Thus, there needs to be flexibility for the interviewer to gather data as well as control to be responsible for managing the interview process (Legard, Keegan and Ward, 2003). In CLI, the interviewee is in control of what information they share and the interviewer directs and redirects attention to different areas and aspects of the interviewee's experience. Creativity, spontaneity, flexibility and control are features of both interview methods facilitating a meaning-making dance between interviewer and interviewee. This tension between the interviewee being in charge of the content and the interviewer having close control of the structure of in vivo codes separates CLI from II in GTM in that CLI navigates around the mental models of the interviewee in a more purposeful manner than is recommended in II in GTM.

Within a GTM approach Charmaz (2004) advises that towards the end of an interview, the interviewer should re-evaluate, revise and add questions. Likewise, a CL interviewer will at this time consider possible under-explored areas while aiming to stick to their limited tool kit of questions. However, they might ask a 'contextually clean' or two to raise an unmentioned topic that serves the research purpose or to check out a category that has emerged from previous interviews.

6.3.2.2.3 Making choices during Interview

6.3.2.2.3.1 Salience

Both GTM and CLI researchers use salience as a way of deciding what aspect of their interviewee data to ask about

next. In GTM that salience is systematically picked up by the post-interview coding process and can take the form of categories to be asked about in the next interview. In CLI, salience is systematically picked up as worthy of further investigation during this interview. It might be salient because of the purpose, the data already gathered, the model that the interviewer is building, or because it confounds information already shared or because of emphasis that means it seems salient to the interviewee. CL interviewers investigate what seems salient by repeating back what's just been said, sometimes along with phrases from earlier in the interview and by asking clean questions to find out more. They may anticipate an area that is presupposed by the data but hasn't been named yet or something that has been said by previous interviewees and seems to be an important code across interviews. Of course, anyone using II in GTM will also be finding things salient during an interview, a potential difference is there is an active analysis of and use of salience during the interview in CLI.

6.3.2.2.3.2 Questions are determined and introduced depending on the data.

In other kinds of information gathering, such as surveying, all the creative thought is put into asking exactly the questions that are to be answered (Engel and Schutt, 2014). In GTM, data specific questions are likely to emerge, not during the interview but between interviews after the coding (Legard, Keegan and Ward, 2003; Gray et al 2007). In these findings on CLI, this coding is happening in the moment, along with constant comparison within the interview data and each question is dependent on how the new data fits, extends or confounds what has already been said and shown.

6.3.2.2.3.2 Follow up on anticipated areas of inquiries

One intention, within, as well as across, intensive interviews in GTM, is for the researcher to pay attention to and follow up on anticipated areas of inquiries, hints and implicit views and accounts of actions (Charmaz, 2004). CLI is also about noticing what is there and noticing what is not there, but must be there for what is there to make sense (Grove and Panzer, 1989). The intention - and the behaviour - within the disciplines is similar. One difference in behaviour is that CLI has a specific set of protocols for detecting gaps and implicit information. These are listed in Section 5.2.1 of the findings. For each code there is a specific set of clean or contextually clean questions to make that move and follow up that piece of information. CLI is asking for this information in order to build a coherent model of this participant's experience, while II in GTM is eliciting information for a more generalised model or theory only across the interviews.

In GTM it's important for codes and categories to earn their way into the final theory (Strauss and Corbin, 1997), because they are grounded in the data and significant or salient in some way. With CLI the questions themselves earn their way into the interview because they correspond to the structure of the interviewee's data (Tosey and Mathison, 2010).

6.3.2.2.3.3 Relationship with Participant

Both GTM researchers and CL interviewers build rapport with their interviewees in order that they are comfortable enough to access their ideas and experience and to share it with another human being. However there are nuanced differences in how each is building rapport and therefore the behaviours can be quite different and what works for II in GTM does not work for CLI. In II in GTM the aim is to build a rapportful relationship (Charmaz, 2004) between the interviewer and

interviewee in order that this relationship helps to create the trust required for a successful interview. In CLI the interviewer is aiming to build rapport between the interviewee and their own experience/thinking and to build a relationship between themselves and their interviewee's matrix of experience. II in GTM could be said to be people-centred (Joseph and Bryant-Jefferies, 2008) while CL could be said to be stuff-centred (Walker, 2014) and the trust between the interviewer and interviewee comes from the interviewee comfortably exploring their own experience because the interviewer does not interrupt their attention by using a word that doesn't make sense to them. Clean questions themselves help to build a relationship between the questions and the listener's experience and that rapport is at the forefront of a CL interview rather than it being a relationship between the interviewer and the interviewee (Lawley and Tompkins, 2011).

6.3.2.2.3.4 Both approaches ask questions in the moment.

What are the subtle differences in these questions?

Charmaz (2014) warns against compromising the nascent grounded theory with irrelevant, superficial or forced questions - and these categories of questions do not belong in the data set of a CLI either. They will be mildly or strongly leading as they are not adjacent either to what is being said or to the purpose of the research. It is important to bear in mind that asking any old clean question about any part of a sentence is also a sure-fire way of asking irrelevant or superficial questions and derailing an interview. This is why the CLI researcher stays tethered to the purpose and to the model they are building as they go along.

Charmaz (2004, p.68) suggests to researchers that if they wanted to explore what happened before someone went on leave before a heart attack, they could ask, 'You mentioned that

you were on leave when you had your heart attack. Could you tell me about the events that led to your being on leave?' as being less intrusive than, 'Why did you take leave?' Within a CLI framework, the interviewer would repeat the topic to orientate the interviewee to the point in their experience that is being asked about and ask, 'What happened before you were on leave?' Within a timeline then it is very simple and non-intrusive to elaborate on sequence with clean sequence questions and filling in gaps like this follows the logic of the information shared.

6.3.2.2.3.4 How we collect data shapes their content

Both II in GTM (Charmaz, 2014) and CLI (Grove and Panzer, 1989; Nehyba and Svojanovský, 2017; Lawley and Tompkins, 2000) state that how we collect our data shapes the content that we are able to elicit. It is important to both disciplines that they follow rigorous processes to demonstrate that any theories elicited are grounded in the data of the participants' experience. As Charmaz (2004, p.58) states to GTM interviewers: 'We examine how our research questions and mode of inquiry shape our subsequent data and analysis. It helps you to become self-aware about why and how you gather data and thus enables you to assess your effectiveness.'

CLI researchers examine their research questions and, in fact, examine every question they ask in their interview to assess it for cleanliness, in terms of it being their participant's ideas and not their own (Linder-Pelz and Lawley, 2015). They examine their questions and their overall interviews for effectiveness in terms of their ability to build an authentic model of their participants' experience (Nehyba and Lawley, 2020). They will assess it for coherence and consistency and ensure that they have understood it from the logic of the interviewee's words (Lawley and Tompkins, 2000). Through reflecting on and minimising our own metaphors

and models in order to use clean questions, the Clean Language researcher understands how their own metaphors and models for codes, for how systems work and for how organisations should behave, are influencing their ability to see fresh patterns in the data.

6.3.2.2.4 Endings

6.3.2.2.4.1 Theoretical Saturation

The term theoretical saturation, first used by Glaser and Strauss (1967, p.61) is used in different ways within the literature; it may refer to saturation of a theory or of a category emerging as the theory develops. In this discussion it is being used to refer to a sense within data collection that enough has been gathered and that the model, when repeated back is accepted by the interviewee and nothing further is added. In the first few interviews, all the data is new and then after a few interviews, patterns begin to emerge. By (say) the fifteenth interview, the researcher recognises patterns in the interviewees' experiences. More interviews confirm what the researcher has already sensed. Guest, Bunce and Johnson (2006) found that 12 interviews of a homogenous group is all that is needed to reach saturation. This is confirmed in these findings as after around 15 interviews the core categories of principles and process were confirmed in the data. CD is a complex model and Ryan and Bernard (2006) assert that the greater the complexity, the more interviews are required. This is confirmed in this study which was exploring a complex subject and booked a total of 34 initial interviews.

CLI literature is short on references to saturation and although there is a some guide to when, in an individual clean language session, the interviewer has got a cohesive, consistent, cogent model of the client's experience (Lawley and Tompkins, 2000; Neyhba and Lawley, 2020; Way, 2013) there

is not a method for this. These findings show that within an individual CL interview, the interviewer is asking questions until they are able to create a 'model' of the interviewee's experience and asking further clean questions may add detail but doesn't fundamentally change this model. This endeavour, within a single interview, echoes the saturation point in a GTM study.

6.3.2.2.4.1 Reflection on the Interview and the interviewer

CLI and GTM are both concerned with protecting the data from premature evaluation (Charmaz, 2004; Glaser, 1978; Grove and Panzer, 1989; Tompkins and Lawley, 2000; Walker, 2014) - and require researchers to follow protocols that allow them to prove that their data and the theories that emerge from that data, are grounded in the concerns of the population being interviewed. How the two approaches go about this differs. The CL interviewer needs to be engaging, meaningfully with their own embodied, emotional responses while interviewing, and adjusting themselves so that they only ask clean and contextually clean questions which is encouraged as a general sound contribution to qualitative interview practice (Dilley, 2000; Hiller and DiLuzio, 2004). This ability to ensure a clam neutral state and clean stance is a core feature of CL use in general CL sessions (Way, 2013). CL interviewers can specifically check on the cleanness of their interviews through a cleanness rating (Linder-Pelz and Lawley, 2015) allowing them to have personal reflection as well as to reflect on the cleanness of their interviews.

In these findings, the embodied sense of when the interviewer is attending to the interview, the interviewee and their data and when they are distracted by their own assumptions, meaning and preconceived ideas, is a core part of the preparation for an interview (See Section 3.3.1.1). CL experts in this field believe that only through awareness of strategies for managing our own patterns can we attend to

the logic of others (Walker, 2014). This kind of self-reflexivity isn't such a core concern in GTM but the approach does cover reflexivity through the due diligence to the coding process within and across interviews, the theoretical memos and the constant comparison.

6.3.2.2.4.2 Coding

After an interview then GTM introduces coding to analyze the transcript. In CLI this is not an ending, it is happening from the start of the interview.

Key commonalities: Both II in GTM and CLI need a clear purpose, use purposive sampling (although this is not built into CLI in general but specific to when it is used in research) and deliberately ask questions that make sense to the interviewee. Both approaches rely on interviews to gather data from the participant's perspective, aim to use the participant's words and advocate limiting assumptions from the interviewer. The structure of both approaches is similar with no fixed order or agenda. Both approaches use salience to decide what to inquire into next. Both II in GTM and CLI use gestures as aids to understanding. Both II in GTM and CLUI follow up on anticipated areas of inquiries. Both approaches build a relationship with the participant but for different reasons. GTM and CLI have a notion of saturation when enough information has been gathered. Both approaches use coding to make meaning.

Key differences: Intensive interviewers in GTM may ask non-confrontational questions to build trust but CL interviewers wouldn't make this judgement call. CLI not only limits the assumptions of the interviewer but has strict protocols to keep assumptions at bay and to rate interviews for 'cleanness' and root out any assumptions that find their way into the data set. Every question, as well as every code, has to earn its way into the data set in CLI and this is

over and above the requirement in II in GTM which has limited research about specific questions that researchers can and can't ask. The use of interview guides is prevalent in GTM and not used in CLI. GTM researchers seek to clarify and extend the meaning of interviewee statements by making statements or asking questions that refer to other interviews while the CL interviewer may only ever use what the interviewee has said plus their content-free codes and contextually clean questions. Despite having no agenda, CLI has tight control during the interview and navigates purposively around the data using coding in-the-moment. Saliency is used in GTM during the coding process while in CLI this is used during the interview to decide on the next question to be asked. CLI uses gestures to create models of the interviewee experience and to form visual spatial schema to aid their coding in-the-moment. CLI has specific protocols to follow up on gaps or anticipated areas for inquiry during the interview whereas GTM restricts this to between interviews. In II in GTM rapport is encouraged in order to get high quality information from the interviewee and to ensure a second interview. In CLI, rapport is explicitly built between the interviewee and their own information and experience in order that they can better share their experience during the interview. In CLI questions form part of the data set and this is not the case in GTM. Saturation in CLI happens during an interview and in GTM saturation happens across interviews. In GTM coding happens post interview and in CLI coding is happening in-the-moment.

6.3.3 Research sub-question 3: What benefits does Clean Language Interviewing bring to the grounded theory methodology researcher?

6.3.3.1 Protocols for staying grounded in the data, during an interview

CLI gives qualitative researchers (not only GTM researchers) a protocol to follow in order to ask high quality questions designed to keep the researcher's stuff out and to gather the interviewees' stuff in. In short, CLI can provide the GTM researcher with a method of interviewing that very closely mirrors the approach of GTM to a study: starting with an open mind, attending to what is there rather than what you presumed would be there, staying close to the data, working iteratively, coding, attending to emergent knowledge, abstracting and theorising, building useful models and theories.

Interviewers do unconsciously bias information (Thibodeau and Boroditsky, 2011; Tosey, Lawley and Meese, 2014). With naturalistic forms of inquiry and qualitative rather than quantitative research, the researcher can't just introduce randomisation or blind testing to reduce this bias (Norris, 1997). Rather there needs to be some way of bringing due diligence to reducing bias or putting in a system to minimize it. This is what is being attempted through CLI. Briggs (1986) argues that the meaning of the responses in interviews are contingent on the questions that precede them and by using CLI the GTM researcher can feel secure that this relationship is sound.

The background to the CLI discipline is that the interviewer cannot possibly grasp the other's experience but can only build a schematic model that must be built from the logic of that client's world (Grove and Panzer, 1989; Lawley and

Tompkins, 2000; Nehyba and Lawley, 2020). This means that CLI follows the same principles and discipline as II in GTM, and is a good fit for uncovering the concerns of the participant (Charmaz, 2004; Glaser, 1992) without twisting it to the researcher's concepts of the normal. This is a mission for many in qualitative research (Wertz 2011). In CLI the questions are very narrowed so that they can be applied to almost any experience without adding interviewer shape to that experience and therefore increase the facility of the GTM researcher to make meaning without shaping meaning.

In various writings, Glaser (1978; 1998) argues that researchers shouldn't worry about their preconceptions as their impact is managed through the analytical process of coding, that if these preconceptions are not reflected in the data then they will not become part of the final theory. CLI takes the position that research indicates that answers are influenced by the preconceptions of the interviewer and therefore they will be reflected in the data and have every chance of ending up impacting on the theory. CLI provides clear steps that a researcher can follow to minimise the impact of pre-conceptions and a tool for reflecting on the cleanness (Linder-Pelz and Lawley, 2015). These protocols do not appear to go against Glaser (1998) but certainly take care of concerns of issues of covert influence.

It appears that, as well as an evaluation instrument, receiving feedback by rating the cleanness of interviews is a way for researchers to become systematically sensitised to their own assumptions, models and metaphors. CLI gives researchers confidence that they are able to keep these preconceptions at bay for a bit longer (Saldana, 2015). CL interviewers regularly submit their transcripts to groups of critical friends as advocated by Norris (1997) to assess them for cleanness (Linder-Pelz and Lawley, 2015) and to

ensure that the vast majority of questions earn their way legitimately into the data, thus making the processes of research more public and transparent. This is a practice that could be adopted in GTM as a way of socialising the idea of keeping data collection freer from assumptions of the interviewer.

The changes from ordinary to clean questions can be subtle and detecting leading non clean questions requires a degree of psycholinguistic understanding. For instance Nehyba and Lawley (2020) noted that a question such as, 'Do you meet regularly?' would be considered a leading question in a cleanness rating. This is because it is assumed that in order to process the information, or to negate it, requires the interviewee to make a mini model of the experience in their perceptuomotor system (Scorolli, 2014; Wilson and Foglia, 2011) and to try on the action, and that this trying on may influence their experience later. This practice can be very precise in the field of CLI and the GTM researcher would need to decide how 'clean' they wanted to be.

6.3.3.2 Protocols for training attention during an interview

Despite an extensive literature search on research interviewing, there is little evidence of sophistication or self-awareness in the use of language by the researcher (Tosey and Mathison, 2010). CLI brings this self-awareness and awareness of other, directly into the realm of interviewing. In particular, for the GTM researcher, this is a method that demonstrates tying every code and every question directly to the experience of the participant. Norman (1983) urges researchers to develop appropriate, experimental methods of uncovering mental models and these methods need to work with the fact that models are likely to be messy, sloppy and incomplete rather than neat or elegant.

CLI is one such method for directly allowing a GTM researcher to uncover mental models in the organisation in which they are formed.

This method may also protect the GMT researcher from engaging in 'false, collusive objectification' (Bourdieu, 1999, cited in Yanos and Hopper, (2008), p.2) interviews in which the interviewee gives answers that gloss over their experience and concerns or provide answers that fit theories held by the interviewer rather than their authentic experience (Yanos and Hopper, 2008). Asking clean questions and unpacking small phrases or individual words to uncover how they work for this specific individual may ameliorate issues of participants saying what they think you want to hear or what they think is a good explanation for their experience.

6.3.3.3 Coding in-the-moment during an interview

Interviews in GTM need to be flexible yet controlled (Charmaz, 2014), to keep to time and to manage the flow of information and by following the protocols of coding in-the-moment the GTM researcher extends this facility to being in control of the data and being able to actively pursue aspects of the data shared while still minimising interviewer assumptions. From these findings, coding in-the-moment allows the interviewer to gain access to the meaning of a participant's statement while the participant is still in the interview and able to answer for themselves. When Charmaz (2004) says that questions should fit the participant's experience and be able to elicit and elaborate the participant's specific experience, the sub-categories of coding in-the-moment - tethering, parcelling out, interrogating, navigation and modelling - do just that. A very narrow set of questions able to elicit a very broad range of specific experiences. In this sense it is a strong addition to the qualitative tool kit.

Wasserman, Clair and Wilson (2009) have developed a systematic method for exploring the conceptual relationships between discovered codes, something they claim is problematic in GTM as the researcher imposes their concerns, experience and logic to these relationships. Through parcelling out and creating embodied models of the interviewee's experience, CLI offers the GTM researcher a way of exploring the relationships between discovered codes demonstrating how the relationships are emerging as a property of the logic inherent in the participant concerns and not imposed by the researcher's logic, concerns and experience.

The GTM researcher will be coding for a word or small phrase within a sentence or paragraph that is the key code, or a gesture recorded alongside interview transcripts and can take this as the initial code and mark it and see how it relates to other actual words or gestures and build a model grounded in their data before applying a conceptual code to that word or gesture, thus staying grounded in the data for longer. The better the quality of the code and the more easily the researcher is able to apply it, the better quality their research (Saldana, 2015). By using coding in-the-moment, the researcher is able to interrogate in vivo codes as they arise, while the interview subject is present. This is a much 'cleaner' way for the GTM researcher to stay close to the interviewee's data for longer before applying their own codes to the data.

Creating visual spatial schema and building 3D models of the participant experience is a specific feature of the findings in this study and gives GTM researchers another way of making meaning from the data available and adds the skill of building a cogent model of the interviewee's experience. These schema illuminate the relationships between codes as understood by the specific participant as well as providing

maps of codes that can be compared across interviews. This creates a double description of each interviewee's data; transcript and visual spatial model which in turn can lead to a deeper understanding of the meaning they make of the topic (Bateson, 1972)

CLI can extend the intentions of II in GTM in that data is being collected, analyzed and a model developed from the first answer to the next question, while at the same time protecting the interviewer from premature evaluation. This allows the researchers to be congruent with their wider research process from start to finish.

6.3.4 Summary of discussion on CLI

This study aimed to explore a set of strategies that would enhance the practice of CLI as a research tool and through reflection and comparison with intensive interviewing in GTM has provided a model to do that. Alongside enhancing CLI, these principles of coding in-the-moment can be used by a GTM researcher, or indeed any researcher wanting to ensure fidelity between their data collection and the experience of their interviewees.

Chapter 7: Conclusion

7.1 Introduction

This thesis had two separate aims: 1) to explore the under-researched areas of CD in HE through a qualitative method and, 2) to explore the utility of CLI as a research tool. The study itself started with two overall research objectives: to develop a model to advance the practice of CD and to explore a set of strategies to advance the practice of CLI as a research tool. As the study progressed, these two objectives were broadened to capture questions that

emerged from analysis of the data. In relation to CD, the three wider aims related to: principles and processes for designing curricula, the barriers to aligning these within HE, and the conditions needed for successful CD. In relation to CLI as a research tool this broadened into exploring: coding in-the-moment; the commonalities and differences between CLI and intensive interviewing as used in GTM; and the benefits that CLI could bring to the GTM researcher.

This chapter will follow the empirical and then the methodological conclusions.

7.2 Recapitulation of purpose and findings

7.2.1 Research objective one: To develop a model to advance the practice of CD

My intention was to investigate whether there was general model for CD in HE through interviewing individuals actively engaged in designing CD (Woodgate, 2000). I chose to use CLI within a GMT framework to uncover the thinking, attitudes and behaviours of those involved in designing curricula in HE and to use their mental models (Lakoff and Johnson, 1980; Morgan, 1986) to generate a generalised model. The purpose was to develop a model that could help others make practical use of these findings (Strauss and Corbin, 1998), to reflect on and refine their thinking thereby enhancing their practice.

Each of the 34 interviews resulted in an individual visual spatial model for CD and, when synthesized, two core categories emerged: one for the principles required in CD and another being a process for CD. At around 15 interviews, a theoretical insight, a new sub-question and the core category of alignment emerged. This completed a model for CD in HE: principles, process and alignment (see Figure 3).

I found a clear set of principles that almost all the participants agreed were important in CD. Similarly, there was general agreement about the process to follow. The strength of this agreement was surprising. However, despite this consensus, around 25% of individuals or teams felt unable to align their behaviour, and that of their colleagues, to the principles and process they aspired to. All of the participants had a similar model for what was a curriculum and this was closely aligned to creating a learning journey, balancing practical work based skills, critical thinking, subject specific knowledge and the ability to engage in direct research. Despite the differing ideas in the literature, I noted that the models for what the practitioners believed was important were remarkably similar, indicating a common sense that unites what programme teams want to produce.

The CD principles that emerged from the interviews were: to keep the student at the heart of CD; to appreciate colleagues; to make the time to reflect and create; to synthesize theory and practice; and to be congruent, ensuring there is a good fit between activities, behaviours and the principles (see Figure 4). This confirms some recent recommendations around CD (Fung, 2017, O'Neill, 2015), and extends the work to include principles to embody and a process for teams to follow while also considering the behaviours and interactions of team members in relation to the behaviours and interactions they want for their students.

These principles made a lot of sense when they emerged and I could logically see how they worked, despite being a novice in terms of designing curricula in HE. I think that core to applying these principles is the notion of diligence; they seem relatively simple but applying them consistently takes time and effort. Of course, you should keep your students/customers at the heart of a design process, of

course a team that appreciates one another will be more effective than one that holds one another in contempt, of course good design takes time and creative space. I also think that they are so simple that many people do forget to check in with them. I've found, in applying them to my own work, that there were regular areas of omission that were negatively impacting my standard of work.

The CD process consists of five stages starting with a small team researching and reflecting on all aspects of the curriculum, from industry to subject, to teaching and learning, as well as reflecting on what they have been doing, what was working and what wasn't working. The next stage is for the whole programme team to come up with a shared vision for their curriculum, taking into account the findings from the first stage. The third stage is for the whole team to co-create the shape and the structure of the curriculum together, ensuring cohesion and consistency between and across modules and assessments. The fourth stage was to write the content for the modules individually or in small groups. Finally, the small leadership group checked the content and the course structure, and ensured congruence between activities, learning outcomes and the results of their research and reflection during the first stage (see Figure 8).

I have recently been involved in conflict resolution in a secondary school and I noticed during a curriculum development day that they were often solving bits of problems such as attainment or behaviour or attendance, but rarely taking time to go to first principles of what was their vision for the curriculum as a whole. In the cut and thrust of the workplace there doesn't seem to be enough time made for getting the design process aligned. Teams need ways of bringing this thinking and behaviour into an easily managed timeframe that can be applied regularly and checked in with.

The final core category was alignment: whether the individual, professional team or the institution created the conditions for alignment between the desired principles, the process and their own behaviour (see Figure 9). Of the three dimensions of the model, alignment brought the principles and process together. Those programmes which had a leader creating the conditions to align behaviour and attitude with the principles and process spoke about CD in terms of resources and actions that they were able to put into place. Those without such a leader to help them align their behaviours spoke in terms of problems and desired outcomes in relation to the CD process.

Those leaders could be institutional, departmental or at programme level. Interestingly, the participants did not mention attempting to create the conditions for alignment up the organisational hierarchy. Rather, some leaders took it upon themselves to create the conditions for their sphere of influence so that the principles and process of CD became just the way things are done at those institutions.

Organisational alignment is so core to these findings, and it seems that a clear area for HE institutions to consider is getting the right people into the right rooms at the right time and to share research, agree their overall vision and the structure required and then to build the content or the culture from which that will fall out naturally.

Prior research on CD has focused predominately on skills and knowledge (Asunda and Ware, 2015; Wrenn and Wrenn, 2009; Angeli and Valanides, 2009). This study builds on those findings by adding principles and a process which include the attitude and behaviours of staff and leaders of teams and institutions. This was found to be critical to the design process at all levels within the institution and of course, within HE these are curricula being designed for people by

people. It makes complete sense that the relationships between people during the design process will impact the effectiveness. Ideally leaders in CD are motivated to behave in ways they know are positive for CD. However that requires continuous learning and overcoming self-limiting aspects of their existing mental models (Hackman and Wageman, 2007). It also requires that they engage in productive action, even when the structures around them make it hard to prioritise CD. This is about stepping up and doing what is right, even when it is difficult.

Glaser (1978) says that when getting started in a GTM study, the researcher needs to keep their attention open to both the concerns of participants -until a problem emerges- as well as how individuals and groups resolve that problem. The core problem that emerged during this study was the creation of a curriculum that connects all the aspects of HE through the experience of the student, the resolution of this problem being alignment of behaviour with known CD principles and process.

Overall, this study brings out a set of principles and a process that leaders in CD can use alongside the creation and application of alignment of behaviours to outcomes. The curriculum is and should be a connector, an equipoise in the centre of HE, bringing together industry and academia, knowledge and research with practical skills. Ideally this should be a transformative experience because only then can the next generation of students use their new thinking to make positive changes in the world. All aspects of the curriculum are connected in the equipoise of the student, the one point where everything meets. The CD principles and process uncovered in this study need to be enacted by the leader who steps up and creates the conditions required for the team designing the curriculum to behave in ways that are congruent with what they want the students to be doing during

curriculum delivery. Thus, there is an alignment from principles through design process to desired student behaviour. This alignment is achieved more easily when it is embedded in everyday behaviours and is 'just what we do around here'. For this reason, this study and the literature call for institutions to design curricula that connect all aspects of HE, and an institutional process that is aligned with the outcomes of those curricula.

7.2.2 Research objective two: to explore a set of strategies to advance the practice of CLI as a research tool

I chose to use CLI, an approach I've been practising and honing for 20 years, as my data collection method and to reflect on the specifics of this interview technique to ascertain and document its core ideas and practices. Although there have been some academic papers describing CLI as a research methodology, I wanted to contribute to the field with a deep-dive reflection into the skills that underpin the process.

Upon analysis of the practice of CLI, four specific techniques emerged that make up a process I have called coding in-the-moment: tethering, parcelling out, navigating and modelling. These processes allow the researcher to move around the interview data, to interrogate specific codes and to create meaning from other people's mental models. The notion I'm using of tethering keeps the attention of the interviewer tethered to the purpose of the research and the interview data revealed thus far. This tethering to purpose and data is much tighter in CLI than it seems to be in Intensive Interviewing as used in GTM and forces the interviewer into a level of diligence where they can justify every question they ask. Parcelling out gives structure to what has been shared and relates in-vivo codes to one another

creating visual spatial schema. While this was used by David Grove when teaching Clean Language therapy, it has been adapted here as a way of bringing structure to interviewee data on the fly so that my coding has a simple focus without losing meaning. Navigating uses the concept of adjacency to move around the data and to inquire into different codes to fill gaps in the schema or to extend meaning with clean or contextually clean questions. Modelling is the creation of a model of the interviewee's 1st person experience. There is a great deal happening in-the-moment that means the researcher is making a conscious, mindful choice of the next question to ask and of areas of the interview to come back to for further inquiry.

By using CLI in conjunction with GTM, I gained a different set of filters to look at my CL skills. I realised part-way through the data collection that as well as coding transcripts answer-by-answer post-interview, I was actively coding interviews answer-by-answer *while* the interviewee was in front of me. This led to the exploration of the four strategies of coding in-the-moment, which allows readers to understand what is happening in a CLI from the interviewer's internal perspective. This process helps an aspiring CL interviewer to check how they are coding and to understand what codes they are applying and for what reason. It supports the CL interviewer to keep control of the overall structure of the interview without overly influencing the content.

7.3 How do the findings relate to previous research in these two areas?

7.3.1 Curriculum Design

For a number of years researchers (Ziegenfuss and Lawler, 2008; Bovill and Woolmer, 2019) have been calling for studies

to be undertaken in CD. This thesis makes an original and important contribution to the topic area, specifically the findings specially related to the behavioural and attitudinal aspects of the practice. First, the literature on CD recommends ensuring alignment between learning outcomes, assessments and modules (Alfauzan and Tarchouna, 2017; Biggs, 2003), which is confirmed by the findings in this study. Second, there is more recent research about curriculum as a connector (Fung, 2017), which is also confirmed by my findings. This study extends the literature by exploring the connection between the behaviours of individuals and teams, and what the institution needs to do to create the conditions where staff can align their activities with good CD. This makes me think that institutions need to get involved with their CD process and like programme leaders, to step up and take personal responsibility for creating the conditions that are aligned with good CD practice. I believe they need to follow the same process institutionally that they expect their programme teams to follow.

7.3.2 Clean Language Interviewing

CLI is a new academic field (Tosey et al, 2014; Linder-Pelz and Lawley, 2015; Cairns-Lee, 2017; Nehyba and Lawley, 2020) and previous research emphasises how the clean questions protect client data from interviewer bias. This study speaks to the facility that CL offers the researcher to code and model interviewee data, and in particular, to the relationships between key aspects while *the interview is underway*. These findings avoid premature theorisation through the application of coding in-the-moment tools that support the researcher to keep fidelity to the meaning of their participants' experience. This seems to me an extraordinarily versatile tool. I know from experience that

it can be used in police interviewing, recruitment, and critical incidence interviewing as well as research. Just like the curriculum design principles and process that it uncovered in this study, CLI takes diligence and a real stepping up to ensure that the method for eliciting data is congruent with the purpose of the interview. This study compares the findings on CLI with intensive interviewing in GTM and adds to the literature on using CLI within a GTM study, indicating how the GTM researcher can start coding and analysing during an interview, can demonstrate how their data gathering is grounded in the concerns of the interviewee, and how researchers can sensitise themselves to their own assumptions and prevent premature theorisation. I believe that it is a benefit to any grounded theory researcher who wants to ensure that their interviewing skills and behaviours are as transparent as the grounded theory process in ensuring when they are data focussed and when they are theorising.

7.4 Limitations

As with all research, the limitations offer opportunities for further research as is the case for both aspects of this study.

7.4.1 Empirical

The programme teams that agreed to take part in the study were chosen by their institution as being likely to be helpful and therefore the resulting model may be biased towards participants happy with their own performance. I think that teams experiencing more difficulty may be less likely to put themselves forward or to have been recommended by their teaching and learning lead and this may be a barrier for this type of research. How one should investigate the views of a wide range of programme teams may be a question

that needs to be asked. How one should investigate the views of a wide range of programme teams including teams who do not want to be interviewed, may also be a question that needs to be answered before a more comprehensive study can take place.

The sampling process for empirical findings presented a range of difficulties; even those members of staff with a keen interest in CD said that a lack of time prevented them from supporting the research. Even when people agreed to be part of the research, it was hard to coordinate diaries which meant the data collection took place over 3 years, often with changes in the team. One team had changed programme leaders twice since the start of the data collection period and, although this gave a useful comparison of before and after the team took on the institutional design for CD, it was also a long gap between interviews and not all participants in that team were speaking of the same leader. Not every participant was able to commit to a second interview and the pandemic prevented us meeting as focus groups to reflect on the emerging model. Despite this difficulty, the 34 first and 13 second interviews did get the study to a point where data saturation was met, and additional data was not providing any new information (Braun and Clark, 2021). The difficulty that I found getting interested, available research subjects suggests to me that there is not enough time in the academic timetable for reflection and research.

This study investigated what people said they were doing in CD. I note that there was no observation of what people did while carrying out the design process. I wasn't able to investigate whether or not those who were aligned with the CD principles and process were doing what they aspired to be doing and whether, if they were doing it, it had any impact on student experience or attainment.

Due to the Covid-19 pandemic the CD model developed could not be tested by discussing it with the programme teams who had participated (this had been the original intention). Therefore, there is no data on whether the participant cohort, as a whole, agreed that it was a model that fitted their experience.

7.4.2 Methodological

My methodological findings arose from personal reflection on my own approach, as I was engaged in it. Therefore, this study does not conclude anything about how CL interviewers generally model interviewees' information. I'd like to see future researchers conduct such an investigation and the resultant generalised model could be compared to my reflections to distinguish what is idiosyncratic to me, and what is common to how CL interviewers think and process information during an interview.

Through the course of this study, I explored commonalities and differences between II in GTM and CLI and was able to isolate certain features of each. However, I was unable to find any proven method of measuring interviews for efficacy, efficiency or quality of the data gathered. Therefore, I am unable to say whether the differences between the two approaches make a substantial difference. Until such qualitative to quantitative methods are available, it is difficult to see how interview methods can be compared, and it will be left to interviewers to become familiar with both methods and to choose the one most appropriate to their research.

The potential benefits of CLI and coding in-the-moment for GTM researchers is currently at the theorising stage and may or may not be useful. I have not yet had the opportunity to present my findings and conclusions to GTM researchers nor

to receive their feedback on the CLI strategies. I did engage with a GTM expert, Cathy Urquhart, sharing the coding in-the-moment strategies with her over several sessions including some in-depth discussion around the ideas. Cathy indicated that there was something different and interesting in my findings and encouraged me to conduct further research.

7.5 Implications of this study

7.5.1 Empirical

This study offers evidence for leaders in HE to create conditions that make it easier for staff to do what they believe would be a good job. I suggest that there's little value in advocating a connected curriculum (Fung, 2017) unless the institution also provides time, status and resources needed for quality CD to take place. The findings suggest that it only takes one or two leaders to use their own professional ethics or the professional ethics of their industry to create the conditions necessary for localised alignment between the team behaviour and accepted principles and practice. It seems to me that the importance of such alignment to attaining the desired outcome cannot be overstated.

If an institution were to use this model to align their programme teams around a CD process, it would confirm the value of the findings. This would be one way to demonstrate that the model can help leaders and teams create a design for CD that they can all follow. If it was found that the institution that had followed the model for CD in this study was able to show an increase in student attainment since changing their approach to CD, it would lend support to the idea that changes in CD can lead to positive real-world effects. This would move the findings from

descriptive to something more useful and potentially prescriptive.

The study offers a detailed three-part model which could be used by institutions to support a CD strategy. Although I do not think that following all three elements of principles, process and alignment are easy to do, the findings of this study tell a story of all individuals wanting to do their best for the students and the principles and process would be a way of supporting teams to do this.

7.5.2 Methodological

This study offers an extra dimension to the GTM that future researchers can benefit from. It seems to me that both CLI and GTM methods have at their core a respect for the data and for the ability to pay attention to patterns in the data in order to make meaning. However, one area that is under described in the literature is how a GTM researcher should go about gathering that data and what questions are more or less likely to gather high quality data grounded in the interviewees' experience. In fact this area seems under described for researchers in general and in my opinion many researchers lack the ability to reflect on their own and their colleagues' interview questions as it just doesn't seem to be 'the way we do things around here'. CLI is a systematic method designed to do just that. It includes the protocols, the skills needed and a way of testing the interviewer's adherence to the approach.

I think that a great benefit of Coding in-the-moment is that it allows the researcher to ask about and interpret the participant's tacit meanings, while the participant is still with them rather than simply interpreting the data through their own inferential codes. The specific skills needed to be a CLI without doubt take time and dedication to master

but as Cairns-Lee (2017) and Nehyba & Svojanovský (2017) have shown they are learnable and coding in-the-moment may make this easier for future students.

7.6 Contributions

7.6.1 Empirical

This study has revealed five principles for CD and a five-stage process for CD teams to follow, where the principles need to be enacted throughout the five-stage process. The principles and process are confirmed in the literature (Barnett and Coates, 2004; Maher, 2004; Fung, 2017). A key finding, which extends the literature, is that there needs to be alignment between the behaviour and thinking of any programme team engaged in CD, and the behaviour and thinking in which they want their students to engage as they experience the curriculum. This alignment needs to happen throughout the institution. For example, staff say that engaging in critical inquiry and collaborative learning are as important for them as they are for students.

'Having staff model what they want the students to be. So having staff that have an HEA fellowship that's enabled them to be reflective, critical thinkers then their teaching models what they want the students to do.' (Teaching and Learning Lead)

A second contribution that I see from these findings is that creating the conditions whereby staff have the necessary status and resources (including the time they need to engage in the behaviours and thinking) is as important as the guidelines about how to implement alignment.

'Every Friday, the meetings are there, they are timetabled and protected so if anyone tried to schedule

something, they had to work around it.' (Programme Team, Social Science)

The findings demonstrated that people knew what they should be doing but didn't always have the resources to act.

'Sometimes sitting and thinking and reflecting is a very wise use of time, but there's not that time, and it's a shame really because reflection is key to professional development.' (Programme Team, Science)

Thirdly, the language people use when describing how they do CD can tell us a lot about their orientation towards CD. I've found through this study that those who are aligned with their espoused outcomes of the CD principles and process speak mainly about resources they have:

'We've got a fantastic programme administrator and ... she's so good at her job and so skilled at her job.' (Programme Team, Health)

and the actions they take:

'We looked critically at ourselves and whether we were able to teach a course like this, whether we had the skills or the resources. We were our own best friend, or critical friend.' (Programme Leader, Social Science)

Those who are not aligned or are part of a team that is not aligned, tended to talk about their desired outcomes:

'I think greater discussion across the university, or even faculty level or school level, would help or could help provide a richer curriculum. But I think, at the end of the day, the barriers there are probably time.'

We're all strapped for time and resources, to be honest.' (Programme Team, Social Science)

This group also speak more about problems:

'A lot of them are very research focused and therefore couldn't really give a damn about the teaching, as long as it's actually minimum.' (Programme Leader, Science)

I note that this could be a very interesting contribution in itself and a way of quickly gauging how aligned a team believes they are between their espoused and their enacted values.

7.6.2 Methodological

While other researchers have used CLI as their methodology (Cairns-Lee, 2017; Nehyba and Lawley, 2020; Tosey et al., 2014), the descriptions of CL in those studies have been from a general outside perspective. I believe that this is the first detailed academic reflection on what happens during a CLI from the interviewer's perspective. During this study, I have taken my own tacit skills and knowledge of coding in-the-moment and made them transparent and learnable so that they can enhance practice.

Through the reflection process, this study has used the cleanness rating (Linder-Pelz and Lawley, 2015) to sensitise me to my own assumptions and to support me to stay tethered to the purpose and the data. In turn, this cleanness rating can serve to sensitise other qualitative research interviewers to either investigate the source, purpose and impact of any leading questions in their interview, or to assess their interviews for cleanness overall.

This study has produced the most comprehensive process for CLI from an external behavioural perspective and from the interviewer's internal perspective so far produced (see Appendix VI). The study confirms the CLI literature and extends it from external behavioural perspective to an internal interviewer perspective.

I have introduced an explanatory metaphor for that inside view of CLI - that of the rockface and a rock climber, tethered to the purpose for the interview and to the interviewee's data. This metaphor can help future researchers get a felt sense (Lakoff, 1987) of the experience of CLI.

This deep dive into a practice that had been very familiar to me, has allowed new principles and skills to come to the fore in such a way as to make the tacit skills of CLI easier to learn and teach. Already, the concepts of tethering, parcelling out, navigating and modelling are being taught in a pilot course on CLI by myself, James Lawley and Marian Way, and further research will indicate whether the strategies do, indeed, improve the practice of CLI as a research tool.

Engaging in a CL interview mirrors the experience of engaging in a project using GTM. The CLI approach to data collection seems congruent with the approach to GTM research overall. In fact, any research that purports to be interested in the concerns of the participants and aiming to keep the data safe from premature theorisation may benefit from paying attention to the questions asked. These findings contribute the notion that each question within this kind of research needs to earn its place in the dataset.

The skills of CLI help the qualitative researcher to engage actively and agilely with data, during their interviews as well as afterwards. Unfortunately, I don't have any raw data of what other GTM researchers are doing during their interviews or papers about the quality of questions used during GTM studies, so it is difficult to compare. The fact that I could not find papers comparing the impact of specific questions on interviewees used by GTM researchers and the quality of data elicited, indicates that this area may be academically interesting and an area for future research.

These findings offer researchers in GTM a data-collection approach that allows them to measure and demonstrate that their data is grounded in the experience of their participants. I believe there is great benefit in applying an approach that would allow them to code and to analyse codes during, as well as after and across interviews. Adding CLI protocols into the training of GTM researchers could be a useful development, making GTM an even more robust methodology.

7.7 Possible areas for further research

7.7.1 Empirical

One suggestion I would make for further research that would extend the findings of this study, would be to share the five CD principles and five-stage CD process as well as the importance of alignment with programme leaders and teams about to revalidate their programmes, and to explore what contribution it makes to their thinking and practice.

I recommend sharing the overall empirical findings around connection and alignment with senior leaders in HE

institutions, to explore in what ways their institution is aligned or misaligned with the principles and practice.

A third suggestion would be to learn whether following the five-stage process and the five principles for CD results in improved student performance. This could be done by comparing institutions who decide to use this model with those who don't, or by comparing the results in a single institution before and after the model is introduced.

Despite the lack of peer reviewed systematic studies on CD, the participants in this study were quite clear about what they *should* be doing and how the process *should* work. I therefore think that a separate study could be designed to uncover where this common knowledge is coming from, or, even better, to conduct a systematic review of programme teams following this process and uncover whether it has the positive impact that the programme teams think it would have.

In terms of applying the model (the principles, process and alignment) more generally, I see that it could be applied to any design team who wishes to provide a high-quality service. If the word 'customer' or 'patient' was substituted for student, then the principles and the process could possibly apply to the retail or health sectors.

Finally, I would like to have access to study any staff teams (if they exist) who are unhappy with their CD process and who are nevertheless achieving great student results. While the notion of congruence between principles, process, behaviour and attitude makes common sense, we know that in complex systems common sense doesn't always give us the results we want or expect (Levitt and Dubner, 2014). This way I could test the model by looking for outliers.

7.7.2 Methodological

Given that the methodological findings result from my reflection on my personal perspective on CLI, one obvious suggestion for further research would be to work with several CL interviewers to uncover individual models for CLI and general model for CLI as a skill.

A second idea would be for me to invite some GTM researchers and some CL interviewers to conduct a number of recorded interviews and then to explore their experience of the interviews from an interviewer's perspective and to code for commonalities and differences.

Thirdly, I think it would be interesting to take some transcripts and get some CL interviewers and some GTM interviewers to code them post-interview, to discover commonalities and differences in the coding, and to trace a lineage from the way that the interviews are conducted, through to coding. This way I think that resultant patterns that are picked up through both approaches could shed serviceable insights to the researcher.

7.8 Personal Reflection

One of the issues I had through this process was assuming that other researchers were coding the way I was coding and assuming other CLI interviewers were coding in-the-moment the way that I was. A positive aspect about the way I operate is that I naturally like to investigate how different people are carrying out the same task to compare their internal strategies - indeed this is the mainstay of my business (Walker, 2014). That led to me asking two fellow researchers if we could all code a page from one another's interviews to ensure we were coding in a similar way and could confidently say that we were practicing GTM. It was this interaction

that led to the realisation that I was coding word-by-word and building visual-spatial schema that allowed me to build a meaningful model even from fragments of an overall interview. This facility was not shared by my fellow researchers and the disparity between our approaches to coding led to a large section of the reflection and learning in this study (see Appendix II for an example).

Throughout the research process I encountered five separate episodes of family crises which required me to unexpectedly care for others and to get involved in complex administrative procedures such as liaising daily with adult social care and the local education authority. My neuro-diverse profile of dyslexia and dyspraxia, which I normally manage very well, was absolutely pushed to the limit with an overload of detailed task-focussed duties, both personal and academic. This drew out the research journey into a long, often arduous process and it was an effort to balance filial duty, empirical and methodological research and parenting over the five years. Without the keen interest in the findings from colleagues and the unwavering support of my research team it would have been derailed altogether.

The learning, however, has been profound and I am raring to go out now and find groups of people wanting to extend the research and to find practical use for the processes developed. I'm already thinking how I could apply the empirical findings to our own trainings next year and the methodological findings to an on-line training in CLI.

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Appendix I: Participant Information Sheet

Caitlin Walker
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Title of Project: Designing and delivering the overall curriculum is like what? Using CLI to explore how programme leaders and teams think about designing and delivering curricula.

Researcher

Caitlin Walker

Faculty

Education, Health and Community

School

Sport Studies, Leisure and Nutrition

Dear

You are invited to take part in a research study. This study is based within institutions that are part of the University Alliance Group, to which your organisation belongs. I am emailing to invite you as a member of your programme team (*name of team to be inserted*) to take part in the study.

It is important that before you decide to take part that you understand why the research is being done and what exactly it involves. Please take your time to read the below information. Please ask us if there is anything you are unsure of or if you would like more information. Take your time to decide if you would like to participate or not.

Rationale for Project

CD at programme level as an entity is relatively under-researched, as studies tend to focus on the different components rather than the interaction of these to make a whole. This study sets out to investigate how those individuals directly involved in designing the curriculum think about that design.

The study will be qualitative in nature and will include:

- One interview (lasting between 1 – 1.5 hours) with a senior lead in the institution about issues regarding the student experience and CD from an institutional perspective
- Two interviews with members of two programme teams from within the institution
 - The first will focus on the overall CD and delivery from an individual and team perspective (approximately 1 hour)
 - The second will explore the ideas further to develop a model of CD (approximately 1 hour)
- Finally a focus group (approximately 1.5 hours) will be organised for all the staff that have taken part in the interviews to share the findings and models developed around CD and explore the implications and possibilities for implementation.

1. What is the purpose of the study?

This study focuses on developing an understanding of the ways in which Higher Education institutions in England develop and deliver their undergraduate curriculum and how the design elements and decisions support good student learning.

2. Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do you will be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason.

3. What will happen to me if I take part?

You will be asked to take part in two individual interviews and one focus group. The interviews will be a minimum of 30 minutes and a maximum of 90 minutes. The focus group will be a minimum of 60 minutes and a maximum of 90 minutes.

During the individual interviews there will be the researcher and yourself present.

The first individual interviews will ask you generally how you design and deliver the curricula within your team. The second interviews will ask you more structured questions about specific themes that have emerged in the project so far and ask for your response.

During the focus groups, a small group including yourself and up to six members across two programme teams, will be invited to consider the findings from the research so far and consider how accurate they seem, how useful they are and what could be done with the findings?

Individual Interviews will be audio recorded, transcribed and a copy sent to you for accuracy. Focus groups will be audio recorded and a copy of general findings will be sent to the group. Please note that a transcript of the recording of the focus group won't be sent to participants to avoid individual statements or opinions being ascribed to individual speakers following the event.

4. Are there any risks / benefits involved?

There will be no risks involved whilst participating in the research.

5. Will my taking part in the study be kept confidential?

All raw information obtained from the research study will be kept confidential to the research team. Data from the first interviews will be analysed and patterns or themes from this round of interviews will be used to inform the second set of interviews. This means we will share

any general themes or patterns that have emerged with participants. These themes won't be able to be traced back to a specific person. In the focus group we cannot guarantee confidentiality, as we cannot control what different members of the group choose to do, we encourage you to only share opinions that you're happy to be shared professionally and we will encourage the group to treat the information shared sensitively and confidentially.

Contact details of the research team:

Caitlin Walker c.a.walker@2016.ljmu.ac.uk

If you any concerns regarding your involvement in this research, please discuss these with the researcher in the first instance. If you wish to make a complaint, please contact researchethics@ljmu.ac.uk and your communication will be re-directed to an independent person as appropriate.

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Appendix II: Comparing CLI with two GTM research students.

A summary is shared below of the differences in the intentions and actions of interviewers and what that tells me about CLI.

Exploration 1: We asked ourselves, 'When we're interviewing at our best, we're like what?'

Researcher R - <i>I am an explorer, I'm not trying to prove something predefined. I'm exploring new territory with an open mind. I am identifying what is there and bringing this back to my base for analysis. I am the constructionist researcher, making new meaning out of experience. I go and interview the participants, then I go through the data collected and construct meaning myself out of this data. I take my interpretations to colleagues and check that this meaning makes sense to them. I ask for their ideas or interpretations too and use this to enhance the meaning I'm making. I then take my interpretations back to interviewees and together we create a co-construction of the knowledge that exists.</i>	Meaning making early, checks the meaning they are making with colleagues.
Researcher M - <i>I am an honest and true data collector. I am interested in originality; what I find may confirm something that already exists but I'm not going in assuming that.</i>	Own thinking is part of the data. Separates her own thinking from

<p><i>It is important that I keep my attention on what has been said and then to look at that data and wonder what else is here that no-one has noticed or what else is here that could be being overlooked. My own thinking is part of the data and so, as I generate my own thinking, I also bring those concepts into my data collection and analyse these too.</i></p>	<p>interviewee data. Then combines hers and theirs to create meaning.</p>
<p>Researcher Caitlin - <i>I'm like a detective or a police investigator asking, 'I wonder what is happening here?' Trying to uncover facts and motivations. Keeping inadmissible evidence out of court. As a researcher I believe that the expert on meaning and on motivation is the interviewee who is experiencing the phenomenon and that I need to keep my own interpretation at bay for as long as possible so that the evidence is as grounded in their actual experience/thoughts as possible. I may have thoughts and assumptions later and then my allegiance will shift from collecting data to making my own meaning but this is farther down the line.</i></p>	<p>Keep to building a model - keep interpretation at bay as long as possible. Shifts to own thoughts later in the analysis process.</p>

Table 11: Comparing approaches to data

While the other two researchers were comfortable with reading the data and simultaneously having their own thoughts and feelings and insights about it, I was aiming to consciously keep my inferences out of the way and work directly with the in vivo codes to build structure with minimal interpretation.

Findings: Researchers R and M actively bring in their own thoughts as data during initial coding. I aim to keep mine at bay for as long as possible.

Next we explored our approach to interview analysis. We took one short extract from each researcher's data, read them in silence, coded them and shared our initial coding.

Exploration 2: We asked ourselves, 'What are you doing as you read a transcript?'

Researcher R - *I had to read the whole passage in order to understand the context of what I'm reading about. As I am reading, I like to imagine the person and what they're saying, I think about what they might be like outside of the interview, at work etc.*

For example, with extract B, I thought it was interesting how the practice and experience of lecturing on sport allowed her to get better. I am relating to my experience of sport and what happens when you practice over time, how your confidence grows. As I'm reading the extract, I'm calling on everything I knew before about any contexts that relate to the interviewee.

Researcher M - *Once I'm reading the data, I read the whole interview to get a feel for their experience as they tell their stories. I am looking for themes, writing down facts and repeated concepts so that I can look at what's important later. For example, when the interviewee says that being awarded a prize at school for her short story had a big impact, I can go back to other interviews and find out if they had a significant experience of being 'labelled' a good writer in their formative years. If necessary, I can ask them this in follow-up interviews or I can ask my next set of interviewees. I write these concepts in the margins and*

write mini hypotheses about how and why these could be important in this experience.

Researcher Caitlin - *I read a sentence and as I'm reading it I separate it into nouns and verbs and the relationships between those nouns and verbs. I pay close attention to what's inferred by the words they've said. I'm drawing on concepts I know from generative linguistics; deep structure (Chomsky 1988) and the meta-model (Bandler and Grinder 1975). I'm aiming to get as much structure as I can from the words as they are presented. This gives me a frame for fitting in the next pieces of data as they arise. It also gives me a frame for which question I might ask next to fill in a piece of the structure or to expand my understanding of what has just been said.*

I asked what strategies each interviewer had for recognising their own assumptions or preconceptions from the interviewee data and how they then went about bracketing off their assumptions? Researchers R and M said they didn't have active strategies for separating what was presented to them from what they were inferring about what was presented to them. They make use of their inferences from the beginning. I did have strategies for noticing my inferences about what is being said and for bracketing off that inference.

I wanted to analyse and predict differences we might see in our approaches. As a researcher, I am trying to keep my own meaning at bay both during the interviews as well as on initial analysis of the interview transcripts whereas Researchers R and M were actively applying their meaning to their first read-throughs of the transcripts and didn't have strategies or inclination to keep their meaning separate from the data. These two researchers didn't have active strategies for distinguishing between what was presented to

them and what they were inferring about what was presented to them.

Exploration 3: After exploring our models for interviewing, we discussed how our models/metaphors and our attitude to research affected our use of reflective logs. This was an important question to me as I thought it might reveal our attitudes to our own construction/thoughts and how we managed data coming from our own minds and experience rather than those of our interviewees.

Researcher Caitlin - *I use my initial notes to lay out the words and concepts and gestures verbatim from the interviewees. Then, as a reflective log, look at what could logically be inferred from the words and gestures and make space for follow-up questions that I might want to ask the next interviewee or in a follow-up interview. I write down assumptions that I am making in order to keep these separate from data generated by the interviewees. I use these to encourage me to look for alternative explanations in the data than the ones I first thought. I'm logging to create separation in the first couple of rounds of analysis.*

Researcher R - *I do it because I'm meant to, but I rely more on conversations with colleagues for my reflection and it's this co-construction of meaning which I then write up. I keep a lot of my reflections and assumptions in the margins of my coding notes, then I can see what they're related to and their links in the data.*

Researcher M - *I write down the concepts that I collect from my data and what I think that they mean. These meanings become a new source of data. This way I can reflect on and analyse the development of my own thinking over the course of the research. I am interested in how my own thinking and understanding grows as a result of being exposed to these*

new concepts and how that is creating new knowledge around the subject.

Researcher M and myself were more closely aligned in that we were separating data from the interviewee and data from our own assumptions. One difference between us was that Researcher M was actively looking for how her own thinking generated additional data whereas I was holding off from taking on assumptions and interpretations until I was moving towards model generation. Researcher R was happy to use her interpretation and take it to further conversations and seemed to be using the interviewees' data more as a stimulus for her own thinking rather than the main source. This may be part of being a constructionist.

These three examples are a tiny sample of what might be happening for different GTM researchers. It was significant for me because it gave me insight into what other people are doing. Although it has given me an idea of how to extend this investigation into research in the future, it doesn't tell us conclusively about the differences in the methodologies of researchers. It does, however, reveal some differences in attitudes and activities in the minds of three researchers all purportedly following the same methodology.

One observation I have is that Researcher R was embracing her own thoughts, experience and knowledge as sharing equal footing with the data that she was gathering. It did not seem crucial to this researcher to have a clear separation between her own experience, bias and expertise and that of the interviewee. Conversely, she was looking to keep herself and her thoughts in the frame as she progressed through the interviews. This is even to the extent that she wasn't using the reflective log because her reflections and thoughts were interwoven with the interviewee's data. It was very much a

co-construction of knowledge and theory. She was using the data as a springboard from which to construct her theory.

Researcher M, on the other hand, placed a high value on the accuracy of her interviews. She didn't want her data biased by her own experience. (It should be noted that of the three of us, she had the most direct experience in the field that she was researching.) She was still interested in the development of her own knowledge and her own concepts but wanted to ensure that they were separate from her personal experience and therefore more 'accurate' to the field. She was making hypotheses as she was going along and building on these in a similar way to Researcher R but her values on separation and accuracy lead me to think that she was more likely to keep her theory more grounded in the data from the interviewees.

There seemed to be a marked difference in the way I was treating data compared with the other two. For example, they both said that they struggled with the extracts from the other two researchers because they wanted to read the whole interview and they wanted to have more information about who the person was, the role at work, their gender etc. in order to settle in to making sense of the interview. They wrote notes on the extracts along the lines of, 'I need more context to understand what this means'. Or they assumed context (and wrote it into their margins) that I knew wasn't accurate in terms of my own interview. They both made a lot of assumptions about the data that wasn't at all indicated from the presented words.

I, on the other hand, was not fazed by working with short extracts from their interviews. I was able to build up a structure of what their interviewees were saying and able to demonstrate that this is a logical structure based on the words they'd said. This got me, and them, wondering about

what this difference was and whether I could codify it as part of my research. On reflection, and following questions from my research colleagues, I was able to explain that I was following a process in which I was thinking, 'What has to be there, even though it hasn't been said, for what has been said to make sense'. (Grove and Panzer, 1989; Grinder and Bandler, 1975).

For example, when I read Researcher R's interview extract and her interviewee said

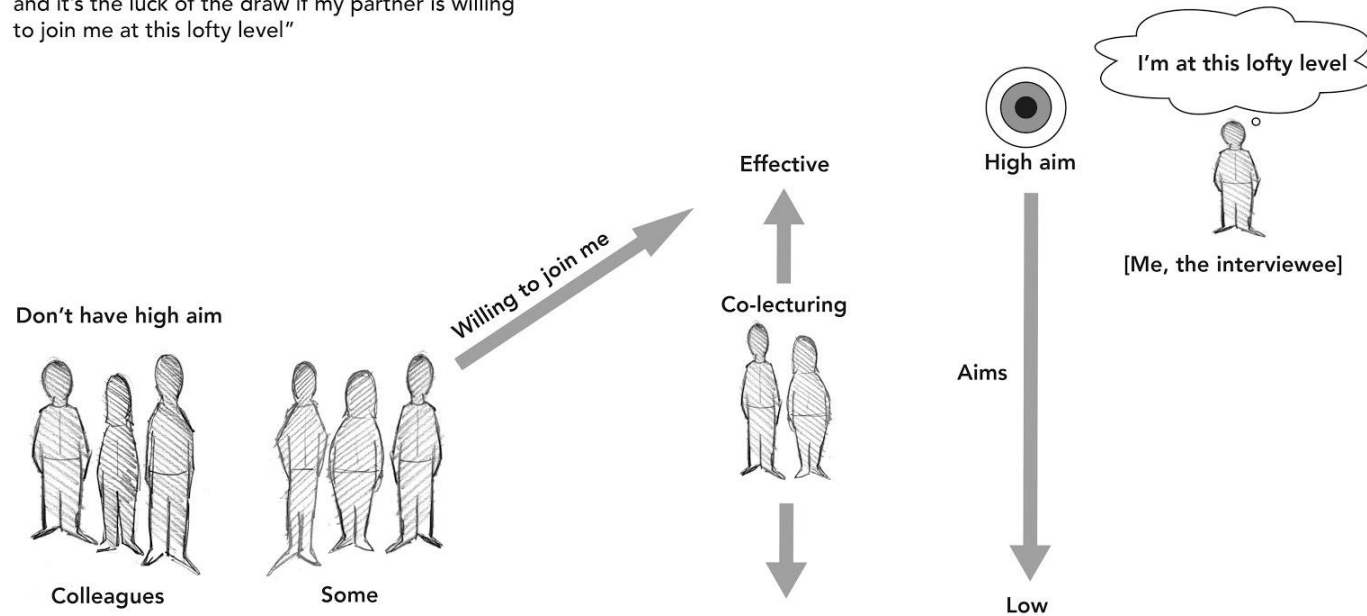
'Effective co-lecturing is a high aim for some colleagues and it's the luck of the draw if my partner is willing to join me at this lofty level.'

I didn't need to know, unlike my fellow researchers, what the lecture subject was or how many colleagues were in 'the draw'. Rather I started to build a structure based on what I was reading, from scratch, with minimal additions from my own lived experience. This observation led me to re-examine what I was doing during and after interviews and led to the uncovering of coding in-the-moment. The following diagram was my first model of coding in-the-moment.

Parceling meaning - visual coding language schemas in clean interviews

The purpose of coding is to let you know what questions to ask next

"Effective co-lecturing is a high aim for some colleagues
and it's the luck of the draw if my partner is willing
to join me at this lofty level"



Note: Listening for the implications of speech acts
and how someone orientates their attitudes, beliefs
and assumptions towards others, and bring these
to their attention using clean questions

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Julian burton, delta7.com

Figure 16: Parceling meaning - visual coding language schemas in Clean Interviews

- There's a concept which this interviewee calls effective co-lecturing.
- There will be some behaviours that they consider to be 'effective co-lecturing' but we don't know what these behaviours are yet.
- The metaphors of 'lofty' and 'high aim' imply a high / low organisation in their mental model.
- This may imply that ineffective co-lecturing is lower than 'lofty'.
- There's a lofty level which the interviewee associates with effective co-lecturing.
- There are a group of colleagues - we don't know how many.
- The word 'Some' indicates that not all colleagues aim to engage in the behaviours that the interviewee classes as 'effective co-lecturing'.
- We don't know how the interviewee knows that some colleagues aim for what the interviewee is aiming for and others don't.
- There is something called 'The luck of the draw.' Which implies that the lecturer does not have control about who they work with or whether this person shares their aim.
- The phrase 'join me' implies that this interviewee considers that they have this high aim.
- The phrase 'join me at this' implies that this interviewee considers they are already at this level.
- There is a possibility that this lecturer holds some of their colleagues in contempt in that they do not share this 'high aim' and therefore may have lower aims.

Appendix III: Example of moving from open codes to selective codes

I wouldn't be able to share all of the routes from open codes to selective code but I have selected a range of them. In general, any selective code would have at least five open codes that fed into it. Some feed in as actions, things they say they do or that are important to them and some can feed in as desired outcomes or problems, things that people wish were happening or are upset because they aren't happening. They show up as important factors in CD for these particular interviewees. Some also come through as entailments of the metaphors used to represent CD when it's going well and when it isn't going so well

I have two ways of developing selective codes from my initial codes. One was from the words or gestures used by the interviewee. A second was from the pictorial models I was making during interviews that demonstrated how the different elements fit together as good overall principles and practice.

The table below shows some of the examples of the open codes that led to secondary and selective codes. I had a huge amount of data and vast numbers of open codes. The items listed here are only a snapshot of the data collected and analysed. Whilst the open codes listed here are mainly direct quotes, to have been included here they will have been said in similar ways across at least five interviews.

Initial codes	Selective codes
<i>The QAA process is purgatory.</i>	QAA CD process suppresses creativity and innovation
<i>You need to push back against institutional hurdles with a compelling narrative.</i>	
<i>This is a tick box exercise - serving up refried beans from old modules .</i>	Diverse learners need diverse routes to demonstrate skills
<i>Students are at a range of academic levels .</i>	
<i>Each student has own way of learning and thrives on different assessments .</i>	
<i>We spend time in blue sky thinking.</i>	Clear vision allows team to address competing priorities
<i>There is no one vision for CD at this institution.</i>	
<i>The course needs to tell a basic story so the students and the staff know where we are all going and why.</i>	
<i>To fit revalidation timetabling you have to start before you finish teaching.</i>	External processes interrupt what the team see as great teaching and learning
<i>The timetable of quality assurance means that you have</i>	

<i>to review modules before they are completed.</i>	
<i>Professional standard won't let us teach and assess tools that are needed to future proof our course .</i>	
<i>Programme leaders are given the same rank as researchers, plus time and money .</i>	University investing in CD
<i>We need to have a big CD project and get the whole University involved .</i>	
<i>T&L and University spent time researching and designing best approach to CD .</i>	
<i>If you want programme leaders to have clout, they need to have power .</i>	University not investing in CD
<i>They want us to lead a team but don't give us any authority.</i>	
<i>There is a void where CD should be.</i>	
<i>Staff want to get on with research not waste time on teaching.</i>	Staff prioritise research over teaching and learning
<i>My team is more interested in getting their research done than in some decent teaching.</i>	

<i>Staff won't take part in group processes for CD, they're too busy with research.</i>	
<i>We meet regularly, every fortnight and attendance is high.</i>	Staff need time together to create something meaningful
<i>Our admin load is so high we have no work life balance.</i>	
<i>We have busy lives so just one or two make the curriculum and the rest just follow.</i>	
<i>All modules should fit together horizontally and vertically.</i>	Student synthesises knowledge
<i>Like a matrix, each level, each module should feed into and refer back to every other level and module. Good assessments do this.</i>	
<i>The levels should all feed into the course learning outcomes.</i>	
<i>Students take theory and make it practical from the get go.</i>	Emphasis on developing Vocational and academic competence
<i>...getting that balance between the hands-on clinical skills as well as those clinical reasoning skills.</i>	
<i>The application of knowledge has to be at the fore and</i>	

<i>fitting that together is really important.</i>	
<i>Assessments should synthesise knowledge across all modules.</i>	Assessments should contribute to the vision and standards of the course.
<i>... second scaffolding session then the students will have an assessment, and that assessment is a collaborative assessment .</i>	
<i>Assessments mirror the kinds of critical thinking students need to do in the field.</i> <i>We are at risk of dumbing down our courses to keep our numbers up.</i>	
<i>It's not just personal values, we instil professional values too.</i>	Create a strong proud professional identity
<i>One of the key skills that people within our industry expected was teamwork, so teamwork is core.</i>	
<i>We start with the end in mind, what kind of qualified practitioners are we wanting to produce.</i>	
<i>We hold multiple stakeholder panels.</i>	High level partnerships reflect on CD research and
<i>We pay lip service to employer and student feedback and I</i>	

<i>don't rate it highly. We decide and just get on with it.</i>	come up with one clear vision
<i>Senior managers and teaching and learning leads spent time exploring the evidence to come up with best practice.</i>	
<i>The wider university get affronted by feedback from students.</i>	Is the team able to give and receive feedback
<i>New members of staff are encouraged to go and observe in the team they're gonna teach.</i>	
<i>Our team has professional respect and robust discussions, we welcome feedback.</i>	
<i>Design the level outcomes backwards from the course learning outcomes.</i>	Start with the end in mind and work backwards
<i>Consider the student you want to be leaving as a graduate, what professional skills, academic skills, attitudes, critical reasoning do you want them to have and then work backwards.</i>	
<i>Think carefully of the kind of graduates we want and then what activities will support that development.</i>	

<i>It should be teach, reflect, adjust, teach, reflect, adjust all through the course.</i>	Keep on reflecting and adjusting the course as it's being delivered.
<i>We get together every three weeks and reflect on the students, our teaching, library usage etc.</i>	
<i>We all have different specialisms. Some are great academics, others have great experience in the field. We need each other.</i>	Celebrate and appreciate our staff diversity
<i>I know the strengths and weaknesses of my team, who to rely on for which jobs.</i>	
<i>From the first moment, we model those values, we care for each other, for our students and we expect them to care too.</i>	Expect our students to take on professional values
<i>We use the institution to create real works-experience so that they get a feel for what's expected of them in the real world.</i>	
<i>We lead them tightly by the hand at level 4 and release them until they're on their own at Level 6.</i>	Students learn to become self-motivated, independent learners
<i>Our students arrive expecting to be spoon fed, it's like</i>	

<i>secondary school - we have to train them out of that.</i>	
<i>We base all of our institutional change on evidence based research - that's why the staff listen to us.</i>	<i>We are an example of what we are asking for</i>
<i>If we want them to learn team-work as a core part of their course we need to act as a team .</i>	

Table 12: Moving from substantive to selective coding

Appendix IV: CLI and the empirical findings within this study

Example: The findings about Alignment

Using the content free codes of orientation towards an aspect of CD: Problem, Desired Outcome, Resource and Action. I was primarily applying these codes to categorise sentences according to whether what was being spoken about was something they didn't want, something they wished they had, something they were pleased to have or something they were actively doing to get what they wanted. My purpose was to use these codes to sort out the principles and the process. These codes also gave me insight into the different attitudes of those leading the design of curricula.

Once I realised that there was something interesting in people wanting things that they couldn't have or didn't do, I could sort Individuals, Institutions and Programme Teams, into groups around these codes.

For example, using this way of linking codes, I could see that in University 2 one programme lead in Health 2 was talking 40/40% Problem and Desired Outcome focussed with 20% Action, whereas in the same institution, Health 1, the entire team was completely Action focussed. The institutional lead in this same University, was also 50/48% problems and desired outcomes with around 2% of Actions such as *'some small teams managed to engage well with CD despite, rather than because of the institution'*.

CLI and coding in-the-moment allowed me to start by looking at the teaching and learning leads whose differences were incredibly stark in relation to these codes. I categorised them in terms of how they were orientated towards CD in their institution. From here I could also subdivide the problem

codes into who they held responsible for the problems. The thorough nature of the CLI while not adding content, gave me structure that I could work with when uncovering differences between the interviewees that I wasn't initially coding for.

The Cycle of Change

As well as working with the data, Charmaz (2008) says that analysis of codes is part work and part play and it felt playful when the idea of the Cycle of Change (Prochaska and DiClemente, 1983) came to me. I said 'It's as though some teams and interviewees were talking about CD the way that some people talked about giving up smoking. They knew they should but weren't doing anything to stop.' I looked at the differences through the lens of The Cycle of Change.



Figure 16: Cycle of Change as a model for where people are in relation to creating the changes needed for enacting CD Principles and Process.

I'll use this model of change to look at the findings about the institutional leads. They are only five individuals, but they are interesting because it is as if each of the four institutions were at different stages of Prochaska and DiClemente's (1983) Cycle.

University 1 could be said to be in the precontemplation stages of addressing CD. That is, they were talking only about what should be happening but not acknowledging that these things weren't happening in their institution. They didn't mention any problems in the institution's approach to CD. They used the terms, 'I think ...,' 'Maybe ...,' or 'It could be ...' 19 times within the first 20% of the interview. This could indicate that they were thinking about their Desired Outcomes but they were not considering changing what they do or are going to do. They didn't talk of Actions they or their department took to ensure the Desired Outcomes were met. If they did refer to Problems it was always from a passive position: *'If the balance isn't reached it's because something has interfered with the balance.'*

This talk could also be described as Passive

University 2 seemed to be at the contemplation stage of change. They were talking about and acknowledging the Problem and saying it needed to be addressed. They were not talking about any Actions that they were preparing to do so I wouldn't place them at the planning stage of the model. They were deeply upset about the Problem and when asked what needed to happen their response was, *'A university level overhaul.'* This also seems to tie in with being at the contemplation stage of the cycle of change.

University 3 could be said to be at a mix of Contemplation, Preparation and moving into Action. They were acknowledging the specific Problems at programme level and seeking to address parts of the issues with definite Actions. They were leading these initiatives and getting feedback. The way that they talked was still mainly Desired Outcome. They were hoping that the programme teams would get on board but weren't clear that it was going to be a natural conclusion of the Actions they were taking. They were not acknowledging

the Problems at an institutional level and therefore unlikely to be thinking about institution-wide change.

University 4 was using statements that could be said to indicate them to be at the Action and Maintenance stage of changing the culture around CD. They had considered the Problem, had researched CD within the latest academic literature, they'd worked with wider stakeholders including senior management at the institution to get a systemic approach to change. They had a clear Desired Outcome and they had then moved to the Planning stage and attempted to change the conditions under which CD operated across the institution and were enacting different strategies to see whether this resulted in the changes they wanted to see. They were running some of the changes at an institutional level such as changing the role of course leader so that it was given more status, more money, more time and became a desirable step in career progression.

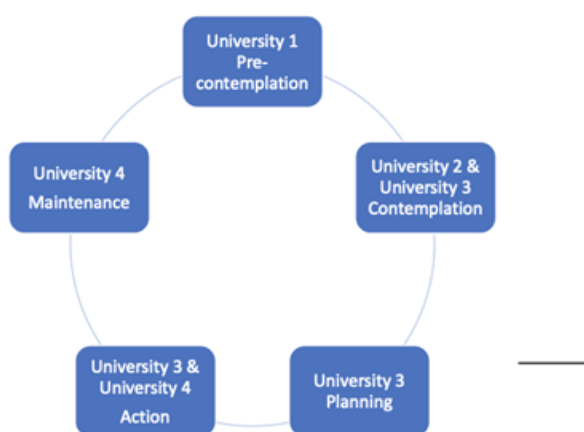


Figure 17: Mapping the institutions onto the Cycle of Change

The different individual interviews could also be mapped onto this model as could the teams themselves, sometimes all holding similar positions, as in University 4, or some individuals within one team being in different positions, as

in University 1 education. There seems to be a relation between those who speak in problems and desired outcomes and their inability to create the change they want around them.

So why is it that certain individuals and groups are remaining in precontemplation and contemplation without moving to planning? The data/literature suggests that this could be to do with who they believe is responsible for creating change and who they think is responsible for their current circumstances. During the CL interviews, whenever I heard a problem statement, that was usually an inference, I asked about the antecedent, the source this led me to their beliefs about responsibility.

'They (Programme Teams) don't have the time to share, it almost seems like an indulgence really to think about those questions about what is the purpose of students coming to university.'

And when they don't have time to share, where does not having time come from? (This question inquires into the perceived responsibility for time paucity.

'It isn't built into their workloads.'

Through the interview, with my attention on the purpose of getting usable data, the Coding in-the-moment is regularly interrogating codes like this with the questions in mind - 'How does this problem work?' so that it can be mitigated in the recommendations coming out of the study. Looking at the findings now, these questions revealed not only the initial inferences of the interviewees but also who is being held responsible for this being a problem in their eyes. I used the codes of the Drama Triangle (Karpman, 1968; 1973; 2019) to help model out where any blame was being directed.

Utilising the Drama Triangle (Karpman 1968) to code problems and attitudes

Developed in the late 1960's, Karpman's model illustrates patterns of attitude and behaviour that people can go to when they aren't getting what they want. I believe it is useful to discuss this model in relation to these findings because 25% of the interviewees were not getting what they want, 25% were managing to get what they want despite not having the support they'd like and 50% were reporting that they were managing to get what they want. I will illustrate the model briefly (Drama Triangle: Persecutor, Rescuer, Victim) and then discuss how this can be applied to those who perceive themselves to be aligned or misaligned to CD principles and process in HE.

When people aren't getting what they want they can look for the fault in others and take a Persecutor position. They believe that they, themselves are OK. They would behave in an OK way. Someone else isn't OK and that is why the situation isn't OK. It is someone else's fault, not theirs. They are in contempt of others not themselves and they don't believe they are required to act. I've emboldened the target for contempt.

Persecutor:

- The **students** these days want spoon feeding, **they** can't think for themselves.
- **They** (leader) just let the bickering go on.
- **They** (my team) are much more concerned about their workloads than the reality of doing any decent teaching.
- There is zero accountability in this **institution**, zero.
- The **university** doesn't give us a clear steer.

- Our **institutional leaders** are more interested in money from foreign students than in the quality of our courses.

Those who are not demonstrating Alignment may be blaming others for their inability. They may believe that their alignment is dependent on someone or something else changing.

A different move people can make when not getting what they want is to consider themselves at the mercy of things outside of their control and take a **Victim** position. I'm not OK or my situation is not OK, or my institution is not OK. I'm trying, but in this context it is not possible. They are in contempt of their own situation and don't feel able to enact change. I've emboldened the phrases that indicate to me the speaker holds themselves in contempt, that it is them that isn't OK.

Victim:

- **I tried** to set it up and no-one really signed up for it. **I really want it to happen**, but no-one's buying it.
- **I tried giving** a colleague feedback and others didn't take what I was saying seriously. (This sentence was said with a victim stance but could also be taken as persecution of the others.)
- The problem is **it's** quite a big job to write a new module and even more of a big job when it's written, to write all the new materials that go with it. And when **you've** been in the place a few years **you** don't really welcome that very much. **It's** just too much work.
- **We** don't do as much of this as I would like, but then **this** is a **post 92 institution** as opposed to a pre 92. (Victim with a bit of persecutor)

Those people who don't demonstrate alignment and share problems from a Victim position, may consider that they are personally or institutionally unable to instigate change.

A third way that people can seem to be active at the same time acting as though they don't have choice is when people take the role of Rescuer. That is either to persecute someone; 'They aren't OK so I have to'. Or to come from a victim position and say, 'I'm not OK, or my situation isn't OK therefore I have to...' This person is Rescuing the situation because they believe they have no choice or that the other person/department needs that help. You can identify a Rescuing position as being precontemplation and contemplation because the actions they do don't actually get them what they want in the end. They still end up moving from an active position to an unhappy one because they will end up persecuting or feeling like a victim later on or even at the time.

- *Usually there's **one or two or three people** that tend to **put the effort in** [to CD] (Rescuing CD but persecuting colleagues and feeling like a victim.)*
- *Sometimes there's quite a bit of post-op rationalisations and **crowbarring things in**. [to the CD] (Rescuing the CD process by making up why the different bits have to go together instead of having done the diligence through the process. Persecuting their own process.)*
- *The unhappy member of staff wrote himself out of his own modules and these **ended up being written** by the course leader. (Course leader rescues their course by writing out someone else's work and rescues the staff member by covering his responsibility.)*
- *So **we're now sort of having to** pick up and try and put in an early module board actually so that we can get*

the uplift ratified and communicate that to the students. (Having to work really hard to rescue the students' marks from a mistake within the institutional machinations. Persecuting institutional processes.)

- *CD should be a group process but generally some **idiot like me ends up** going off and doing the bulk of it myself. (Rescuer position from a victim standpoint, probably has a bit of persecution for the rest of the group.)*
- In these situations someone in the interaction is doing something that is either outside of their duties or is something they don't really agree with in order to put right something that's going wrong.

Drama & Contempt

When people are behaving incongruently, they may hold someone or something in contempt and believe this is responsible for the problem which maintains the situation. This is indicated in Drama statements. Prior to conducting this research, I wrote a book called 'From Contempt to Curiosity' (Walker, 2014) which explores how to shift attention from Drama to Action. I did not, however, start this research with these concepts in mind. I meticulously interviewed the participants and coded their words and gestures to uncover what was required within a good CD process, in their opinion. It wasn't until after the focussed coding session that I saw the pattern of drama and contempt and this theoretical interpretation earned its place in the findings (Glaser, 1978).

Applying the CLI questions during the interviews is a way of unpacking these positions of Drama from the interviewee's point of view. The interviewer is using the logic of the statements in the interview, of who is OK and who's not OK in those statements. The CL interviewer can unpack drama in

a statement from an 'I'm OK, You're OK' position (Ernst 1971, Harris 1976).

Persecutor	Victim	Rescuer
I'm OK, you're not OK , they're not OK, someone else needs to change.	I'm not OK , something needs to change but I'm a victim of circumstances.	Something else is not OK so therefore I have to... I have no choice about my actions. This makes me not OK .

Table 13: Relating the Drama Triangle to 'I'm OK, You're OK'

This ability to unpack, to work backwards and to interrogate the logic of the statements is one that is trained into CL Modelling and carried over into CLI. This protocol from my CLI practice is also able to reveal extra information about the speaker and their attitude towards those around them, the task and the institution. This part of CLI and coding in the moment enables the researcher to forensically look at who the speaker believes needs to change or how they need to change.

All these Drama positions seem to indicate misalignment. If the speaker talks in terms of something or someone being fundamentally not OK in their world of work they then seem to be in a victim position to change and to remain unable to move past the contemplation stage of the cycle. They lack any agency to change what is happening around them and their take on where responsibility for change lies means that they are not motivated to engage in the change process themselves. It is not clear whether the lack of alignment precedes these attitudes or whether the attitudes create a lack of alignment.

What Drama statements are used by those who are happy with CD in their team or institution?

The finding was that those programme teams that state that they are following the espoused CD principles and the espoused CD process do not use Drama statements at all.

They spoke in terms of Resources and Actions which do not contain any statements that match with this model. They clearly do have outcomes that they desire and they have clearly faced problems but they talk of them in relation to what they are going to do to address or mitigate them.

∄ Because we want X we do Y.

∄ Because X is important we do Y.

I.e.

∄ *We want to ensure synthesis from the start so our assessments are designed to synthesise across modules as well as across levels.*

∄ *We looked at the skills we wanted our end product to have and how to weave those skills into the other areas of knowledge.*

People making these statements, in this study, were happy with their CD. They seemed, despite having similar circumstances, to have a different attitude or belief that they could do something about it and that it was their job/duty to do something about it.

In relation to this specific phenomenon, those who use drama statements do not seem to display alignment and those who display alignment don't use drama statements. As Nelson (2015) points out in relation to drama positions and health, those taking drama positions are rarely taking responsibility for their own behaviour or for ensuring that they take the steps necessary to do what they need to do.

When we are in drama, holding ourselves, others or our situation in contempt, we may not recognise that we are part of a pattern. This may require skilled feedback or a change in culture. Indeed, in one of the teams at University 4, the original interview was profoundly negative about CD, their programme leader and their teammates. The same interviewee, 18 months later, was completely positive about all aspects of CD as a change of leadership as well as the adoption of the institutional design for CD had dramatically changed the CD process and CD principles being followed in their team. This indicates that an individual may lose a sense of agency around alignment and become passive if they don't feel inspired to be capable of change. Conversely, when external conditions change the alignment that person feels and behaves about CD can change dramatically.

Appendix V: Verbatim transcript: repeating back during Clean Language Interviewing

An example of repeating back, fairly early on in an interview with a programme team member.

I: So if you think about designing the curriculum. CD is like what? (Starting Question)

R: I think that was one of things that *Sandra* put in the email and I thought, "Oh, what is it like?" And I find a metaphor, you know, but then I thought sometimes it feels like it's, like, a blind person going into a dark room trying to figure things out, where you start. And for me it's starting at the end, so the curriculum is the end and it's a framework that tries to hold everything together, but at the same time allows you flexibility so...

I: Okay so, let me just check, so it's like a blind person going into a dark room.

(Repeating the autogenic metaphor.)

R: Yeah. You don't know where you're starting from and you don't know where you're going to end with it.

I: And the curriculum is the end.

(Identifying where curriculum is in the CD process)

R: It's...the curriculum for me is the end. It's the end result of a very long process in a way that, it feels that this is a point that you never arrive at because it's supposed to be the end but it's ever evolving, and a really good CD will have built in the flexibility to ... respond to changes.

I: it's ever evolving.

(Repeating a keyword, or to use the rock climbing metaphor, tapping in a pin with the anticipation that I may come back to this word later.)

R: It is ever evolving.

I: It's got flexibility...

R: flexibility.

I: built into it to respond to changes.

R: Yeah.

I: It's ever evolving and...the curriculum's the end and you never get there.

R: That's it.

(Note their concurrence that this is correct so far and they go on to add to it.)

And for me it's...in our programme, especially when we started, because we started at the end, so what do we want our students to look like at the end when they finish the degree? What do we want them to get out of it? What do we want them to learn? What do we want them to know? What skills do we want them to have? And we started from that point and we started with industry insights

I: You started with industry...you started at the end.

(These repeating back, at the beginning, are partly to help me as an interviewer make sense of the rich text and start creating the visual spatial schema as well as to check with the interviewee that I've heard and understood what they've said correctly.)

R: Yeah. How do we want our students to look like when they finish the full programme?.

I: And you went for industry...

R: We went for industry. We talked to alumni. We looked at best practices in terms of designing curriculum within our subject field, so we went into all those processes.

I: So when you say you looked at it, what did you actually do?

(Moving from Inference to ask about evidence)

R: We benchmarked. We did research. We had industry panels. We had student panels, and we sat down and we talked to them and we listened. And we were saying to industry, what skills do you want our graduates to have so you give them jobs?

I: How many of you did that?

(Further specifying the behaviours. Whole team? One person?
To more accurately crate a schematic of their process.)

R: So I think it was a couple of panels during the process. So
we had two or three panels in terms of industry forums and
at one of those, I mean, I've been...actually I participated
in two CD, re-designs, particularly with other Universities
and the approach for both of them was quite similar in that
regard. But it was very industry led, industry oriented.

Appendix VI: Clean Language Interview Process as used in this study

This is written from the first-person perspective as it is not a generalised model for CLI and parts are likely to be my idiosyncratic way of doing things

Explanatory Metaphor Model for CLI

When I am engaged in CLI, I am like an agile rock climber who is tethered to the top of a cliff face by a clear pin and I am at the bottom. The rock face is the data I'm collecting and the purpose for the interviews is what I am tethered to - i.e. the purpose determines the direction in which I am climbing and the only direction in which I can climb safely.

The purpose - including how I want to use the data following the research - helps to shape my starting point, the first question I ask my interviewees. As information is shared, I can begin to see and feel the shape of the specific terrain belonging to an individual interviewee all the while climbing only within the terrain of my purpose.

It is crucial to align the purpose, the interview frame and the starting question. This tethers my attention and allows me to tether the interviewee's attention. With it being a CL interview, I can only work with the data that is emerging and nothing else. In fact, every question needs to be adjacent to what has just been said, to something said earlier in the interview or to the purpose.

Develop a neutral 'Clean' state for interviewing

A good state of mind is important in CLI for the interviewer to be able to pay attention to many details in the interviewee's words and gestures and to build a model of the

interviewee's experience. My personal metaphor for my state is that of a round-bottomed Russian Doll that is weighted to always stay upright. Well-balanced, alert and calm and with a physical awareness of when I am too interested or not interested enough in an aspect of the interviewee's data.

Tethering

The CL interviewer tethers their attention to the project purpose, the frame that is given to participants and the starting question.

Using the purpose for this interview as a tether

Prior to embarking on an interview, the overall purpose for the interviews and how the data will be used need to be clear. The interview process and the specific interview method should be congruent with the purpose.

In this study, the purpose was to uncover the current mental models of those involved in CD with an idea that uncovering their thinking might enhance the practice of those embarking on CD in the future. With this in mind, during the interview process I was constantly asking myself, 'Do I know enough about what this person has said to know what I can 'do' with the information?'

Framing the Interview

According to this 'tethered to a rock face' model, the way I framed an interview also belongs to the data-set; it is part of what the interviewee was responding to and so it has shaped the 'rock face' that they presumably were scanning for experience to share with me. My framing this included:

The information I sent to interviewees by email in advance, which included the purpose for the interview, the reasons

behind the research and how their data would be used (see Appendix I)

What I said to the interviewee just before I asked the starting question, such as, is there anything you'd like to know before we begin and then whatever the content of those answers were. In this study the starting question was 'Curriculum design, for you, is like what?'

These frames were instrumental in engaging the participants and in training their attention to where I wanted it to be.

Starting Question

Having got clear about my purpose and what the information would be used for, and having framed the interview to the participants, it was important that the starting question was aligned with these. When a researcher chooses what aspect of an interviewee's experience to explore, the initial question can make all the difference as it sets the direction of the first part, if not all, of the interview. For example, in this piece of research, if I had been interested in uncovering people's knowledge about CD with a purpose of uncovering what is known about the theory, I could have asked, 'What is curriculum design?' Or 'What do you know about curriculum design?' This would have trained participants' attention to the concept of CD. However, what I was interested in was their model for the design process as a whole. I needed a starting question that would elicit an overall model and so I asked them for a self-generated (autogenic) metaphor. I asked, 'Curriculum design, for you, is like what?' I was asking for a present continuous, embodied experience of CD. I wanted them to consider the overall process and to give me a metaphor that would encapsulate the entire process. I didn't always get a metaphor, but I did always get their model for the overall process.

When I used this starter question, I got very little theory in the answers I received; almost 100% was about their personal experience.

The only variations were when I was asked to clarify what part of the process I was after.

'I think I don't follow the question. The process of designing a curriculum? ... or how I see a curriculum developing?' (Programme Leader, Science)

It is impossible to open an interview with a classically clean question (see list below) because the interviewee has yet to provide any content and it is the interviewer's role to set the direction of the interview based on the purpose and frame of the research. My aim was to keep the follow-up questions as free from content as possible so as not to sway the answers from the interviewees.

The clean questions developed by Grove (Grove and Panzer, 1989) accept and extend any of a person's salient words or gestures (Walker, 2014). There is subset of CL called 'classically clean questions' that are at the heart of CLI. The interviewer takes an interviewee's word or a phrase and incorporates it into any of these classically clean questions:

- What kind of...
- Is there anything else about ...
- Where/whereabouts is ...
- Where does ... come from
- What happens just before ...
- What happens after ...
- What happens next
- That's like what?

In addition to the classically clean questions, the options available to the interviewer can be extended by a range of contextually clean questions. There are two types. One type of question references the research topic with a minimum of added assumptions; the other type of non-leading question is congruent with the logic and context of the interviewee's descriptions. Both types of question aim to expand on the data already provided. These questions should be asked purposively in service of developing an understanding of the interviewee's experience in relation to the overall purpose for the research.

Parcelling out

The term 'parcelling out' was initially shared by Grove (Grove and Panzer, 1989) as a technique for trainee CL therapists to understand and develop clients' metaphor landscapes. It was his play on the word 'parsing' which means breaking down a sentence into its component parts (nouns, verbs, adverbs etc.) so its meaning can be understood, while 'parcelling' is about treating the parts of the sentence almost like objects. When someone is parsing, they are looking for the structure of a sentence whereas when they're parcelling, they're treating the elements of the sentence like parcels: turning the sentence into a visual-spatial schema or model which is as close as possible to the client's first-person perspective.

Using in vivo codes during the interviews

As noted in Chapter 4, during this study it became clear to me how much I was coding during the interviews: categorising and building structure and looking for patterns and relationships. I was using the actual words spoken, known as in vivo codes, a term used in a form of qualitative data analysis that places emphasis on the actual spoken words of the participants (Neuman, 2003).

For example, one interviewee said:

*'I think it's the **mapping out** of the **milestones** on that **journey** isn't it? **Rather than** the complete ... **the complete journey** and **every step** should be **taken**, but I think we have **left enough space for interpretation** by the **students** given the **diverse range** of students that have come to us in terms of **global outlook** or in terms of **pathways**, or **initial academic achievement**.'*

As I became aware that I was using in vivo codes during my interviews, I also realised I was using Grove's parcelling out technique in all my interviews. It is a key function of the way I conduct interviews. In the above example, I imagined the in vivo codes as being separate parcels (see Figure 10).



Figure 12: In vivo codes as parcels

As I applied this parcelling process, along with in vivo coding, I was asking myself, 'How does this work?'

The creation of visual/spatial schema with those in vivo parcels

The next step in this process was to turn the in vivo parcels into a visual-spatial schema demonstrating the interviewee's process of 'mapping out' (see Figure 11).

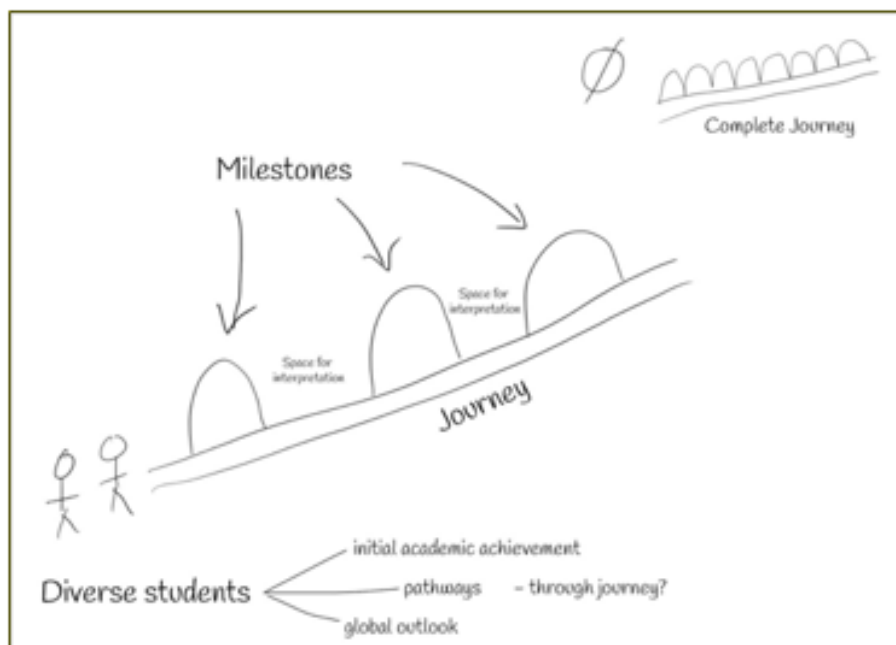


Figure 13: Turning in vivo codes into visual schema

Summary of visual spatial map in words:

This interviewee's *metaphor* for CD is that of a **journey**. (Although the interviewee did not explicitly say 'my metaphor for the curriculum is that of a journey', it is reasonable to assume this, as it was their response to the first question I asked, 'Curriculum design, for you, is like what?' - which is an invitation to metaphor.)

During CD there is an *activity* called **mapping out**.

Within the metaphor the *things* that they map are **milestones**. (The interviewee made three downward gestures as she spoke about mapping out milestones so I inferred there were three, knowing I would ask how many later.)

There is an *undesired activity* called **mapping out every step of the complete journey**. (The words 'rather than' are what indicates that this is undesired.)

There is a *desirable activity* called **leaving enough space** in the mapping out **for interpretation**. (This is the other half of the comparison - rather than do X you should do Y.)

They leave this space given they have a **diverse range of students**.

The students are diverse in **global outlook** and **initial academic achievement**.

In terms of **pathways** - I wondered if this could mean they will have a diverse way of going through that journey but I didn't know that yet, hence the note and question mark on the diagram.

This level of analysis was happening as soon as the interviewee had spoken. Even though I was still engaged with the descriptive in vivo codes, I was forming the parcels and then the schema in my mind's eye. I was actively analysing how the different parts of the response related to one another and how they fitted together from the interviewee's perspective. I was using everything that the participant had told me to create my model of their mental model from their perspective.

From this added visual spatial layer of implicit structure, I was developing a schema of the experience that stayed grounded in the words of the interviewee and therefore close to their experience. I was also deciding which aspect was most salient given the research objective.

Using interviewees' gestures to aid parcelling out and creation of schema

I reflect the gestures back to the interviewee during the interview, in the same way, direction and speed as they were using them. I treated them the same way I might treat a word. As well as gestures, I followed the interviewee's lines of sight to help me to understand how they were organising their mental models. When the interviewee talked about the mapping out of milestones, this was accompanied by a gesture: she moved her right hand from her left shoulder out to her right

in front of her and marked out a couple of points along that line as she said the word 'milestones'. I interpreted this gesture as demonstrating the direction of that journey and I visualised a line in the area where the gesture was happening with marks representing milestones along that line. As another example, when a programme leader said 'The curriculum is a spiral' they indicated where the spiral was in relation to them and to the different aspects of CD.

While I was aware at the start of the research that referring to gestures and lines of sight are important for helping to engage interviewees with their own thinking, I realised during this study that paying attention to gestures is also important for building up a model on the fly. The gestures helped me to make sense of the in vivo codes in relation to one another and aided my parcelling out of the data. I was actively attending to gestures that demonstrated the spatial nature of the interviewees' mental models. I particularly noticed this when I had to interview by telephone and I couldn't use this visual aid.

Note-taking to aid parcelling out and creation of schema

The interviewer may keep sketches of the gestures and references in space alongside notes of what was said. Rather than keep notes which are verbal and written in the chronological order in which they appear, when I am conducting a CLI, I generally use A3 paper and create a sketch of their actions and behaviours in the middle of my paper while leaving plenty of room for writing notes. I started by making a stick figure for the interviewee and placing key words or sketches around the figure demonstrating how they were organising their thinking. Rather than longhand notes I wrote 'headings' of a sentence, making sure these were the interviewee's exact words so that when I used them back, it was easier for the interviewee to recognise them

and also so that they could hook directly back into the their experience as they were experiencing it. I keep different coloured pens in my pack; however during this study I tended to use one colour for data that they were positive about and red for problems or for aspects to be avoided or mitigated against. Note-taking in this way was helping me to create a 2D model, built answer by answer, of the interviewees' mental models as seen from their perspective. This aided me to code the data I had and to uncover gaps in the model that I could inquire into.

Tethering to the purpose and the data constrains the salience attributed to the parcelled out words

Salience tethers the interviewer to the purpose, to what has just been said and parcelled out within this current interview and to any categories or models that have emerged from earlier interviews.

To take another example from this study:

'Our discussions and our relationships are very good. I think we understand each other, and we all respect each other's opinions.' (Programme Team Social Science)

As usual, when I heard this sentence, I first parcelled it out so I could see the different elements as physicalised in vivo codes in relation to one another and what had gone before in this interview. In relation to models that had emerged from previous interviews, the in vivo code, 'relationships are very good', stood out as an important factor in good CD; it had been mentioned in over 90% of the interviews so far. So this stood out as something worth inquiring further into with some clean questions. I also recognised that the terms 'very good', 'understand' and 'respect' were vague and didn't describe behaviours that people would be able to emulate in order to achieve the

results they may want, so I needed to inquire further if I wanted to get data that would serve my purpose. I also recognised that this was the third time this interviewee had mentioned 'respect' as being a resource to their team or their CD and so this also stood out as salient to this individual and therefore worth further inquiry.

When I am tethered to top of the cliff face and data emerges that seems salient to me, it is like I put pins or pitons in places I'd like to come back to. Each piece of data that I receive is another step, either to understanding the rock face (the individual interviewee) or to taking me closer to the top of the cliff (the purpose for the interviews). Once I have a draft schema and notice which in vivo codes seem salient, I then have a series of content-free codes that help me to decide which question to ask. A content-free code is one which indicates the class of information that has been shared such as whether it is a piece of evidence and describes tangible behaviours or an inference which describes thoughts or beliefs.

Navigating

Returning to the rock climbing metaphor, an interviewee may start by giving an overview of the rock face, as in CD is the *'mapping out milestones on a journey'*, or CD is *'something that makes a positive experience for the student in terms of is it enjoyable, does it relate clinically and is it accessible'*, the former being metaphorical and the latter a more conceptual answer to the same question. They may begin by saying where they are rather than answering the question, as in, *'We had a curriculum re-design at the tail-end of last year, last academic year'*. They may describe an idealised, wished-for rock face, such as, *'In the ideal world, I think of it as creating a journey for students'*. Whatever their response - whether it is useful for the

interviewer's purpose or not - it is a 'way in' to their mental model and so it forms the first part of the map the interviewer will need to navigate by. The tools needed for this kind of navigation are somewhat different to usual. The interviewer needs to classify - or code - the information given (in relation to the purpose) and then to use this coding to help them to decide where to go next.

When the interviewee gives an overview, the interviewer can simply ask clean questions of their response, '*What kind of mapping out?*' or, with the more conceptual response, they may repeat back to support the interviewee to know where they are going and then ask a developing question such as, 'And that's positive in terms of it is enjoyable, relates clinically and is accessible, and what kind of enjoyable?' When an interviewee spoke about '*in the ideal world*', I inferred that this was not what was happening for them currently so I asked them some questions to find out more about their desired outcome and CD in '*the ideal world*' and will remember to shift their attention to a new rockface shortly, with a question like 'and when that's in the ideal world, what is it like here?' CL interviewers must do this repeatedly, gradually building the map of the terrain as they go.

Once the data is parcelled out and I know where I am and where the interviewee is then I can move my attention to navigating around the schema I've made.

Coding and interrogating those codes

As I reflected on how I was using the in vivo codes, I realised I was analysing them using a number of codes I was applying to the data. I already knew that there are some content-free codes that all CL interviewers use such as coding whether the information presented is an attribute or location or a process, and if it is a process, was it at the

beginning, middle or end? Another set of codes refer to whether something is a concept or a metaphor. The new finding was the extent to which I was using a relatively simple set of codes to give me great agility to decide what to inquire into and to move around the data and to expand areas that I anticipated had more to offer.

There is a long list of codes I could include here but for convenience I am listing those that seemed most pertinent and which I used most in this study:

- Evidence versus Inference
- Sequence: Antecedent and Consequence
- Orientation: Problem, Desired Outcome, Resource, Action

Content-free code: Evidence versus Inference

In order to ensure that I was meeting my purpose of finding data on how to enhance the practice of CD, I needed to know whether an *in vivo* code used by an interviewee was a concept/inference or whether it described something tangible or behavioural. If it was an inference, and I wanted to keep my model of what the interviewee means as closely tethered to their experience as possible, then I needed to use a clean question to inquire further into that code to uncover the behavioural meaning behind the inferential word. By asking for evidence, I can have a more accurate idea of what they're talking about.

For example, when an interviewee said, '*We meet regularly as a whole staff team*', I coded '*whole staff team*' as evidence. I can imagine that if this ended up as a category, someone else could interpret it accurately. However, I coded '*meet regularly*' as inference because without asking clarification questions I wouldn't know what the interviewee meant by '*regularly*'. They might mean once a term or once a week. This was important as I wouldn't want '*regular staff*'

meetings' as one of my core categories, only to find later that this means completely different things to different people. To enrich my data, I was able to ask specific questions to get the missing pieces of evidential information.

'And you meet regularly as a whole staff team. How often is 'regularly'?''

'Oh, every Friday morning 10-12 without fail.'

Conversely, if an interviewee was giving evidence without any inferences, this could potentially lead to me making incorrect inferences. For example, when an interviewee said, 'We've changed our grade for Programme Leader from an 8 to a 9', I coded this as evidence; I could look up exactly what this means but what I didn't know was why they were telling me this. I didn't know what this shift in scale meant to them in relation to CD. Therefore, I directed their attention towards the inference of their evidence:

'So when you've changed the grade from an 8 to a 9, what difference does this make?'

'It means that it's a valued job, a respected step in an academic career and it also means hours are assigned to someone to carry out this role. It gives them the clout to make things happen.'

Now I knew how come the interviewee thought this change was important and I could factor into my data the reasons the institution had created it.

Content free code: Sequence: Antecedent and Consequence

As well as coding for evidence and inference, I was also training attention on the antecedents or the consequences of an action, by asking questions such as, 'Where does that come from?' or 'What happens after that?' Or 'What is the

impact of this?' These codes and the questions that flowed from them allowed me to redirect attention in the interview without altering the data or adding in any assumptions.

To return to the earlier example...

'I think it's the mapping out of the milestones on that journey isn't it? Rather than the complete...the complete journey and every step should be taken, but I think we have left enough space for interpretation by the students given the diverse range of students that have come to us in terms of global outlook or in terms of pathways, or initial academic achievement.'

After parcelling out the in vivo codes and assessing the sentence for salience, I was able to enquire into the process of the activity of *mapping out* by asking for the antecedent:

'And what happens just before the mapping out of those milestones?'

And I could direct their attention to the consequences of leaving enough space:

'And when you have left enough space, then what happens?'

Content-free codes for orientation towards phenomena:
problem, desired outcome, resource, action

I wanted this research to enhance the practice of curricula design and therefore it was important for me to code what I was listening to according to whether it was something that was:

- **A problem:** something they had and didn't want.
- **A desired outcome:** something they wanted but didn't have.

- **A resource:** something they had and wanted to keep.
- **An action:** something they were doing in order to ensure they were getting what they wanted.

I was coding what was being said and then logically working out what else had to be true for what they had just said to make sense (Grove and Panzer, 1989). For example, when an interviewee said *'Obviously we should be meeting regularly but that's outside of my influence.'* I coded that there's a desired outcome of *'meeting regularly'* and a current problem of that being *'outside my influence'*. To find out more about what meeting regularly would get him and more about this desired outcome, I asked, 'And if you were meeting regularly, what would that give you?' I was also able to find out his perceived current reality, was actually happening, given he didn't have his desired outcome: 'And when you should be meeting regularly, and it's outside of your influence, what is happening instead?' To learn how the 'problem' could be mitigated I asked, 'And when you should be meeting regularly and that is outside of your influence, what would you like to have happen?'

These simple content-free codes were firstly informing me on a range of useful questions I could ask next to inquire into or to expand the in vivo codes. Secondly, they were supporting me to build up a model of the interviewee's experience directly from their words. All of the in vivo codes could then fit together to create a model of what was being shared and to support me to know what I could ask next to gather more information without adding in my own content.

The reason these content-free codes are so important to me as an interviewer is that they demonstrate gaps or areas where I can legitimately put my attention while still keeping my attention and the attention of the interviewee on the interviewee's own first-person experience.

For example, the codes of problem, desired outcome, resource and action allowed me to (1) learn an interviewee's classification of the information they were sharing:

- A. Something undesirable that was happening.
- B. Something desirable that wasn't happening.
- C. Something desirable that was happening.
- D. An action they were taking to ensure C.

... and then (2) to ask an appropriate clean question to learn about any of the other three categories. If something undesirable was happening (A) then what would they like to have happen? (B). If something desirable was happening (C) then what actions were being taken to ensure this? (D).

If an interviewee shared an inference, it was legitimate for me to ask about evidence. If they shared the start of a process, I could ask about the next step. If they shared a state of being, I could legitimately ask about the antecedent for this state. These codes give great facility in moving around the data set and finding areas that serve the purpose for the interviews, stay close to the interviewee's experience and allowing me to navigate in many directions depending on what I have decided is most salient at this point in the interview.

Table 6 demonstrates the in vivo codes and how I applied content free codes and how this allows the interviewer to make choices about where to inquire next.

<p>In vivo code: word or phrase</p>	<p>Possible Content-free Codes: Problem, Desired Outcome, Resource, Action Inference, Evidence Antecedent, Consequence Metaphor Process Behavioural, Concept</p>	<p>Interviewer action: Possible areas for further inquiry – the interviewer's questions ask for different classes of information from the interviewee</p>
<p><i>Staff don't turn up to group meetings</i></p>	<p>Problem Behavioural Non-specific</p>	<p>And <i>when they don't turn up to meetings...</i></p> <p>Evidence: Which meetings? How many staff don't turn up?</p> <p>Consequence: <i>Then what happens?</i></p> <p>Antecedent: <i>Where does the not turning up come from?</i></p> <p>Metaphor: <i>When staff don't turn up, that's like what?</i></p> <p>Inference: <i>What does it mean when they don't turn up?</i></p>

<p><i>Programme teams should be thinking at the whole course level</i></p>	<p>The word 'should' means it is coded as a Desired Outcome</p> <p>Concept</p> <p>Part of a process</p>	<p>Evidence: <i>What would let you know that programme teams were thinking at the whole course level?</i></p> <p><i>What would you see or hear?</i></p> <p>Clean Question to expand the in vivo code:</p> <p><i>What kind of thinking?</i></p> <p>Consequence: <i>what would that give you?</i></p> <p>Antecedent: <i>What needs to happen before they think at the whole course level?</i></p>
<p><i>We're a close-knit team</i></p>	<p>Resource</p> <p>Metaphor</p> <p>Inference</p>	<p>Clean Question to expand the in vivo code:</p> <p><i>What kind of close-knit?</i></p> <p>Antecedent: <i>Where does the close-knit come from?</i></p> <p>Consequence: <i>When you're close-knit what happens next?</i></p> <p>Evidence: <i>and when you're close-knit, what do you see or hear that lets you know you're close knit?</i></p>

Table 6: Multi-coding in the moment and how it supports the interviewer to code and analyse data during a live interview

Using adjacency to navigate around the interview data

The next concept underpinning my CLI practice was that of adjacency. This is the concept that allowed me to move nimbly around interview data, in order to inquire into areas that I had identified earlier as worthy of further inquiry.

By forming visual spatial models of the information and using content-free codes to clarify what kinds of information I had and what kinds of information were implied but not exposed yet, meant that I always had somewhere to go for my next question. Then, like the rock climber, I had the ability to move to any in vivo code and to expand any part of that information by asking a question that directed their attention to a category adjacent to the one already being shared.

Staying adjacent meant that all interview questions could stay close to the data shared. I could stay in one place and explore in more detail. I could move left or right or up or down. When I found something interesting that I knew I'd want to investigate in a short while, I would knock in a piton so I could easily come back to it later. I was building a coherent, consistent route between an interviewee's first-person experience and the purpose I'd pinned to the top of the rock face.

For example, when the interviewee said, *'It's the mapping out of milestones'*, I coded this statement as an action (something they were doing that they were happy with), a metaphor, and a process. Once these basic codes were established, then there were lots of ways I could respond. Like the rock climber, I could move in almost any direction. I could:

Ask a clean question simply to accept and extend the code: *'What kind of milestones?'* or *'Is there anything else about that mapping?'*

Train their attention to evidence-based clarification: *'How many milestones are there?'* or *'When does this mapping out happen?'*

Ask for the source of this process: 'Where does the mapping out come from?'

Ask for the consequence of this part of the process: 'And it's the mapping out of the milestones, what happens next?'

Each of these moves accepts and extends (Walker, 2014) the information available, building up the model incrementally whilst minimally adding the interviewer's bias or assumptions.

Detect and utilise autogenic metaphors and their entailments

A lot of Grove's work in CL was about eliciting autogenic, naturally occurring, metaphors in people's language and developing these for therapeutic purposes. In interviews, these naturally occurring metaphors help the interviewer build a model of the interviewee's experience. For example, when one of the interviewees in this study said, '*It's really a set of interchangeable building blocks and there needs to be more of a flow*', the metaphors in the statement carry more information than would be implied by a simple coding of the words. Metaphors come with an inherent internal structure, logic and entailments that provide a rich description of the way the interviewee has made sense of their experience. These additional implications help the interviewer to find out more about what is happening in the interviewee's inner world and how they are constructing their mental models. If the interviewee uses a metaphor such as 'It's like herding cats.' it says a lot about the degree of control that the herder has as well as the attitude of the cat (Programme Team member) to anyone trying to herd it. These metaphors also help the interviewer to interpret gestures. For example, if the interviewee describes their experience as 'a journey' they may at the same time use a

sweep of a hand. The interviewer can utilise the logic of the journey metaphor to identify the direction, the beginning and the end of the journey. For example, they can use this logic when enquiring about the beginning of the journey, by pointing to the start of the hand sweep. Metaphors provide clues to attitude as well as to structure.

Modelling

By studying the language of the participants, the CL interviewer aims to allow the researcher to build a representation of the mental models they hold that inform social action (Carley and Palmquist, 1992). Through using clean questions, the interviewer can start 'creating a model of the inner world of their participant as their participant describes it, without overlaying their own model of the world' (Cairns-Lee, 2017, p.125). This part of the process ties very closely back to the purpose for the interviews. The usefulness of a model depends on what is the intended use for the data uncovered through the interviews.

During each interview, each of the stages, tethering, parcelling out and navigating are in service of building a model of the participant's concerns with and experience of CD. I was building a visual, spatial model of the interviewee's experience from their perspective and was tracking this model in space and also through note taking.

Through the reflection on these skills of CLI, other aspects of the process I have described in the methodology became clearer. Specifically, it became clear why repeating back and pausing are so important in CLI. Words and phrases are being coded sometimes in multiple ways and repeating back relieved some of my cognitive load. It allowed time for me to hear the words themselves again, to attend to the visual spatial schema and decide which question would be most salient and would best serve the purpose. Repeating back a

number of keywords enabled precision coding so I could choose exactly which piece of information to ask about and expand upon. I needed to repeat back key words to the interviewee because I was building a cogent model of that interviewee's experience from that interviewee's perspective. Every so often I needed to check with the interviewee that I was building this in an accurate way. At the beginning of an interview I was actively engaging with the participant to understand what they were saying and how the elements fitted together. Through observations and note-taking, I was attempting, during the interview, to develop a second person map of a first person experience (Nehyba and Lawley, 2020) orientating the map in relation to the gestures used by the interviewee. Before closing an interview, the interviewer may recap their draft model of the interviewee's experience or what seems to be important as a way of checking whether anything has been missed or the interviewer is misunderstanding the interviewee's meaning. Not only will this enable greater refinement of the ideas being presented (Tosey, Lawley and Meese, 2014), it is one way for the interviewer to build confidence that the data is representative of the interviewee's authentic experience (Linder-Pelz and Lawley, 2015).