Academic Paper

Trust-based mentoring towards a new knowledge state as a change cycle: Exploring key interpersonal interactions

Stephen Atkins (University of Waikato)

Abstract

Within the New Zealand Education sector, the Specialist Classroom Teacher Position is a mentoring position focusing on developing novice teachers. Mentoring occurs in pairs that are bounded by factors conducive to the development of trust relationships and focused on facilitating mentee knowledge generativity. Generativity, as increased mentee capacity, represents a change cycle. Trust, support and challenge were considered key phenomena underpinning change. Three mentoring dyads were studied from a subjectivist perspective. Findings suggested trust was the basis of the relationships. Mentee self-confidence, rather than support, emerged as the factor that is viewed as sustaining engagement in the change process.

Introduction

The Specialist Classroom Teacher position is a unique mentoring position specialising in the development of classroom teaching practice in New Zealand Secondary, and Area Schools, the latter taking students from New Entrant to Secondary. The position is unique because those appointed accept this as a career choice in itself, with a clear focus on mentoring in teaching practice. Appointed Specialist Classroom Teachers (SCTs) must relinquish other management positions (with some exceptions) so are not part of the school leadership. This is a deliberate move to position each SCT alongside potential mentees, mediating possible power imbalances. This sets a context that supports a collaborative mentoring approach for mentees who in the research were called Provisionally Registered Teachers, recently renamed Provisionally Certificated Teachers (PCTs) which is the term used in this paper. PCTs are newly qualified teachers required to undergo two years supervision prior to gaining full certification status, though SCT-mentoring can continue beyond the two years by mutual agreement. One suggested focus of the role is supporting other

teachers to expand their "knowledge, skills and attributes" (MOE, PPTA, & NZSTA, 2007, p.2) so that growth should be apparent.

SCT mentoring for professional growth

Piloted in 2006 as an initiative of its three stakeholders, the New Zealand Ministry of Education (MOE), the Post Primary Teachers Association (PPTA) and the New Zealand School Trustees Association (NZSTA), and continuing to the present, the SCT position has the specific role of contributing to "the enhancement of such quality teaching practices in all schools by providing support for professional growth of other teachers in the school" (MOE et al., 2007, p. 2). Support is therefore seen as a primary function of SCTs necessary for mentee growth.

In developing an SCT-mentee relationship the three stakeholders noted in its guidelines that the relationship must be "high trust and confidential" (MOE et al., 2007, p. 3). The confidentiality aspect further cements the collaborative nature of the relationship, since any related documentation can only be used at the discretion of the mentee, removing a potential barrier to trust development. In the requirement for high trust, removal from leadership roles through relinquishment of management positions by the mentor, effectively removes any external control a leadership position may hold over the mentee, and external control is a feature of co-operation (Mayer, Davis, & Schoorman, 1995) rather than trust. This provides a context for the establishment of trust as a basis of the SCT-mentee relationship.

The study upon which this paper is based, sought firstly to gain evidence of support and trust, and any relationship between these two concepts apparent within SCT-mentee relationships that resulted in the professional growth of the mentee. Professional growth is viewed as the generativity of new knowledge for the mentee. Knowledge is defined as an increase in capacity. Increasing capacity is taken as growth in double loop-learning (Argyris & Schön, 1996), as opposed to single-loop learning. Single-loop learning is viewed as performing tasks as a matter of routine, whereas double-loop learning involves challenging rote responses through reflective discourse that leads to the learner questioning his/her own "insights, actions, and personal theory to create and gain knowledge" (Yeo, 2006 p. 411). An increase in capacity through double-loop learning is accepted as evidence that professional growth has occurred, and growth, as an 'expansion of mentee knowledge' (MOE et al., 2007) is a specific intention of the SCT role.

In addition, challenge was investigated as a stimulus for change and therefore growth. Without challenge a mentee may feel supported, and trust may exist, but without a stimulus for change, a state of stasis persists (Daloz, 1999; Tang, 2003). The New Zealand Teachers Council in its induction and mentoring guidelines, which although the guidelines encompass wider mentoring initiatives including certification still provide guidance to SCTs, notes that mentors are valued if they act as change agents. One function of mentoring in these guidelines is stated as "Facilitating learning conversations with the Provisionally Registered Teacher that challenge and support them" (NZTC, 2009, p. 4). Challenge should be evident within SCT-PCT relationships if a change process resulting in an increase in capacity is to occur, and the challenge may be mentor or mentee initiated.

A mentoring generative effect for change

Mentee knowledge generativity represents growth from an origin to a new knowledge state, the process representing a change cycle. How support, trust and challenge underpin the mentoring relationship and generativity, form the basis of this paper. The view taken from the outset is that trust is the primary concept upon which the relationship is based. Trust in a collaborative mentoring relationship can be considered 'particularised', 'interpersonal' trust. Particularised is taken to mean an intimate trust in people close to the trustor as distinct from generalized trust which is explained as an abstract trust of people in general (Mayer et al., 1995), and interpersonal trust refers to trust

towards other individuals rather than to an organisation (Freitag & Traunmüller, 2009). How trust, support and challenge are evident and interplay in the generativity process is now examined through the literature.

Literature review

This review begins by considering the approach to mentoring that informs the reader on the mentoring context. It then examines the literature on each of the concepts of trust (incorporating risk-taking), support, and challenge, and considers possible interactions between these concepts in generativity for the mentee. Bear in mind, such mentoring programmes, supported by its stakeholders, had suggested strategies of "Supporting and assisting teachers to expand their knowledge, skills and attributes to increase teaching effectiveness" (MOE et al., 2007, p. 2).

Mentoring – a collaborative, reflective approach

The particularised, interpersonal mentoring relationships studied involved mentoring pairs. While it is accepted the SCT-mentor is the more experienced member of the pair, attempts to position mentor and mentee alongside each other, go beyond simply removing the SCT-mentor from management positions. The confidential nature of the relationship removes the mentoring process from formal reviews associated with teacher certification or appraisal processes, and this too sets a context for the development of collaborative relationships.

Further, there was commonality in mentoring approach between mentoring pairs, consistent with an intent of the SCT-mentor role. As stated this intent is to encourage "collaborative, reflective and shared practice" (MOE et al., p. 2), thereby facilitating mentee growth. Such a 'facilitative' understanding of mentoring is confirmed in studies whereby mentees state support for professional development as "assisted by observation, reflection and guidance from the mentor" (Kemmis, Heikkinen, Fransson, Aspfors, & Edwards-Groves, 2014, p. 159). Consistent with achievement theory, that asserts activities must be ones which the participant wishes to undertake (Hollyforde & Whiddett, 2002, as cited in Smith, 2005) and with the notion that mentoring goals and the process must be owned by the learner (Megginson & Clutterbuck, 2005) each mentee did set the goals or took initiatives of their own volition. In addition, each mentor positioned himself/herself, as a facilitator of mentee growth through reflective dialogue that was dialectic in nature. As such a collaborative, reflective approach to mentoring was adopted for each mentoring pair, with the mentee being the locus of control.

Trust

A distinguishing feature of trust is that it contains the notion of vulnerability (Mayer et al., 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). Trust is seen as a willingness to being vulnerable or to the taking of a risk (Mayer et al. 1995), but is not the action of taking the risk. Vulnerability implies something valuable is potentially lost if the risk is taken. Likewise there must be the potential for positive outcomes. Trust when defined as a "psychological state comprising the intention to accept vulnerability based upon the positive expectations of the intentions or behaviour of another (Rousseau et al., 1998, p. 395) gives credence to a social exchange view of trust (Pratt & Dirks, 2007). This social exchange view is described as 'competing' positive elements, as anticipation of positive outcomes, and negative elements, as being vulnerable to the possibility of hurt (Pratt & Dirks, 2007). Such a view gains support from other researchers who have conducted quantitative studies using similar views of trust (Brockner, Siegel, Daly, Tyler, & Martin, 1997; Bouquillon, Sosik, & Lee, 2005).

Relationships other than trust relationships, may contain both vulnerability and the potential for benefits, and therefore need to be distinguished from trust. Co-operation has already been

mentioned as one of these. It differs from trust in that it results from external control of a sub-ordinate by a superior, or a lack of alternative actions being available to a sub-ordinate, the result being minimising of the willingness to be vulnerable (Mayer et al., 1995). The sub-ordinate co-operates with the superior without really trusting that person.

Confidence is a second similar concept. While confidence has been used to describe trust (Cook & Wall, as cited in Mayer et al., 1995), it is the element of choice that distinguishes the two. Put simply, if a trustor makes a choice to trust a trustee, then it is a trust situation if there are potential risks. If the trustor asks the trustee to do something out of habit, without considering they have a choice or not, then it is confidence because they have not considered the risk (Luhmann, as cited in Mayer et al., 1995). Volitional acceptance of vulnerability is therefore a key to trust (Brockner et al., 1997; Bouquillon et al., 2005).

Various authors have examined the constructs of trust and have put forward a range of these such as honesty and loyalty (Larzelere & Huston, 1980, as cited in Mayer et al., 1995). Mayer and colleagues (1995) argue a case for three factors that explain a major part of trustworthiness constructs. These three factors are ability, benevolence and integrity. Benevolence for instance, pertains to "the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive" (Mayer et al., 1995, p.718) who along with other authors (Solomon, 1960; Strickland, 1958, as cited in Mayer et al., 1995) supported benevolence as a trust factor. The three factors of ability, benevolence and integrity served as a basis for the identification of social exchange trust in this study. Relevant extensions to the work of Mayer and colleagues include the addition of 'institution-based' trust factors, including a 'structural assurance' belief which pertains to safety nets within the institution's structures, and a 'situational normality' belief that supposes things as they occur are normal (McKnight, Cummings & Chervany, 1998). Within SCT-mentoring, confidentiality is considered a structural assurance belief, and the mentoring of a PCT by an SCT is considered a situational normality belief because it is expected. Both beliefs assist in social exchange trust development, so that the parameters surrounding the SCT role are conducive to trust development.

A relationship-based commitment view of trust (Pratt & Dirks, 2007) goes beyond the social exchange view of trust in that rather than viewing positive and negative elements of trust as 'competing' elements, there is a focus on the binding together of these elements within the interpersonal relationship, so that emphasis shifts from a 'hedonistic calculus' of net positive or negative outcomes, towards a pattern of committed behaviour. Pratt and Dirks (2007) claim this may give rise to an escalation of such committed behaviour, lessening the ambivalence between negative and positive elements of social exchange trust, targeting a commitment to the interpersonal relationship, thereby lessening the risk of dissolution of the trust relationship. Relationship-based commitment trust is seen as a deeper level of trust than a social exchange view.

A 'deepest form of trust' has been posited that includes 'identification' and 'reciprocity'. This deepest form of trust has been defined as involving "an emotional connection or identification between parties, and is based on reciprocity, shared values, and congruent self-images and beliefs" (Bouquillon et al., 2005, p. 243). Similarly, a deepest trust going beyond a calculative self-interest to personal bonds of empathy or identification, becoming more peer like, has been described by others (Kochan & Trimble, 2000; Nooteboom, 2006). Both views are considered 'deepest trust' within this study, though the later view opens the possibility of acceptance of different value systems, so it may go yet deeper than the former view.

The three views of trust, social exchange, relationship-based commitment, and deepest trust are the views of trust used for the purposes of identifying trust, and the depth to which trust has developed within the relationships studied.

Support

It is well established that support is a major function of any mentoring relationship (Daloz, 1999; Awaya McEwan, Linsky, Lum, Wakukawa, 2003; O'Brien & Christie, 2005; Rajuan, Beijaard, & Verloop, 2008; Ghosh, 2012). In a survey of beginning teachers across New Zealand schools (393 respondents) emotional support was identified as "the most important mentoring activity" (Cameron, Dingle & Brooking, 2007, p.105). Such emotional support engenders feelings of safety (Tang, 2003) and safety can be viewed as a stabilising force (Daloz, 1999; Smith 2005). Affirmation is an example of emotional support. If it is of a current practice it is viewed as stabilising, whereas if it is directed at changes, the view is it supports growth.

Support can also occur when a mentor offers expert knowledge to a mentee. This is viewed as cognitive or academic support (Rajuan et al., 2008). Similarly support may be offered as 'practical knowledge' which has been referred to as application support within real life situations. Whereas expert knowledge may include knowledge of the curriculum to be taught, how the teaching of the curriculum is planned for, and delivered in the classroom, are examples of application support. Decision making in immediate classroom problems (Awaya et al., 2003) and instructional related (O'Brien & Christie, 2005) are examples of practical support. The offering of expert knowledge and practical knowledge as cognitive support and application support respectively, are included as statements of support of the mentee if made by the mentor.

Support is seen as existing as 'support fields' between mentor and mentee, and it may affect the trust relationship. Emotional support, and support through the offering of expert knowledge and practical knowledge are the three support fields readily recognised. Support offered by the mentor towards the mentee seems the most relevant to the professional growth of the mentee, notwithstanding, there may be reciprocity of support that impacts on other relational concepts.

Inter-relationship between trust and support

Conflicting statements in the literature suggest a difference in the way the relationship between trust and support is viewed. Writing about affirmation of what is being done well, some authors suggest support will result in trust of the supervisor (McNally & Martin, 1998; Montecinos, Cnuddle, Ow, Solis, Suzuki, Riveros, 2002). Contrasting with this is the view adopted in this research that, particularly in collaborative relationships, the basis of support rests within the trust relationship. This view is shared by (Awaya et al., 2003) who state "protégé and mentor enter into an implicit agreement in which support is built on mutual trust" (p. 55), and O'Brien and Christie (2005) who report probationers suggesting "that supporters should be someone the probationer can trust" (p. 194).

According to some authors, confirmation of a cause-and-effect relationship between trust and support in social exchange trust situations, through quantitative studies using empirical evidence, has proven difficult (Pratt & Dirks, 2007). While Brockner and colleagues (1997) found some evidence that high trust and support built on this trust was more likely to result in pursuing riskier outcomes than low trust and low support situations, suggesting a cause and effect relationship.

Challenge and risk taking

Challenge of the mentee is seen by many authors as pivotal to the learning process and a function of the mentor (Daloz, 1999; Tang, 2003; Megginson & Clutterbuck, 2005; Rajuan et al., 2008; Ghosh, 2012). Likewise challenge is stated as the second role of a mentor of PCTs (NZTC, 2009). Viewing challenge as a mentor's function Megginson and Clutterbuck (2005) refer to taking the mentee into the 'zone of discomfit' to create challenge and note the best learning often takes place at the edge of what is known. Their term 'zone of discomfit' has similarities to the term cognitive dissonance (Daloz, 1999; Tang, 2003) about which it is noted challenge creates a gap (dissonance)

in the learner calling out for closure, and learning occurs in gap closure (Daloz, 1999). Thus challenge may lead to learning if it is acted on, so it acts as a 'trigger to learning' (McNally & Martin, 1998; Rajuan et al., 2008). Similarly if a mentee disagrees with a mentor's stances such as behaviours they may observe in the mentor, these are also seen as "triggers of challenge that contain the potential for initiating a learning process" (Rajuan et al., 2008, p. 281). Such disagreement may be viewed as challenge by the mentor because it may have taken the mentee into the 'zone of discomfit'. It could also be argued that a collaborative relationship may facilitate mentee self-challenge, including taking "increasing responsibility for setting their own targets" (McNally & Martin, 1998, p. 45), so that the mentee remains the locus of control in the change process, consistent with the view the mentee must set the goals and own the process (Megginson & Clutterbuck, 2005), and have agency for their own learning (NZTC, 2009).

If challenge is acted on within a trust relationship, the risk-taking behaviours that ensue equate to 'risk-in-situation' (RIS) (Mayer et al., 1995). Challenge may lead to RIS if it is not seen as a threat that results in retreat, but rather provides some dissonance between the existing state and a perceived new knowledge state (Tang, 2003) and is seen as 'constructive frictions' (Vermunt & Verloop, 1999). Challenge provides a stimulus for the possible engagement in RIS by the mentee, and risk-taking is generative if the outcome represents new knowledge.

Mayer and colleagues (1995) suggest a second type of risk termed 'risk in the relationship' (RTR) whereby the trustor is vulnerable to the actions of the trustee. The 'outcomes of the RTR' (trusting behaviours on the part of the trustee), will feedback to the trustor who will update the prior perceptions of a trustee's perceived trustworthiness. So whereas, the RIS is the risk of the action having a positive or negative outcome making the trustee vulnerable, RTR is acceptance of vulnerability on behalf of the trustor, to the actions of the trustee, who may act as expected or otherwise.

Challenge could also equate with risk-to-relationship (RTR) since, if introduced, it could potentially damage the relationship if it was not appropriate to the ability or desires of the mentee, who may act in retreat behaviours or unexpected ways. Challenge by the mentor may have a greater risk of being at an inappropriate level and therefore posing a greater RTR than self-challenge by the mentee.

Figure 1: Daloz 2-D Model
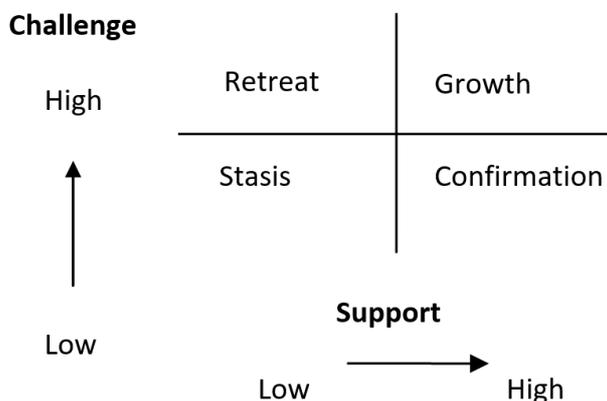
A conceptual model

While it is acknowledged this is a qualitative study involving a small number of cases, nevertheless building on the 2-D mentoring model of Daloz (1999) as shown in Figure 1, and quantitative studies by various authors (Mayer et al., 1995; Brockner et al., 1997; Bouquillon et al., 2005; McKnight &

Chervany, 2006) it was considered useful to propose a conceptual model whereby support was dependent on trust, with challenge representing a Z-axis. The RIS in response to challenge represents the line of mentee growth from an origin to a new knowledge state.

Methodology

For the purpose of this research, generativity, and the inter-relational concepts that contribute to generativity, are viewed as ideologically subjective, occurring in naturalistic and holistic settings. To elucidate knowledge required honouring this subjective ideology, gathering data within naturalistic and holistic settings, and adopting an interpretative view to these data so as to preserve the meanings attributed to that data by each participant. Consistent with subjectivism, the study drew on ideographic and hermeneutic approaches, so as to capture the meanings and intentions of each participant in the gathered data.

Chosen participants were the SCT-PCT pairs as mentoring dyads, and the events from which data were gathered were as much as possible a normal part of the mentoring processes occurring within these dyads.

Purposefully selected case studies

A qualitative research approach was adopted, using three purposefully selected mentoring dyads. A general invitation to participate was presented to SCTs at one of their regular cluster meetings. Interested SCTs then completed a written selection quiz so selection was based on self-reporting by mentors only. The first basis of selection was that each SCT was working with a suitable mentee within an established mentoring relationship, so that 'trust should be developed' (Mayer et al., 1995) or that the SCT considered the mentee was 'able' and therefore capable of self-challenge (McNally & Martin, 1998). The second basis of selection was that a collaborative style of mentoring was reported because collaboration is a key to the development of trust, particularly deeper levels of trust. Interestingly, most SCTs identified they were in new relationships with novice teachers, functioning primarily in a support role, so that very few met the specified criteria. Once SCTs were selected a brief meeting occurred between researcher and each dyad separately allowing an introduction of researcher to participants, and the gathering of written consents from participants to be involved.

Data Gathering

The naturalistic and holistic approach to data gathering included the audio recording of two consecutive mentoring meetings, in their entirety, as primary points of contact for each case, so that the data were representative of a normal part of each mentoring relationship as it occurred. Consecutive meetings allowed for the sequencing of events, and being a series of events gives greater confidence that data are representative of actual events (Dyer, 1995). For each case only the participant pair attended the meetings. Audio recorded data were transcribed verbatim by the researcher and transcripts were forwarded separately to each participant, prior to one semi-structured interview for each dyad.

For each semi-structured interview prepared questions particular to each dyad were forwarded separately to each dyad member in advance of their interview, to serve as an interview guide. Each question was preceded by a short piece of narrative that drew reference to the piece of transcript to which the question applied. Questions centred firstly on confirming or otherwise that generativity occurred or was occurring as a process, and secondly, sought to gain insight into the interpersonal interactions as the key phenomena being researched, namely trust, support and challenge, so that an initial thematizing of the data was applied prior to the framing of the interview questions. Such an approach involving classifying data based on learned typifications (Cohen, Manion & Morrison,

2017), and culling for meaning based on the participants words but framed by the researchers focus of inquiry, is consistent with phenomenological processes (Maykut & Moorhouse, 2003). The initial thematizing of phenomena allowed for the framing of questions for the semi-structured interviews, to confirm or otherwise the researcher's tentative interpretations. In many instances, the questions used were open ended so as to expose the research to unexpected phenomena as viewed from the participants' perspectives. 'Unexpected insights', as multiple meanings have been referred to as the promise of qualitative research (Burns, 2000), and a naturalistic and interpretative research approach stresses the validity of multiple meanings that are experience based (Burns, 2000; Flick 2006).

The following two examples illustrate narrative followed by the semi-structured interview question pertaining to that narrative;

> Narrative: On several occasions Bruce (all names are pseudonyms) makes comments like "That's a really cool thing" (Case Study 2, in future CS2).

> Question: What effect do you think these statements have during the mentoring, and/or on the mentoring relationship?

and,

> Narrative: There are three areas amongst others that are areas of concern within the classroom that arise in your meetings. These are: A. Pushing to the assessment rather than to meet student learning needs, B. Application of knowledge, and C. Questioning.

> Question: Describe any alteration to the practice of Kelly (CS3) or any initiative being undertaken in any one of these three areas of concern that has resulted from this mentoring?

The former question sought interpretation of an affirmative statement made by the mentor, while the latter sought firstly to confirm knowledge generativity, and if generativity was confirmed, led to further questions concerning the interpersonal relationships that underpinned the generativity process.

Secondary points of contact occurred mostly electronically involving cross checking meeting transcripts, forwarding of interview questions prior to the interview, and the checking of the interview transcripts. Once data were collected and verified by each participant pair, all data analysis was conducted by the researcher without further participant involvement.

Data analysis

Analysis of raw data from the participant meetings involved isolating descriptions of generativity to confirm or otherwise, that it occurred, thematizing the key interpersonal interactions as the phenomena under consideration, and isolating dialogue that appeared significant. These were later used, along with dialogue from the semi-structured interviews, in a narrative approach as part of the presentation of findings.

A stepped approach was adopted for the analysis of meanings contained within the semi-structured interviews incorporating aspects of Kvale's (2007) approaches to interview analysis. The four steps used were: 1. 'Narrative Structuring' of text to bring out its meaning, 2. 'Meaning Categorization' by coding long sequences of narrative into simple themes, 3. 'Meaning Interpretation' which involved an interplay of the narrative within the context of the research inspired by hermeneutics, and 4. 'Visualization' of the findings to re-contextualise these within the "broader frames of reference" (Kvale, 2007, p. 108).

In structuring the text and categorizing the meaning into codes in steps 1 and 2, the researcher identified the phenomena that presented, and scored occurrences of these as simple frequencies. In addition significant dialogue was recorded for inclusion within the findings, allowing the reader to verify or otherwise the research findings and conclusions. The advantage to interpreting meanings and visualizing (steps 3 and 4) is that these steps allowed for investigating how each concept contributed to mentee progress towards generativity, and examination of how, if at all, concepts were inter-related thereby allowing appraisal of the conceptual model. Such an approach follows a grounded theory approach to theory development because new theory may emerge within the collected data.

Data presentation

Data from the mentoring meetings and the semi-structured interviews were presented as 'Findings' firstly on a case by case basis so as to preserve the naturalistic and holistic nature of each case. Particular attention was paid to dialogue that described the nature of the mentoring approach, that confirmed or otherwise the generativity of knowledge, and that informed on the interpersonal interactions as the phenomena being studied, with the addition of any new phenomena that emerged. Abundant use of participant dialogue was presented, interspersed with researcher commentary to assist in the flow of information, as a way of preserving participant accuracy and authenticity of descriptions and meanings.

Secondly, researcher categorization and interpretation were presented for each phenomenon in turn using both a narrative approach interspersed with researcher interpretation, and some frequency data for the identified phenomena. The interpretation of phenomena was also extended to an analysis of the ways in which they interacted with each other, in the context of the conceptual model.

Findings

In presenting this paper, data suggesting generativity consistent with an increase in capacity had occurred or was occurring, are first presented, followed by data pertaining to the identified phenomena including the inter-relationships between phenomena. Data include mostly narrative from the semi-structured interviews, and researcher analysis of this narrative, following interpretative and hermeneutical approaches.

Generativity

Evidence of increasing mentee capacity appeared in all three cases. For example, in CS2 Laura (mentee) was developing her use of 'open questions' about which Bruce (mentor) commented

> *"In the open-ended questions…I wrote down a few of them here 'Who can tell me what is happening to...what'll happen to the ball now, do you think…and more specifically a couple of whys as well."*

This development was initiated because Laura recognised she asked mostly closed questions, and she challenged her 'rote response' to broaden her questioning repertoire, specifically when required to gauge, as Laura explained, student understanding in linking the theoretical side of her subject to the practical side. In CS3 Kelly (mentee) questioned her practice as follows;

> *"what's a method of training, give me a definition, all of those kids could tell me that… That's knowledge and information, it's not understanding so instead I gave them a different task…a full on training programme… identify or describe the different methods, why is it…"*

asking students to analyse the techniques involved. Kelly reported trying to lift student thinking from recall to deeper skills such as analysis. Both examples are viewed as evidence the mentee was challenging their rote responses, thereby engaging in double-loop learning, not simply because they had learned a new method of practising, but because they were broadening their pedagogical choices for use in different teaching situations.

Phenomena

The key findings related to the phenomena of trust, self-confidence which emerged in the data, the relative importance of support and self-confidence in the model, and challenge, are now presented.

Trust and risk in situation

Data for the presence of trust appeared in all three cases, sometimes at different depths within the same case. In CS1, the mentee acknowledged trying things that sometimes worked and sometimes didn't, and that the many positive outcomes reflected on the mentor's ability and integrity. These statements were indicative of a social exchange view of trust, because of the presence of risk, and because the outcomes, as RTR, affected the mentee's perception of trustworthiness of the mentor. In deciding to categorise the relationship as trust, it was necessary to question the mentee as to whether they were following the mentor consistent with other concepts such as co-operation, but it was made clear by the mentee, that they had made a conscious decision to engage in the behaviour, had the choice to do so or otherwise, and acknowledged risk was involved thereby confirming trust. The mentee went on to say, "I think we are becoming stronger and stronger...he's become a real good friend...Chris is on my level" (Kerry, CS1). This development towards a stronger relationship, involving friendship is indicative of development towards a relationship-based commitment view of trust, so that in this case, two trust archetypes were evident, with development towards this later view occurring over time.

In CS3 both mentor and mentee revealed they had explored trust prior to this study. John (mentor-CS3) explained trust as "openness so you can lay whatever you want out on the line and show your vulnerabilities." Kelly (mentee, CS3) viewed trust as value congruence when she explained, referring to John, "I have someone here with those same values or beliefs." John also confirmed this sharing of values with Kelly when he stated, "I think for me it is similar, similar values...like we've talked about a moral purpose and believing in a certain thing, and she's got very high standards." The interpretation of this data is that reciprocity of 'deepest trust' underpinned this relationship.

The most commonly referred to phenomenon within each case was identified as 'trying'. This essence was recorded on twenty occasions and was only counted when it referred to the mentor or mentee (extraneous examples such as what students were trying, were not included). Two examples of mentee use are; "Ah well, let's try it anyway or let's do it, with maybe a slightly different approach so we can work it out" (Kerry, CS1), and

> *"I always believe in giving things a go and trying things out and I know from a previous experience…sometimes it doesn't come out on top… I've been given advice and I've tried it and it just hasn't worked" (Laura, CS2).*

These two quotations indicate RIS led to generativity. Trying in both instances above encompassed the possibility of positive and negative outcomes so that risk was involved that equated to RIS, and it was in the trying of new ways or engaging in RIS that generativity, as new knowledge eventuated.

Mentee self-confidence

Self-confidence emerged in the data especially in CS3 where Kelly as mentee stated "we had this dialogue...and I think that's what this does for me it, it allows me to get all this stuff out of my head

and you know...have the confidence to go for it." Essentially Kelly was gaining self-confidence to a level that was sufficient to 'go for it', knowing she could complete a task or learn a new behaviour, yet without knowing whether the outcome would be successful or otherwise. This statement suggests that continuation in RIS by the mentee as the generative pathway is dependent on mentee self-confidence, and this self-confidence rests in the mentor-mentee trust relationship. John, as mentor, also acknowledged an effect of reflective dialogue on his self-confidence when he stated, "I really respect your opinion…it just gives me the self-confidence that I'm doing the right thing." This suggests reciprocity of self-confidence to engage in RIS may be an outcome of reciprocity of deepest trust.

Support and self-confidence – a change of view

In CS1 and CS2, emotional support of each mentee by the respective mentor occurred through identifying positive behaviours of the mentee at the start of each mentoring meeting, consistent with the mentoring model both these dyads had agreed to adopt. Support was both stabilising, when directed at existing mentee practices, and of each change process, when directed at the change each mentee sought. Changes were mostly concerned with the application of knowledge.

In CS3, 'parallel conversations' (Watkins, 2000) were used so that support occurred through the sharing of dialogue and it impacted on an internal state of the mentee as explained by Kelly when she said it gave her "a little bit of excitement actually [and]… the confidence to go for it" (CS3). Similarly, Chris as mentor in CS1 explained the positive statements directed at Kerry as having an effect on an internal state of Kerry as follows; "I think it gives Kerry some continued enthusiasm, and it's giving him motivation...so...I'll try this and I'll try that" (CS1). This continued enthusiasm and motivation is akin to reassurance to be more self-confident (Montecinos et al., 2002) and self-confidence has been described as a personal orientation that allows one "to explore and discover personal strengths" (Rajuan et al., 2008, p. 281. Exploring to discover personal strengths is analogous to taking a RIS to grow in knowledge. The internal state of self-confidence of the mentee has presented as the critical concept necessary for engaging in the change process, a view shared by Weisbuch, Seery, Ambady and Blascovich (2009) who in discussing motivational states assert challenge (as engagement in RIS in this study) and threat (as retreat) can be understood as "context specific self-confidence" (p. 142). These authors view support as one of three coping strategies that increase self-confidence, along with dispositions and skills, consequently, self-confidence is considered the concept necessary for engagement in RIS, while support is taken as a factor influencing this mentee self-confidence.

Positioning support as affecting self-confidence gains further credence from a study by Carpentier and Mageau (2016) who examined interactions between athletic coaches and athletes as coachees. What makes their study pertinent to this study is that 'feedback' from coach to coachee was the dialogue under research, and feedback was integral to the mentoring models adopted in CS1 and CS2 within this study. When the athletes were pursuing a change in performance, results showed those who received more change-oriented feedback than they usually received, experienced more self-confidence, provided the feedback was autonomy supportive. This parallels the findings of this research which show that in mentoring relationships, where the mentees viewed themselves as the locus of control and therefore having autonomy to engage or retreat from challenge, then supportive feedback from the mentors did contribute to mentee self-confidence, enabling engagement.

Challenge

In CS1 and CS2, challenge as a stimulus for growth appeared as advice from the two mentors, and from mentees as advice-to-self. It was normal for these mentees to act on the challenges showing these challenges to be both appropriate and meaningful to them. The mentees then pursued a RIS, not knowing if the outcome would be successful or not, suggesting engagement in challenge is trust-based.

In CS3, active listening, and parallel conversations were used as tools for 'reflection-on-action' (Airasian and Guillickson, 1997, as cited in Ovando, 2003). This reflection, along with the exploration of deeper trust led to the taking of a greater risk by the mentee Kelly. She went beyond her own practice and presented to her department. Referring to this action, Kelly stated "we've changed some tasks...all from this…[and referring to John]...I have someone here with those same values" (Kelly, CS3).

In all three cases challenge acted as stimulus for change, resulting in a RIS action by the mentee. The deeper trust relationship in CS3 underpinned a greater risk-taking action by Kelly as mentee.

Discussion

Within the education sector, with specific 'institution-based trust' factors (McKnight et al., 1998), such as confidentiality, and the relinquishment of management functions for the mentor as an attempt to mediate power imbalances, a context was set for the potential to develop high trust mentoring relationships. Within this context, the facilitator roles each mentor took through collaborative and reflective strategies were instrumental in forming trusting relationships. Trust ranged from social exchange trust (Mayer et al., 1995), relationship-based commitment trust (Pratt & Dirks, 2007), to deepest trust (Kockan & Trimble, 2000; Bouquillon et al., 2005; Nooteboom, 2006) and the evidence showed trust developing to deeper levels over time.

Hinging on trust was the concept of self-confidence of the risk-taker. Self-confidence underpinned engagement in risk-taking as risk-in-situation (RIS) (Mayer et al., 1995), and was therefore critical to the generativity of new knowledge, defined as an increase in capacity as double-loop learning (Argyris & Schön, 1996). The literature and the conceptual framework developed through the literature, suggested support was necessary for engagement in RIS, whereas this study places it as an external factor contributing to self-confidence. It is placed as an external factor because it affects self-confidence and precedes engagement in the generative pathway, while self-confidence is the concept allowing RIS engagement as the generative pathway. The revised model is presented as a mentoring generative effect in Figure 2.

**Figure 2: A mentoring generative effect**
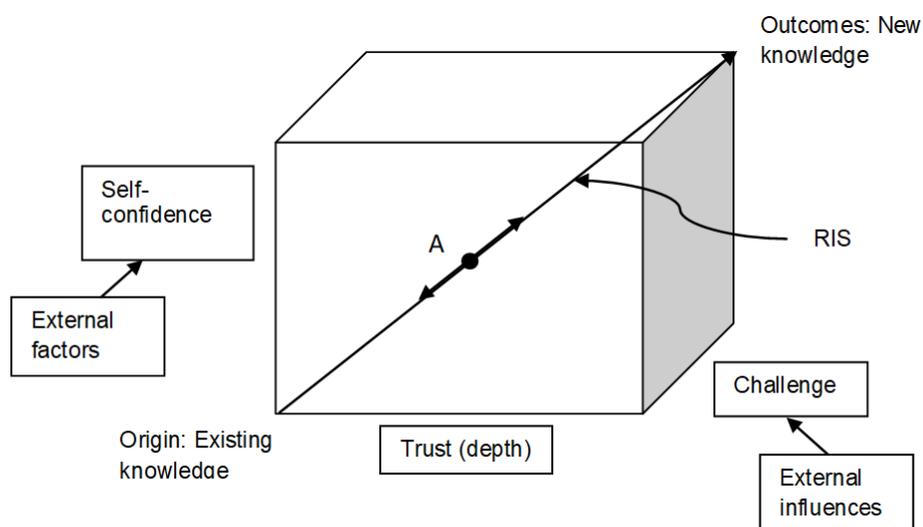
Mentees remained the locus of control of their development because challenge, as the z-axis and either mentee or mentor initiated, was acted on at the mentee's discretion. In response to mentee concerns from external influences within the working environment, challenges were appropriate

and meaningful to the mentees so that once engagement occurred, the challenges were pursued in all cases. Collaborative and reflective mentoring approaches apparent within each mentoring relationship contributed towards the appropriateness and meaningfulness of the challenges, and to sustained movement towards new knowledge.

Further evidence for this model was presented in CS3 whereby as depth of trust increased, greater RIS behaviours were exhibited. In CS3 deepest trust was developed through an exploration of values, value congruence, and reciprocity. The greater risk the mentee took went beyond individual practice, whereby a novice teacher presented recommendations to faculty staff resulting in faculty-wide changes to teaching pedagogy. In addition, the mentor also made changes to his practice so that reciprocity within the trust relationship, underpinned self-confidence for both mentor and mentee, and self-confidence in the model applies equally to both participants in the mentoring relationship, suggesting reciprocity of deepest trust may lead to reciprocity of self-confidence.

A plot of self-confidence in the pursuit of RIS towards new knowledge, as it applied within this study is depicted in Figure 3. Assuming a threshold level of self-confidence is required for engagement, the figure shows self-confidence levels sustained for the better part of time, above this threshold level. It is contended that the trust relationships within this study contributed to relatively high levels of risk-taker self-confidence and that the meaningfulness and appropriateness of challenge contributed to a relatively low threshold level of self-confidence required by the risk-taker. Both these effects contributed to sustained pursuit of the RIS, while the need for support as one external factor is reduced to a minimum.

Figure 3: Self-confidence for pursuit of RIS, as change
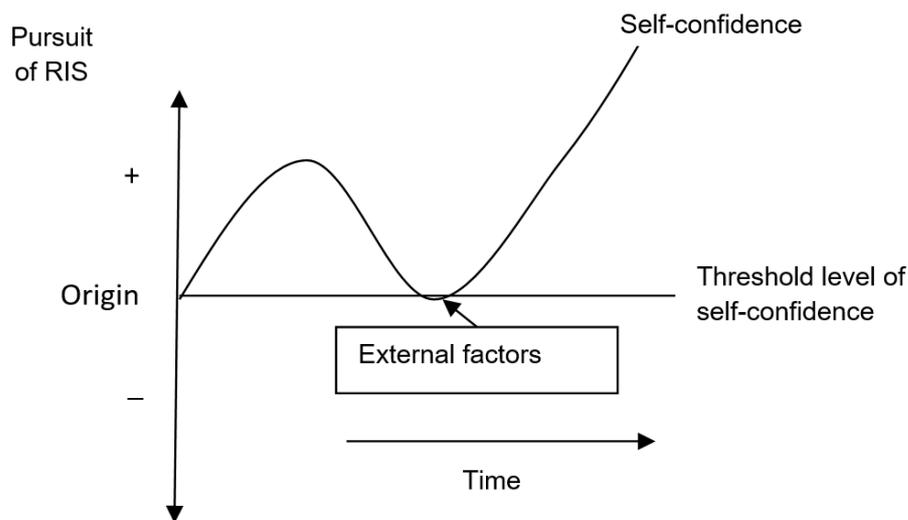
Conclusion

Within the education sector, set within an overarching institutional framework aimed at collaborative mentoring, the outcomes of collaborative, reflective mentoring approaches in this study were the development of trusting relationships, and sufficient levels of risk-taker, self-confidence to sustain engagement in the generativity processes, as change cycles. Each change process was consistently pursued by the particular mentee, indicating their self-confidence remained above the threshold level for engagement, testifying to the success of the trusting SCT-PCT relationships. The implication being that such relationships potentially lead to enhanced professional growth as an increase in capacity, displayed as a wider repertoire of pedagogical choices. In addition, while it

was not presented in this study, there was some evidence in the collected research data, that student learning outcomes were improved as a flow on effect.

For the stakeholders, there exists scope to provide on-going professional development opportunities for SCT-mentors and potential mentees with a particular focus on key interpersonal relationships as a basis for their mentoring relationships. One potential impact of this could be the movement of mentor practice from being largely a support person, as most SCTs indicated they were, making them ineligible for this study, towards taking a more collaborative, reflective role. Such professional development opportunities have the potential to contribute significantly to the growth in professional practice such as recorded within this study, and through this, the progressive overall improvement of the teaching profession across New Zealand.

Further, developing and maintaining solid collegial relationships, based on the key interpersonal concepts may have an effect on the recognised problem of the high attrition of teachers from the profession (Bressman, Winter, & Efron, 2018), with the potential to reduce the current levels of teacher loss.

Future Research

Future research opportunities include for example more in-depth studies of the model, including the adoption of quantitative research methodologies, and further studies of the effectiveness of trust-based approaches to mentoring in sectors beyond education. In addition, longitudinal studies over time could track the progress of teachers involved in SCT-PCT mentoring relationships that endure beyond the two year probationary period, with particular focus on both the continued interpersonal relationships and professional growth. Studies could also extend to include the impact of these enduring relationships on the attrition levels of teachers who remain in such trust-based, particularised, interpersonal mentoring relationships.

Acknowledgements

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About the authors

Stephen Atkins is a Secondary School teacher based in Hamilton, NZ, with a career spanning forty years. He served as a SCT from 2006 (when the position was first piloted) till the completion of 2008. Steve based his mentoring practice on the Daloz (1999) 'support and challenge mentoring model', and through a mentee evaluation sheet that he developed, critiqued the model as applied within his practice. This led to Steve completing a thesis towards the degree of Master of Educational Leadership (University of Waikato). His thesis provides the research foundation upon which this paper is based.