COMMUNITIES OF PRACTICE IN CLINICAL EDUCATION: DO WE (NEED TO)

TRUST OUR LEADERS?

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#### **Abstract**

Research concerning leadership had focused on formal leaders. These conventional 'leadership' positions mask crucial activities within communities of practice (COP). Wegner (2000), claims developing informal leaders is a critical element of community success and leadership itself essential in wider organisational success. Little literature exists clarifying the role of the informal leader or how these leaders encourage performance in academia. The research concerning clinical educators is even more inadequate.

The aim of this study was to develop an understanding of informal leadership within an academic community of clinical educators and was approached from a broadly ontological stance of interpretivism using qualitative methods. Data was collected through open ended interviews of senior academics involved in clinical education and analysed using qualitative content analysis.

Ten themes emerged from the data including 4 that were inconsistent with existing literature. Power, knowledge sharing and creating a safe environment were found only in the analysis whilst trust was only found in the literature.

Academic COP require transformational and 'authentic' leaders rather than leaders using the 'power yielding' tactics available to formal leaders. By identifying characteristics of leaders in clinical academia, we may be able to recognise and nurture these 'natural' leaders. However, as has been seen in business, to provide opportunity for physician growth, there needs to be an understanding and investment in structures that will lay the groundwork for improved performance and leadership (Kennedy, 2005).

**Keywords:** communities of practice, informal leaders, clinical education, academics.

#### Introduction

Understanding leadership as being about one formal person in charge is not wrong, but it is no longer adequate (Souba, 2004). Informal leadership, a uniquely human activity and core to organisational success, needs to be identified and studied, (Souba, 2004). Although capable leaders are needed in medicine, little peer review research has been published (Dowton, 2004). As we begin to realise the importance of good medical leadership, universities must put an increased effort into developing a new generation of competent and efficient medical leaders. Bruce Dowton, the Dean of Medicine at the University of New South Wales explains that "despite leadership roles being critical, we persist with outmoded models of organisations and pay inadequate attention to developing individual leaders and new models of leadership within the medical profession" (Dowton, 2004, p. 652). He suggests that only through thoughtful dialogue and a change in established professional circles (like Universities) can we develop new models for medical leadership. This research was done in response to these concerns. The

purpose was to explore the experiences of clinical academics concerning informal leadership within a formal institutional setting of higher education, specifically Newcastle University

Opinions regarding informal clinical leaders working within a COP, yet immersed in an academic organisation were explored. An interpretivist approach was taken as the aim was to gain insights into this rich subject by eliciting perceptions. Ideally, this study will inform the development of leadership initiatives and contribute to (much overdue) new models of leadership in medicine (Dowton, 2004).

#### Aim

 To develop an understanding of the ways in which academic staff members perceive informal clinical leaders within a community of practice in order to inform current practice.

# **Research Questions**

- What are the perceived roles and responsibilities of informal leaders within academic communities of practice?
- What qualities and characteristics are perceived as important or necessary for these leaders?

## Leadership

When looking at leaders in medicine, it is essential to investigate roles and responsibilities (Kennedy, 2005). Bass and Avolio (1993) suggest there are two types of leaders: transformational and transactional. Transformational leaders are characterised by idealised influence, inspirational motivation, intellectual stimulation and individualised consideration.

These leaders display persistence, energy, sensitivity to others and intuition (Bass and Avolio, 1993). Alternatively, transactional leaders are characterised by following rules, procedures and norms. They work within existing cultures, making decisions based on procedures and operative norms within their organisation (Bass and Avolio, 1993). This classification, however, concerns formal leadership in an organisation. Unequivocally, the majority of research concerning leadership has focused on formal leaders, or those in a 'position' of leadership (Pielstick, 2000). While this literature is interesting and necessary as a baseline, it must be interpreted contextually. The aim of this submission is not the exploration of formal, structured leadership within an organisation. It is concerned with the qualities or characteristics of a leader in self-organising, informal group communities of practice (COP).

Leadership within a COP is often considered the most important role in the community's recognition, support and legitimisation (Fontaine, 2001). Muller (2006) suggests the emergence of community leaders is essential for functioning COPs and argues that although leadership in COPs has been widely observed, very little research or investigation has been done on how exactly leadership affects the community.

## **Communities of Practice**

A community is a social organisation at heart. There is an implication of shared behaviours, beliefs, assumptions or perhaps even language that constitutes the social fabric that connects people. Similarly, a community of practice describes a group of people who share an interest, craft or profession (Lave and Wegner 1991). COPs are informal groups of people bound by shared expertise and passion for a joint enterprise (Wegner and Snyder 2000). These are not

structured teams. They are informal, dynamic and self-organising. They set their own agendas, and importantly, for this research, establish their own leadership (Wegner and Snyder 2000).

# **Leadership in self-organising groups**

Informal leadership has been identified as essential in organisational success, however literature searches reveal very little in the area of informal leaders in self managing groups and scarce documentation exists to clarify what the informal leadership role is (Pielstick, 2000), how leadership activities encourage performance and how the groups sustain their function over time (Wageman, 2001). Wegner (2000), one of the original proponents of COP, claims that one of the key elements that a community should look at w99999hen developing itself is leadership. He suggests the responsibilities of an informal leader in a COP must include: pushing its development along, maintaining a spirit of inquiry, recognising and addressing gaps in knowledge and remaining open to emergent direction and opportunities. He suggests roles that include: thought leaders, networkers, pioneers, people who document practice, and community coordinators (Wegner, 2000). Mueller (2006) argued the fundamental role of a leader within a COP was to influence beliefs and actions. Characteristics identified include legitimacy of individuals as members, trustworthiness (both cognitive and emotional), high visibility within the group and high levels of reputation.

Fontaine (2001) researched how roles within a COP could help organisations better support communities. Two of the distinct roles that were identified were that of leader and sponsor. Community leaders provided the overall guidance and management while maintaining strategic planning and visibility. Their responsibilities included: maintaining relationships within the team, cross organisational networking, setting of goals, managing roles and leading activities.

Sponsors were responsible for nurturing the group, ensuring exposure and offering strategic support.

Three articles were found that address COP in a virtual environment (Bourhis et al., 2005, Tarmizi et al., 2006, Probst and Borzillo, 2008). Probst and Borzillo (2008) suggested the COP leader who has access to inter-organisational networks, promotes intra- organisational networks, sticks to strategic objectives within and outside of the group, sets clear goals, provides direction to follow, imports knowledge, is a driver and promoter, attracts members, does not judge or sanction and develops trust and freedom will be most successful (Probst and Borzillo, 2008). Tarmizi et al., (2006) investigated the challenges for facilitators in virtual COPs and suggested the five most important roles of a leader was: Creating and maintaining an open, positive, and participative environment; Encouraging new members to participate in the community's activities; Listening, clarifying and integrating information; Keeping community focus on its purpose and Encouraging multiple perspectives. Bourhis et al., (2005) suggested specific roles and characteristics of leaders within a successful virtual COP include: devotion to the community, winning the team over, communicating, enthusiasm, convincing members of benefits of community, securing political and financial support, implementing creative ideas, coordination, identifying focused objectives, people skills, personality, fostering trust, innovation and encouraging participation (Bourhis et al., 2005).

The social engagement that is required in a successful COP is evident by the repeated theme of relationships, communication and guidance, arguably the environment in which the transformational leader would thrive. However, there seems to be a competing theme concerning

vision, goal setting, and position or strategy within the bigger organisation, suggesting a transactional leader would help these communities thrive. From the literature, one type of leader does not seem to be clearly identified as being the more effective in COP. This is not surprising as the context of the COP leader a difficult one. These 'leaders' are not in a formal position of leadership, but are recognised as leaders nonetheless. Are these people 'authentic' leaders (Pielstick, 2000)? From this review, there appears to be potential tensions for the leaders as to what exactly they should be doing, and in which environment they would thrive. As outlined in the research aim, this study is an exploration of perceptions of academics around COP leaders in clinical education and within a school with a structured environment based on routine, strategy and procedures. Can a leader fulfil both roles? Can one be a transformational leader within a transactional environment? Clinical leadership must be assessed and the structure must be understood to support both leaders and institutional goals (Kennedy, 2005). Arguably, whether in an academic or clinical setting, leadership is integral to organisational success. Research into informal leadership in clinical settings is abundant. This study was driven by a total lack of literature concerning who is leading informally in clinical academic settings, how and if it is happening.

## Method

Due to the nature of the research area, which aims to explore people's perceptions and views regarding leaders, a positivist approach using quantitative analysis was not appropriate. I wanted to elicit the perceptions of those interviewed without overly constraining or guiding them and so to collect rich data. I believed there was no objective truth about this subject. The truth was subjective and perceptions varied between individuals. Therefore, an underlying assumption

made is that reality can be interpreted subjectively and therefore interpreted in various ways (Graneheim and Lundman, 2004). I had to explore these perceptions as they helped me understand the multiple interpretations of what made a good leader within COPs. Interpretative approaches to research are characterised by the acceptance of multiple interpretations of the study topic and reality should be explored from the participant's viewpoint (Cohen et al., 2007). Ideally, this approach contributed to my understanding of the variations and degrees of differences that exist between different people.

#### **Data collection**

The research aim required the collection of rich qualitative data to explore and make meaning of experiences (Kvale, 1996). Interviews were chosen as a method of data collection as I was interested in exploring what the organisational members 'thought' about leaders in their environment. Byrne (2004) suggests interviews are well suited to explore the attitudes and beliefs of individuals. This method also produces a specific representation of the opinion or point of view of the individual. Through these interviews I aimed to identify and develop a deep understanding of themes and topics, based loosely around the categories mentioned earlier in the literature review. Semi-structured interviews were used which allowed participants to give detailed descriptions of what they thought about leaders in their COP. This is a common approach in qualitative research and allows previously unidentified areas of importance to the participants to be explored (Silverman 2000, Kvale 1996). There were a set of open predetermined questions and others emerging naturally from the interview itself (Cohen et al., 2007). This flexible method allowed me to set the overall structure of the topic and decide the main questions I planned to ask. This method corresponds to the qualitative theoretical stance I

have chosen as I was interested in capturing individual thoughts, beliefs and realities concerning informal leadership (Crotty, 1998). The interview questions (Table 1) were loosely structured and based on background literature search and the research questions.

- What do you think communities of practice are? How would you describe them?
- Do you think they exist in this school/academic setting?
- Can you think of examples of leaders in COP?
- What makes them a leader (qualities/characteristics)?
- What are their responsibilities or roles to the COP?
- What is the (if there is one) differences between these leaders and leaders within a formal management system?

**Table 1: Interview questions** 

I began all interviews by explaining why I was performing the interview and generally made small talk to form rapport. I checked the participant's understanding concerning what exactly a community of practice was and reinforced several important points including: COPs are informal, self-organising and dynamic. Following the general clarification concerning the reason for the interview and introduction to COPs, I began to ask the questions as outlined above.

# Sampling strategies

I approached three senior staff, all involved in medical education. They had been involved in clinical education for 25, 18 and 10 years respectively and all were presently employed in some aspect of post graduate clinical education. Two deliver lectures on COPs and one is presently involved in the online establishment of COPs nationally within clinical education. The interviews were done in their respective offices and took on average 45 minutes to complete.

I know these staff members, thought they might be willing to be interviewed and made the assumption that from both a theoretical and a practical perspective, they would be familiar with COP. I thought this essential for two reasons. If they had not experienced them, or if they were unfamiliar with the terms, then, their values and beliefs would be interesting, but not relevant to this research. I knew they had experience reading and teaching around COPs and at the beginning of the formal interview, I explored their understanding to ensure my assumption was valid. As the cornerstone of my research question concerned COPs I had to ensure I was exploring the perceptions of individuals who were familiar (in a theoretical and practical sense) with COP. This was a small, non-random, convenience sample and unlikely to be representative of the population as a whole (Patton, 2002). However, this purposive sampling was strategic and allowed me to choose individuals who would be familiar with what a community of practice was, and thus have rich experiences that were relevant to the research question (Crotty, 1998). The aim of the study was to explore perceptions of individuals within a specific community of practice. Maxwell (1996) argues that qualitative studies rarely involve sampling procedures or size necessary to address generalisability. The overall goal of this sample was to explore the 'authentic' understanding of peoples' experiences.

## **Data Analysis**

Historically, content analysis dealt with systematic and quantitative descriptions and was used in media research as a quantitative research method that coded data into explicit categories and then described the data using statistics (Hseih and Shannon, 2005). However, as discussed earlier, my research aim required analysis of rich qualitative data that was complex as it offered varied insights into leadership and communities of practice. Therefore, for the purpose of this

study, I have attempted to maintain coherence with the interpretivist approach I have chosen by using **qualitative** content analysis.

Recently, content analysis has developed away from the traditional analytical technique and there are conflicting opinions regarding meaning, concepts, procedures and interpretation (Graneheim and Lundman, 2004). Graneheim and Lundman, (2004) describe **qualitative** or **thematic** content analysis as a method of analysing data that is used to interpret meaning from the content of text data, and therefore adheres to the interpretivist paradigm. Qualitative content analysis goes beyond statistics towards the examination of language and classification of text into efficient categories (Hseih and Shannon, 2005) (Graneheim and Lundman, 2004). Qualitative content analysis is a research method for the subjective interpretation of the content of text data through the systematic classification process of coding, identifying themes or patterns (Hseih and Shannon, 2005). Therefore, the goal of this analysis was to provide a deeper understanding of the interpretations of leadership in COP by the identification of themes or patterns derived inductively and directly from the data (Hseih and Shannon, 2005).

Qualitative content analysis is relatively easy and flexible. It is a quick analysis method to learn and generally accessible to the public (Crotty, 1998). Therefore, for the scope of this research, and given my lack of research background, it seemed realistic and functional to choose. It is unobtrusive and allows the examination of meaning and identification of themes (Hseih and Shannon, 2005). Content analysis identifies, analyses and describes that data in rich detail. This process is comprised of two parts: a mechanical and interpretative component. The mechanical aspect is concerned with organising and dividing the data into categories and the interpretative

aspect determines what categories are meaningful in relation to the research questions. All interviews were completed, read, re-read, transcribed verbatim by myself, and then emailed to each interviewee for checking. This was an attempt to address validity (Maxwell, 1996) by using member checking. Upon positive responses from the interviewees, each interview was re-read and 67 initial codes were generated. With refinement, I ended up with 24 codes. I developed overarching descriptive labels or themes, while ensuring that all coded material was encompassed into one of these themes. Then, using both the interview questions as a guide and the descriptive labels which emerged as the transcripts were read, the themes were reviewed and defined. These were then reviewed again and analysed to generate clear definitions and names for each theme and sub-theme. As I was continually applying interpretation to the data, I remained aware that my personal assumptions and beliefs might influence the interpretation. Finally, the report was produced by clearly linking these themes to the research questions and the literature.

#### **Ethics and consent**

After ethical approval was gained, each participant was contacted, provided information and agreed to be interviewed. No identifying information was included in the data and the transcribing, coding and analysis was done independently by the author.

## **Results**

Ten overarching themes emerged from the data as outlined in Table 2.

Theme emerging from analysis	Found in analysis	Found in literature
Knowledge sharing	X	
Coaching group/group dynamics within the group	X	X
Networking/being strategic outside of formal group	X	X
Reputation, 'who' they are	X	X
Pushing development of individual and/or COP	X	X
Group strategy/in COP	X	X
Personality	X	X
Power/informal/No coercion/traditional	X	
Environment/ safe environment	X	
Trust		X

Table 2: Comparison of themes from analysis to literature

Many of the themes that were identified in the literature also emerged in the data analysis (Table 2). These included themes of coaching (Bourhis et al., 2005, Fontaine, 2001), strategic networking both intra and inter organisationally (Bourhis et al., 2005, Fontaine, 2001, Probst and Borzillo, 2008), personality, reputation(Muller, 2006, Pielstick, 2000) and pushing development (Pescosolido, 2001, Tarmizi et al., 2006). For success, it was suggested that informal leaders must welcome questions, be supportive both at a personal and group level, and manage group dynamics while being strategic within the group. As individuals, 'who they are' is also important. Their vision, planning reputation, personality and their ability to access resources outside of the COP is essential. These themes appear congruent with a transactional leadership style.

## **Inconsistencies with the Literature**

Knowledge sharing, power and safe environment were themes emerging from the analyses that were not found in the literature. Trust was found in the literature but did not seem to be addressed by the interviewees.

# Power, Knowledge and Safe Environment

From the analysis, *Knowledge sharing* was an important responsibility of informal leaders in COP, but not so in the literature. All three participants made explicit references to knowledge; discussing it in terms of 'knowledge', 'skills' and 'experience' and it appeared to be a central characteristic of leaders. Knowledge was described as 'collegial knowledge' and the 'assimilation of information and experience'. Only two overt mentions of knowledge were found in the literature. Probst (2008) suggested part of the role of the COP leader is to import knowledge and Wegner (2000) explained that the leader must demonstrate an ability to recognise and address gaps in member's knowledge. However, from the analysis, the participants clearly articulated the importance of the leader in the assimilation and sharing of skills and experience. The importance of learning as a social process is seen here as the transformational leader inspires intellectual stimulation, motivates others and recognises individuals (Bass and Avolio, 1993).

Power was addressed by all interviewees and the difference between formal and informal leaders was discussed. Only one reference to power in COP literature was found when Pielstick (2000) identified that informal leaders in groups scored lower than formal leaders in 'need for power' and 'using authority for fear or coercion'. No other article addressed it explicitly. However, each of the interviewees described the leader as 'not about having formal power', 'not about ordering', but 'having power by enabling and inspiring others'. This appeared to be power within the boundaries of transformational leadership. It did not concern assigned power or organisational power, but power to enable or motivate in an informal way to influence and stimulate others. This would suggest that a transformational leadership style using power to

inspire and enable, although not addressed in the literature is highlighted as important by these participants.

The third theme not addressed in the literature was 'safe environment'. All participants described how the role of the leader was to create a situation that is secure, not threatened and safe. Although three of the papers reviewed specifically dealt with reasons why COP succeed or fail, the role of the leader in creating a 'safe' environment did not seem to be addressed at all (Fontaine, 2001, Bourhis et al., 2005, Tarmizi et al., 2006). This reinforces the transformational role the leaders plays. In a COP, formal structures and recognised norms do not exist and it is therefore the responsibility of the leader to create a safe environment and comfortable boundaries for the team to work and learn. This was highlighted by all interviewees.

## **Trust**

The final and perhaps most interesting theme that did not emerge from the interviews was one of *trust*. Although, different interviewees discussed '*reputation*' and '*high profile*', not one discussed whether '*trusting*' the individual who is leading was important to them. The closest any coding came, was one interviewee said '*the leader must have credibility*'. Conversely, the literature suggests, quite unequivocally how important 'trust' is in COP leaders (Bourhis et al., 2005, Muller, 2006, Probst and Borzillo, 2008).

Perhaps, whether or not a leader can be trusted or should develop trust is not important. The literature clearly identifies *trust, fostering trust, developing and nurturing trust* as essential, yet these participants barely mention it. The second interpretation might be that trust is implicit in this environment. The issue of *trust* demonstrates a transformational leadership style that is

perhaps unique in academic COP settings. In academic settings, where the interaction is face to face trust is implicit. Bass and Avolio (1993) suggest that in a transformational culture trust is internalised rather than being dependent on contracts and formal agreements. Arguably, trust is a tacit phenomenon; academics do not formally agree to trust each other. There is stability in an academic setting and we tend to know each other professionally and personally and have defined territories (Becher and Trowler, 2001). This stability also reinforces the relational practice by which learning takes place (Boreham and Morgan, 2004).

# **Research Questions**

In any research activity, it is necessary to revisit the original aim or research questions. So-according to academics, what are the roles and characteristics of leaders within a clinical education COP? Who are they and how can they lead in an organisation governed by formal rules, traditions and procedures like a University? Although, disparate to the literature, these are powerful individuals. Powerful in that they enable and inspire others. Pielstick (2000) suggests that informal leaders must rely on 'authentic' leading rather than 'power-wielding' tactics that are available to formal leaders. He argues that the formal authority in positions of leadership may actually mask the process of leading. The leaders within these clinical education communities do not have these formal, structured appointments to the group, suggesting that a transformational leadership style using *power* to inspire and enable, although not addressed in the literature, is essential. These leaders must create a safe environment and are implicitly trusted.

There are two distinct cultures working within this structured environment and as a result, two separate roles appear to emerge for the leaders: one of the transactional leader and one of the

transformational leader. Characteristics that are highlighted as important by the participants include traits from transactional leaders: being strategic outside the group, being strategic within the group, designing programmes, creating content, crystallising ideas and evaluating practice. The roles of this leader included formulating goals and were associated with a clear path and direction. However, roles of transformational leaders were also highlighted: encouraging collaboration and cooperation, being enthusiastic, being advocates, inspiring and motivating and pushing individual boundaries by encouraging free choice. Here, leadership is characterised by relational practice, dialogue and social experiences. These two styles of leadership, and indeed cultures of learning appear to coexist synergistically within this clinical academic environment and within the literature.

## **Conclusions**

Arguably, the term COP may conceal over significant varieties of situated practice. Amin and Roberts (2008) argue that the homogenisation of the term itself is unhelpful. However, in this paper, the intricacy of what a COP was not the aim. The term was used as a generic form of learning in practice. This small, non-random, convenience sample was unlikely to be representative of the population as a whole (Patton, 2002). However, this purposive sampling was strategic and allowed individuals to be chosen who would be familiar with COP, and thus have rich experiences that were relevant to the research aim (Crotty, 1998) which was to explore perceptions of individuals within a specific community of practice.

Developing leadership in clinical education is an investment and may demonstrate a significant return in developing doctors who are 'natural' leaders. However, as has been seen in

business, to provide opportunity for physician growth, there needs to be an understanding and investment in structures that will lay the groundwork for improved performance (Kennedy, 2005). Leading within these communities must be rendered visible to ensure it can be consciously addressed, and recognised to enhance the quality of work life (Boud and Middleton, 2003). COPs in academic settings are dynamic and constantly forming and reforming within the extremely formal structures of the University. Of course there is an individualised and intrinsic component to learning; there is also a collective component where self interest is subjugated for the good of the community.

Transformational leaders and culture appears to be predominant for these educators.

Themes that demonstrated dissonance with the literature: *power* by enabling individuals, *knowledge, trust* and *creating a safe environment* are clearly linked to a transformational culture and leadership style. Organisations are likely to have cultures that demonstrate both styles of leadership, but should move in the direction of more transformational cultures (Bass and Avolio, 1993). Therefore, the awareness of the transactional culture of universities with the emphasis on transformational leading, which appears to be occurring in this setting, appears to be the ideal 'trend' in leadership styles.

Capable leaders are needed in medicine and a campaign is needed to develop doctors as leaders (Dowton, 2004). However, who they are and how they lead within organisations is not clear from the literature. There are powerful clinical educators leading these informal communities who display predominantly transformational qualities. In this environment, they seem to be uniquely responsible for creating a safe place to learn, sharing knowledge and

empowering individuals whilst being powerful and implicitly trusted by the community. Presently these leaders are not recognised formally for their roles in promoting community learning by the institution. We should be striving to exploit the potential of these individuals for their creativity and innovation (Mupinga and Maughan, 2008) and internal coordination (Muller, 2006) in the promotion and generation of shared knowledge within the clinical academic workplace. Outmoded assumptions about medical leadership and obsolete organisational models are prevalent in literature (Dowton, 2004). We must identify new frameworks for doctors who will lead and influence the continued evolution of dynamic healthcare systems (Dowton, 2004). These findings contribute to the dearth of literature around informal academic clinical leadership which must be understood to support both leaders and institutional goals (Kennedy, 2005).

# **Biographical Section**

I am a lecturer in clinical education at Newcastle University and have recently been awarded my doctoral degree from this Institution.

#### References

- BASS, B. & AVOLIO, B. 1993. Transformational leadership and organisational culture. *Public Administration Quarterly*, 3, 113-121.
- BECHER, T. & TROWLER, P. 2001. *Academic Tribes and Territories,* Buckingham, Open University Press.
- BOREHAM, N. & MORGAN, C. 2004. A sociocultural analysis of organisational learning. *Oxford Review of Education*, 30, 307-325.
- BOUD, D. & MIDDLETON, H. 2003. Learning from others at work: communities of practice and informal learning. *Journal of Workplace Learning*, 15, 194-202.
- BOURHIS, A., DUBE, L. & JACOB, R. 2005. The success of virtual communities of practice: the leadership factor. *The Electronic Journal of Electronic Management* 3, 23-34.
- COHEN, L., MANION, L. & MORRIOSN, K. 2007. *Research Methods in Education.*, London, Routledge.
- CROTTY, M. 1998. The Foundations of Social Science Research. *New South Wales: Allen & Unwin*.
- DOWTON, S. B. 2004. Leadership in medicine: where are the leaders. *Med J Aust*, 181, 652-654.
- FONTAINE, M. 2001. Keeping communities of practice afloat. *Knowledge Management Review*, 4, 16-21.
- GRANEHEIM, U. & LUNDMAN, B. 2004. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24, 105-112.
- HSEIH, H.-F. & SHANNON, S. E. 2005. Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277-1288.
- KENNEDY, K. 2005. *The imperative for medical leadership* [Online]. Available: <a href="http://www.healthleadersmedia.com/content/149514.pdf">http://www.healthleadersmedia.com/content/149514.pdf</a> [Accessed September 2013 Winter].

- KVALE, S. 1996. *An Introduction to Qualitative Research Interviewing,* California, Thousand Oaks.
- MAXWELL, J. 1996. *Qualitative Research Design: An Interactive Approach. Sage Publications,* London, Sage.
- MULLER, P. 2006. Reputation, trust and the dynamics of leadership in communities of practice. *Journal of Management Governance*, 10, 381-4000.
- MUPINGA, D. M. & MAUGHAN, G. R. 2008. Web-Based Instruction and Community College Faculty Workload. *College Teaching*, 56, 17-21.
- PATTON, M. 2002. Qualitative Research and Evaluation Methods, New York, Sage Publications.
- PESCOSOLIDO, A. 2001. Informal leaders and the development of group efficacy. *Small Group Research*, 32, 74-93.
- PIELSTICK, C. 2000. Formal vs. informal leading: A comparative analysis. *The Journal of Leadership Studies*, **7**, 99-114.
- PROBST, G. & BORZILLO, S. 2008. Why communities of practice succeed and why they fail. *European Management Journal*, 26, 335-347.
- SOUBA, W. W. 2004. New ways of understanding and accomplishing leadership in academic medicine. *Journal of Surgical Research*, 117, 177-186.
- TARMIZI, H., JAN DE VREEDE, J. & ZIGURS, I. Identifying challenges for facilitation in communities of practice. The 39th Hawaii International Conference on System Sciences, 2006 2006 Hawaii. 1-10.
- WAGEMAN, R. 2001. How leaders foster self-managing team effectiveness: design choices versus hands-on coaching. *Organisational Science*, 12, 559-577.
- WEGNER, E. 2000. Communities of practice and social learning systems. *SAGE Social Science Collections- Organisation Articles*, **72**, 225-246.