INTERNATIONAL JOURNAL OF ENTREPRENEURSHIP MANAGEMENT INNOVATION AND DEVELOPMENT

The Nature of Truth in Research Through Lenses of Three Modes – Theory, Practice, and Mixture of both with Innovations

Benjamin Olusola Ajibade

University of Sunderland in London

benjamin.ajibade@sunderland.ac.uk

Abstract

This piece of work explored the nature of truth in research by narrating the development of knowledge through Mode 1 and mode 2 knowledge, including the recent discussion around mode 3 system. The impact of this on researchers was emphasised by mode 1 (theory) knowledge and mode 2 (practice) knowledge filling the theory-practice gap. Mode 3 system knowledge aimed to encompass both mode 1 and 2 but included innovation as part of the knowledge development. The work discussed research paradigm in relation to ontology (reality of the things we know/truth) and epistemology (knowledge/the way we know things) including axiological assumptions (value) and same related to the of research methodological interest of individual researchers.

Keywords: Knowledge, System, Knowledge Gap, Innovation, Truth, Positivism, Interpretivism

Introduction

In this article, the researcher has explored the development of knowledge and the impact of the nature of knowledge on a research philosophy. Our individual beliefs, values and experience have a great impact on our understanding of the world around us which can be based on our assumptions and will influence the research philosophy that is used in our research activities. Therefore, the way we see the things around us will dictate how we perceive the world, and this could be related to reality. Performing research often entails the development of new knowledge which could be achieved by implementing a particular research approach with the use of some methods.

Literature Review

In the development of knowledge, Gibbons et al. (1994) were the first to classify knowledge into two categories of mode 1 knowledge production which they categorise as being 'uni discipline', that has its focus on a single discipline with clear academic and it could be directed by the individual and their academic peers. In contrast, they discussed mode 2 knowledge production as that which has its attention on the real world, and it deals with the real-world problems. Mode 2 knowledge production involves inter disciplinary working practice rather than being theoretical as we have in mode 1 and this aid reflecting on practice. This assertion was confirmed by Fulton et al. (2013) who discussed the mode 1 (theory) and 2 (practice) knowledge as a means of filling the theory-practice gap; their arguments were directed towards the development of theoretical underpinning knowledge (mode 1) in other to inform practice (mode 2). This is in correlation with the opinion of Kahneman (2011) who discussed system 1 as automatic operation and system 2 as a controlled operation. He stated that individual reacts to situations in two different ways by impulsively evaluating a situation automatically to arrive at a conclusion (system 1) and secondly by thinking about the situation deeply and processing the information cognitively in addition to our personal experience to develop our conclusion (system 2). Furthermore, mode 3 system was postulated to encompass both mode 1 and mode 2 knowledge by linking system theory, knowledge and innovation together in the form of creativity. (Carayannis, Campbell and Rehman, 2016). Mode 3 University or Higher education are those that accept and adopt creativity as well as

knowledge production and application of knowledge. Hence, my creative use of LEGO® Serious Play® (LSP) as a data collection methodology in conformity with mode 3 system knowledge. Fulton et al. (2013) therefore, conclude that the Professional doctorate leans towards mode 2 knowledge production while traditional PhD often produce mode 1 knowledge. Understanding the different ways of operation will enable us to place our paradigm rightly because these will be classified as operating within the realm of 'truth' in our professional practice.

In the 1980s, there was an influx of paradigm disputes which lead to Guba (1990); Guba and Lincoln (1994)'s notion about continuous arguments between the paradigm believers rather than collaboration; he, therefore, gave a description of paradigm as a series of beliefs which he called 'metaphysics', which are typified by ontology (reality), epistemology (knowledge) and methodology (procedure to attain knowledge). Vividly visualising the world will make one conclude that there is no single truth out there, therefore the nature of truth is multifaceted and can be identified through different routes. Our reality affects the way we gain knowledge, which further impacts the way we carry out research in our different disciplines. The perception of truth can be related to the research paradigm, which can be indicative of our values (axiology), norms and beliefs.

Tien in 2009 proposed that the researcher need to be aware of their theoretical position at the onset of the research. Therefore, researcher's that are investigating an area develops some knowledge which might answer a particular and specific question, thereby contributing to the body of knowledge in the specific field. The contribution of this human knowledge to an existing or been an entirely new knowledge is recognised as the researcher's epistemological stance about a research philosophy which is based on the researcher assumption. This leads to some specific realities that the researchers might come across in their research, known as the development of some truth and facts about the particular topic depicting their ontological assumptions (Crotty, 1998). The researcher's value often influences the research process and indicates how our research questions are understood and the interpretation of our research findings in our own way regarded as an axiological assumption. Research philosophy is, therefore, a backdrop of a series of consistent assumptions.

Hence one's ontological belief of what is the truth will have a bearing on the epistemological knowledge of what is reality. All these will have an impact on how we construct our thought and will enable us to be able to make the right philosophical choices of research methodology. Our philosophical stance will dictate how we see the world, which will influence the type of research we undertake. Tien (2009) is of the notion that ontology is the 'way we see the world while epistemology is how we explore the world; thus there is an assumption that all research will take the view of how the world is seen and these will speculate the different methods including the processes used in research. A researcher that see the world as being objective adopts the positivism paradigm which makes the researcher a scientist and the one that sees it as subjective implements interpretivism as their research paradigm in which case the researcher becomes a detective as positioned by Patel in 2015. A positivist belief that there is a single reality, and this could be measured, and this idea is supported by Patel (2015) who is of the opinion that they will use quantitative research to find that reality through measurement. Whereas, constructivist does not belief in the single reality or truth, so truth has to be interpreted through qualitative methods to obtain those numerous realities. A pragmatist will instead use any method that could solve a real-life social issue or problem because they believe that neither positivism nor interpretivism approach could be applied to the investigation, they, therefore tend to use a mixed method of qualitative and quantitative methods especially in a new and unpredictable situation (Saunders et al., 2009; Creswell, 2009).

Different individuals perceive things in different ways; they see the world in their own perspectives and construe episodes in the ways it means to them (Fulton et al., 2013). Park (2013) support the opinion that meaning-making is based on an individual's belief, which could be subjective. My ontological belief of what is the truth will have a great bearing on my epistemological knowledge of what is reality. All these will have an impact on how I construct my thought. The meaning we make about things will shape how illness is taken and this will inversely brunt on learning. In a seminar paper presented by Ignelzi (2000), it was postulated that human beings build their legitimacy based on their own experience. Therefore, the researcher’s experience has an impact on the direction of the process of their research because it shapes their belief.

In 1997, Larson was of the opinion that professional identity is centred on our expertise as professionals within a community of practice in which we find ourselves which gives us a communal sense of working amid a team of specialists but in 1999, Ibarra noted that this develops through socialisation and observation of our colleagues. Therefore, a professional identity can be described as how we recognise ourselves within our business environments and most importantly, this will be based on how we communicate this to the public. It is sometimes difficult to call myself a professional nurse because my professional identity has changed from being a qualified nurse that cares for patients in the bedside to one that teaches the discipline of nursing. Although argumentatively my role is not only of a lecturer but also incorporates managing both the students and other lecturers to ensure the quality of teaching and conforming with the Quality Assurance Agency for Higher education (QAA) regulations. However, Beijaard et al. (2004) believed that professional identity is not 'still' but 'fluid', and it is dictated by how we perceive ourselves, how we feel that others see us and how the public actually sees us. Neary (2014) posited three important contributors to the development of professional identity in her exploration of the findings from a research project that took place from 2007 to 2012 on careers practitioners' professional identity. She cited job title as being crucial to how experts see themselves and their title should replicate what they are doing. The second issue is about individuals participation in continuing professional development (CPD), and she postulated that CPD helps to advance practice most especially if it is done at postgraduate level as this will increase their knowledge and academic skills and opportunity to engage with a new community of practice. The third factor is by providing intellectual engagement through bridging the gap between theory and practice by involving reflection, exposure to policy and undertaking research related to one's professional practice fulfiling 'mode 2' knowledge (Fulton et al. (2013).

The above has an impact on the professional practice of individuals on the choice of their philosophical paradigm for research as this will be driven by the type of research question which will determine the methodology and methods to be used. Whether they will choose an experimental or action research. The realness of the research, therefore, depends on the things we know (ontology) and how we know it (epistemology). Based on my own assumption from the HARP reflective tool questionnaire proposed by Bristow and Saunders (2014) which I recently

completed; it was revealed that my major research approach is pragmatism where I scored the most mark, followed by poststructuralism/postmodernism. Then critical realism, interpretivism and positivism methods where I had the same scores. This postulates a wide range of my thought process regarding research paradigms. My choice of research topic selection, formulation of the research question and subsequent strategies used to conduct my research will be based on various ontological assumptions rather than a single reality. Based on the above, my dominant research stance/paradigm which is pragmatism is indicative of my belief that reality is constantly argued and interpreted and this means that I feel more comfortable with research methods that solve the problems rather than be rigid with just one particular method. From the above, it could be presumed that I have the ability to look at problems through different lenses depending on the nature of the research and my preference of research philosophy will be influenced by pragmatic contemplation.

Research paradigm for social science was categorised by Burrell and Morgan (1979) into four classes which are functionalist, interpretive, radical humanist and radical structuralist. These were made to correspond to four conceptual dimensions of radical change, regulation, subjectivist and objectivist. In their argument, Burrell and Morgan (1979) posited that researchers need to elucidate their assumptions of the nature of science and society and design their own route through their research. In the 'functionalist paradigm', the researcher will implement the ontological approach of objectivism, and it is regulatory because as a researcher, you will be interested in providing a realistic solution to practical problems. While in the 'interpretive paradigm', the researcher attempts to know the truth about the primary meanings of organisational life by finding out illogicality's which can be in the way of understanding and explaining what is going on in the organisation to accomplish a change in the sequence of things. Furthermore, the 'radical humanist' paradigm finds itself within subjectivist and radical change. Therefore, the researcher is required to apply a critical stance of changing the situation, otherwise known as 'status quo' of the organisation. The ontological stance applicable will be subjectivist while the last dimension is the 'radical structuralist' paradigm which deals with the organisation structure like the pecking order by analysing organisation phenomena as power relationships and nature of conflicts (Saunders et al., 2009).

So, paradigm is a way of examining the social phenomena to deduce an understanding of the phenomena; therefore, the HARP exercise above affirms my research philosophical confusion of many years which is finding it difficult to place myself in a specific rigid research category. This was concurred by Fulton et al. (2013) who believed that Professional doctorate student often finds themselves in a dilemma of hanging in-between more than one philosophical approach. This is in conformity with the individuals in the profession which I belong as we often find ourselves using mixed methods of research philosophies at different times to investigate problems. Hence, in an effort to find out the experience of the BSc Nursing students about their programme in our campus; I interviewed few of the students undergoing the course to seek their views and feelings subjectively about the course. Then I sought the opinion of the staff delivering the course around the difficulty in the delivery across different groups of students and their learning. Based on the findings, I gave questionnaires to each of the group of students to elicit further information as this gives them the opportunity to objectively state what they think about the course to confirm or refute the results of the interview. This enables the use of subjectivism, which is associated with constructivism hence objectivism, which is associated with positivism. I was able to use the radical humanist with functionalist paradigms that led to some changes in the status quo regarding the delivery of the course. This is in conformity with the 'interpretive' as it affects understanding and explaining what is happening.

While selecting a research topic, the researcher's axiological view plays an important role as one will choose a topic over the other based on the significant value placed on the topic. My appreciation of personal interaction with staff and students when trying to solve a problem and seeking their view (Heron, 1996; *Saunders* et al., 2009) on any issue is indicative that I value (axiology) data collection through interview which commemorates my preference for qualitative research strategy over others. However, I sometimes value their views by given the student's anonymous questionnaires to elicit response denoting my philosophical stance of using different lenses in approaching problems; hence, objectivism comes into play. The above is influenced by my professional values which are based on the nature of how I will be able to socially construct what is around me and the lens used to analyse them by the consciousness of my own metacognition which could be global and situational meaning (Park, 2013). While analysing the

nature of how student learns, it was recognized that there is a situational as well as global influence on their learning process which require some epistemic cognition. This involves how knowledge develops and are constructed which relates to our interpretation of the available proof. An individual's personal experience and values will impact on the meaning they make of situations they find themselves, and this will otherwise affect their perception of them.

The bone of contention here is how to apply critical realism into nursing and healthcare research; this was agued by Angus and Clark (2011) on the need for different disciplines to spawn profound understanding and substantial conceptualisation that facilitate meaning to their research. We must realise errors in our own thoughts (Archer, 2003), which can impact the choice of methodology. Therefore, there is need to cross our conventional precincts in other to comprehensibly state several approaches in our methods as acknowledged by Mezirow (1991) who stated in his reflective work that we should encounter a modification in our assumption of the world as we learn. In my professional practice, often; the use of constructivist approach forms the basis of what is truth as there are several situational influences that impact my reflexivity which often enable deeper construction of knowledge (Hammersley, and Atkinson, 2007). When the researcher attempts to present the findings of their research, they tend to create meanings which depict their uniqueness. This directs how they construct meanings about the world around them, which affects their identity and language choice. Researchers tends to express themselves by describing and narrating the result of their research; this enables them to stage the text in correlation to their belief which contributes to their uniqueness as supported by Atkinson (1990).

Reflection can be discussed as a psychological process that involves an anticipated outcome which relies on an already acquired knowledge which could be processed further; whereby consciousness is engaged with a known rationale (Moon, 2004). However, Fulton et al. (2013) discussed reflection as appreciating how your personal norms, values and behaviours and be aware of your impact in a situation. They further highlighted the importance of being able to step outside from oneself and one’s sentiments to be able to critique and judge both yourself and the situation because this will reduce bias and bigotry. To be an effective reflexive practitioner, one should be able to see his inner self by probing one's postulation and beliefs, and also the impact of this on the public

and cultural values. Therefore, one needs to imagine the ethical contemplation behind their professional practices, and we should have imaginative proclivity. High level of reflection could influence the method used in research by embedding one's stance which will influence the lens by which an individual researcher will comprehend their inadequacy and limits; they will also be able to reflect on the outcome of their action both positively and negatively (El-Dib, 2007).

Reflexivity gives the researcher an ability to consider one's own thoughts to understand the relationship between their own values (axiology) and research practice (Alvesson and Sköldberg, 2000). So, my own beliefs need to concur with a recognised philosophy to make meanings, as agreed by Cunliffe (2003). In other to critically reflect on the concept of meaning-making, authenticity and professional practice, it is important to consider Hart and Cooper (2015) view of achieving good by the professionals' ability of their use of what is termed 'practical wisdom' of their specialist trade and being able to critically reflect on their practice to achieve the 'good'. In the process of achieving this, I conducted a meeting where I intend to introduce a new 'feedback template'; my perception of the team member embracing the new tool was daunted when one of the attendees stated that the tool would not be professionally acceptable. They taught it appears cumbersome even before I could discuss my rationale of utilizing the template to bridge the theory and practice gap to aid constructive feedback to the student. After depicting the epistemology knowledge supporting the feedback template to the team using interpretivist approach (Patel, 2015) to give meaning to the content of the template; I reflected in action (Schon, 1987) by discussing how I integrated the contemporary marking criteria, general feedback, developmental points and required study skills to improve students' work in the future. I used Kegan (1994) 'order of consciousness' to co-construct my sense of meaning with the team and used the sources that are evident in their environment. The team found the template to be good and this becomes a working document in the department.

While reflecting on action, I realised the importance of interpretivist approach and social constructivism in action research in other to effect change and the difficulty involved in making others to make meaning to interventions in professional practice to bridge the theory-practice gap. This is in conformity with constructivists who believed on the impact of creativity on their

interpretation and knowledge of the world as this makes it realistic. Making meaning in a professional practice can take many dimensions; therefore, as a professional nurse, qualitative research can be used to inform research by linking epistemology approach to the research design (Hlady-Rispal and Jouison-Laffitte, 2014). Consideration of the epistemological stance will assist a qualitative researcher in implementing their knowledge in gathering data which can be in the form of an interview, focus group and field notes in the participant's natural environment and they can focus their research on ethnography, autoethnography, phenomenology and naturalism. All these can be based on the ontological level, which belief in realism; this is subjective because the reality is perceived by the participants to be 'truth'.

I found my research self who has a professional identity, but which cannot be classed as a true identity because I was still struggling with my personal identity. My true personal identity commenced eleven years ago when I had the Professional graduate certificate in education qualification and got an academic tutor position with one of the universities in the North East of England. The first few weeks of the post kick start my journey as a coach and an educator coupled with some research experience. I had an experience with one of the learners who found it difficult to cope with the educational system in the UK because she has a different educational experience from Africa where the majority of their assessments involves exams and multiple-choice questions. She appears confused almost after every lecture and could not cope with the new way of teaching and assessment and on the verge of withdrawing from the programme. I organised a tutorial session with her one day, and she burst into tears and complained of feeling unworthy; after some discussion and encouragement with psychological support, she was gradually improving in her studies.

Further tutorials were organised, and we explored 'Mind Mapping' in one of the sessions as proposed by Tony Buzan during the 1974 BBC TV series called 'Use your head'. He upheld the model of radial tree and colourful pictorial keywords for note taking to improve learner's effectiveness. Buzan (1974) proposition was further confirmed with various researches conducted by Cunningham (2005); Brucks & Schommer (2008); Rothenberger et al. (2008) Beel and langer (2011) which proved that about 80% of the participants believed mind mapping increases their

concept comprehension. The first mind map was designed to investigate what the student's needs are and where she could get the assistant, this included being signposted to the skills for learning training, academic language, time management revision and finding information and referencing, also IT support, personal tutor meeting, tutorial in the form of coaching was included. The student enjoyed the use of images and symbols in her mind mapping, and she also applied this in the classroom to take notes which hugely improved her learning and had a first class in the final classification of results.

The student became very creative since then, and subsequently, the same learning strategy was employed for more students which worked. This brought me to the realisation of the impact of support and tutoring on students. I then developed a learning strategy to enhance students learning experience, which has proven to yield good results, and student's grades had been improving since then.

On reflection, for the first time, I can see myself as a tutor supporting the educational need of his students, coaching them new skills and developing them to achieve their aims and overcome many personal encounters. I am not only that qualified nurse who cares for the patient on their bedside, nurture them to recovery or peaceful death but as a nurse educationist who cares about the learner's improvement. I see myself through a different lens and appreciate learner's 'psychosomatic needs', the impact of psychological issues on their learning, transiting from a different education system of other countries to the UK pedagogic style or even from further education (FE) to tertiary also known as Higher education (HE). I now find myself converting those hiding skills to greatly improving students professional practice, delivering an interesting lecture, increasing students confidence through their course of study which influences their personal advancement and being able to leave a lasting impression on students through my dedication to teaching, inspiring the students, mentoring and guiding them. At the moment, all my earlier strategies paved way to recognising myself as a nurse researcher who gathers his data auto ethnographically by using learner's as an ethnographic model (Whitehead, 2005); and going backward and forward while attempting to learn the meaning of the new practices and the organisational cultural values in which

I find myself while observing, interviewing and interpreting the data collected and thematically presenting them.

Beijaard et al. (2004) believed that professional identity is an important aspect in HEI, and it is the way individuals construe and re-construe their experiences that involve both the individual and context. Some of these give the HE its content specificity on how the individual is identified within the community or the institution in terms of the goods that he or she has achieved in accordance with Henkel (2000) who further stated that each academics has a history (Kogan, 2000), tradition, values and practices that make them a distinct individual and social being. The paradox quandary between my coaching and nursing self, initiated some challenge with my identity. I found it difficult to separate my personal self, my educator and coaching self from my professional self but I have been able to use this narrative storytelling and the learning strategy as an auto-ethnographical tool (Manning, 2009). This had eventually enabled me to examine my personal norms, values and behaviours to support my professional identity. My research experience and professional identity will impact research philosophy that guides the methodology of the research to make a better researcher. Critical reflection has proofed to be very important in research and cannot be underestimated while conducting research and the professional's value and belief will influence the research process.

Conclusion

Finally, we need to move towards developing a methodological approach that suits our own research by selecting methods that are question driven rather than methods led. Therefore, healthcare research needs to support what the investigation is about rather than a particular interest in a philosophical paradigm. My focus will be on the methodology and methods that address the aims and objectives of my study, and this will sit well in a Doctor of Philosophy or a professional doctorate study.

References

Alvesson, M. and Skoldberg, K. (2000). *Reflexive Methodology: New Vistas for Qualitative*

Research. London: Sage.

Angus, J. E.interpretivismand Clark, A. M. (2011) Using critical realism in nursing and health research: promise and challenges. *Nursing Inquiry*. 19 (1): 1–3

Archer, M. S (2003) *Structure, agency and the internal conversation*. Cambridge: Cambridge University Press.

Atkinson, P (1990) *The Ethnographic Imagination: Textual Constructions of Reality*. London, Routledge.

Beel, J. and Langer, S. (2011) An Exploratory Analysis of Mind Maps. Proceedings of the 11th ACM Symposium on Document Engineering (DocEng'11*). California.*

Beijaard, D., Verloop, N. and Vermunt, J. (2004) Reconsidering research on teachers' professional identity. Teaching and Teacher Education. 20 (2):
107-128.

Bristow, A. and Saunders, M. N. K. (2014) Heightening awareness of research philosophy: the development of a reflexive tool for use with students. Developmental paper submitted to Track 21: Research Methodology.

Brucks, C. and Schommer, C. (2008). "Assembling Actor-based Mind-Maps from Text Stream". CoRR. abs/0810.4616.

Burrell, G. and Morgan, G. (1979) *Sociological paradigms and organisational analysis*. London: Heinemann.

Buzan, T. (1974) Use your head. London: BBC Books.

Carayannis, E.G., Campbell, D.F.J. and Rehman, S.S. (2016) Mode 3 knowledge production: systems and systems theory, clusters and networks. *Journal of Innovation and Entrepreneurship*. 5:17.

Creswell, J. W. (2009) *Research design: Qualitative and quantitative approaches* (3rd ed.). London: SAGE Publication.

Crotty, M. (1998) *The Foundations of Social Research.* London: Sage.

Cunliffe. A.L. (2003) 'Reflexive inquiry in organizational research: Questions and possibilities', *Human Relations*. 56: 983–1003.

Cunningham, G. E. (2005). Mindmapping: Its Effects on Student Achievement in High School Biology (Ph.D.). The University of Texas at Austin.

El-Dib, M, A. B (2007) Level of reflection in action research: An overview and an assessment tool. *Teaching and teacher education*. 23: 24-35.

Fulton, J., Kuit, J., Sanders, G. and Smith, P. (2013) *The professional doctorate: a practical guide*. Basingstoke: Palgrave Macmillan.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. and Trow, M. (1994) *The new production of knowledge: The dynamics of science and research in contemporary societies.* London:Sage.

Guba, E. (1990) The Paradigm Dialog. Thousand Oaks: Sage.

Guba, E. G. and Lincoln, Y. S. (1994) Competing paradigms in qualitative research. In Denzin, N. K. and Lincoln, Y. S. (Eds.) Handbook of qualitative research (pp. 105-117). Thousand Oaks, CA:Sage.

Hammersley, M. and Atkinson, P. (2007) *Ethnography: Principles in practice*. 3rd edition. New York. Routledge.

Hart, P. and Cooper, N. (2015) Reflective practice undertaken by healthcare and medical trainees and practitioners: so what's all the fuss about?. *Critical and Reflective Practice in Education.* 4.

Henkel, M. (2000). *Academic identities and policy change in higher education*. London: Kingsley.

Heron, J. (1996), *Co-operative inquiry: research into the human condition*, London, Sage.

Hlady-Rispal, M. and Jouison-Laffitte, E. (2014) Qualitative Research Methods and

Epistemological Frameworks: A Review of Publication Trends in Entrepreneurship. *Journal of small business management.* 52(4), 594–614.

Ibarra. H. (1999). Provisional selves: experimenting with image and identity in professional adaptation. Administrative Science Quarterly 44: 764-791.

Ignelzi, M (2002) Meaning-making in the process learning and teaching. New directions for teaching and learning. 8. Jossey-Bass publishers.

Kahneman, D. (2011) *Thinking, fast and slow. 1st ed.* New York: Farrar, Straus and Giroux.

Kegan, R. (1994) *In over Our Heads: The Mental Demands of Modern Life.* Cambridge, Mass: Harvard University Press.

Kogan, M. (2000). Higher education communities and academic identity. *Higher Education Quarterly*. *54*(3), 207–216.

Larson, M. (1977) The rise of professionalism: A sociological analysis. Berkeley: University of California Press.

Manning, P. (2009) Three models of ethnographic research. Theory & psychology Vol. 19 (6): 756–777

Mezirow, J. (1991) *Transformative Dimensions of Adult Learning*. San Francisco, CA: Jossey-Bass.

Neary, S. (2014). Professional identity: What I call myself defines who I am. Career Matters 2 (3): 14-15

Moon, J. (2004) A Handbook of Reflective and Experiential Learning: Theory and Practice. London: Routledge.

Park, C. L. (2013) The meaning making model: A framework for understanding, spirituality, and stress related growth in health psychology. *The European health Psychologist*. 15:2.

Patel, S. (2015) *The research paradigm – methodology, epistemology and ontology – explained in simple language*. (online) Available at: http://salmapatel.co.uk/academia/the-research-paradigm-methodology-epistemology-and-ontology-explained-in-simple-language (Accessed on 13/03/17).

Rothenberger, T, Oez, S, Tahirovic, E, Schommer, Christoph (2008). "Figuring out Actors in Text Streams: Using Collocations to establish Incremental Mind-maps". arXiv:0803.2856

Saunders, M., Lewis, P. and Thornhill, A. (2009) Research methods for business students (4th ed.) Essex: Person Education Limited.

Schön, D. (1987) *Educating the Reflective Practitioner*. San Francisco: Jossey -Bass.

Tien, C. C. (2009) What Is the Truth in Market Research? Being a Truth Teller. *Asian Journal of Management and Humanity Sciences*. 4: 4, pp. 241-258.