# Re-imagining research teaching: our living journey with our students towards improved practices

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#### Abstract

In teaching research writing and design, we have reflected on our practices with the aim of improving our effectiveness at helping students design and write their Master's dissertations. We chose a living theory, action research approach to experience and live the teaching process with our thirty Master's students in Higher Education studies. The process encompassed four cycles in which we explored our students' research knowledge and skills, self-reflections on the theoretical demands of research writing, perceptions of their growth, as well as our personal self-reflections.

By using a variety of research methods during the process, we also allowed our students to apply and analyse the different methods. In this way we hoped to develop their own voices. Our research teaching thus focused on our personal learning, as well as the learning and knowledge construction of our students.

Although the feedback from the students was mostly positive, the experience of finding ourselves in contradictory roles – being researchers of our students' growth as well as the subjects of their research – was rather hard to assimilate. Nevertheless, the insights that emerged from our research have helped us to bring about a great epistemological change in our future teaching.

## Introduction

We, the authors, are responsible for teaching research writing and design in our Master's programme in Higher Education studies. In the context of Jack Whitehead's (2009b, p.96) "How do I improve what I am doing?", we are striving towards moving from *Good to Great* (Collins, 2001). This article deals with the research training in the Master's programme in Higher Education Studies. The students enrolling for this programme are all employed in higher education institutions, implying that most of them are or will probably become engaged in supervising students. We regard it as very

important that academic staff members are capacitated to conduct research and able to lead others in the research process. Because our students can play such a vital role in generating new knowledge, which forms the core of higher education activities, we realised that we do not only have to provide research training, but that we also have to instill a passion for research. We knew that our teaching had to have a transformative effect, especially if we wanted to lift the 'research block' that some of our students seem to have. To be able to provide transformative training, we had to interrogate the effectiveness of our teaching and whether we were achieving our envisaged outcomes. It would be pleasant to think that our students look upon what we do in the same light as we do, but that might not be the case. They experience us and our teaching from their own point of view, which means that our endeavours to make them positive about research and engaging them in research writing could be difficult to achieve. At that stage, there were students in our class who made comments such as "I have a research block", "I feel that I am completely at the mercy of my lecturers", and "I don't know if I have what it takes".

Our teaching task in the field of Higher Education Studies is primarily to introduce our Master's students to research with the aim of engaging in a research project that eventually results in a formalised and well theorised report. At this stage the guidance had to come from us: it was important that our students gradually develop the skills they needed to conduct research. However, it was also crucial that we follow a process-driven approach by not only taking them through the phases of research planning, writing a research proposal and making choices in terms of the appropriate methods, but also to instil confidence and build a community of practice by thinking together and supporting one another. It was necessary that they could engage in critical discussions about their projects with peers, as well as support one another.

#### Our concern

Universities are faced by the need to develop excellence in postgraduate research, which requires that students are developed to align their practice with appropriate research practices and methodologies (Nulty, Kiley and Meyers, 2009). This means that universities have to increasingly pay attention to the enhancement of their students' preparation for their research journey. The success of this preparation may depend on the range of strategies that are used to facilitate the students' progress. These concerns also have to be

viewed in the South African context of postgraduate studies in South Africa, where only about 12% of all PhD enrolments graduate annually, and where only 26 doctorates per million of the country's population are produced annually (ASSAF, 2010, pp.46 and 75). Although the foregoing statistics reflect on PhDs and our teaching is at Master's level, the statistics concern our teaching as well, because the foundations for research at PhD level are laid at Master's level. We therefore became increasingly determined to effectively guide our students in designing and writing their Master's dissertations.

The work of Calma (2010 and 2011) and Pearson and Brew (2002) emphasising the importance of effective training for the development of research capacity among postgraduate students. Calma (2011) emphasises that universities need to develop 'hubs' for research training. We realised that our task was rather challenging, but we wanted to endow our students with the required knowledge and skills, as well as to cultivate a positive attitude towards research. These challenges led us to question whether we had an appropriate process in mind. We wanted to be effective, but our doubts about our effectiveness were enhanced by Paulo Freire's (1996) critical theory that questions 'traditional' forms of teaching. Much has been published about supervising research, such as the work of Clarke and Ryan (2006, p.478), who emphasise that the goal is getting the students "up to the mark". This made us question our traditional approach to getting the students to the required level of arguing about their research. The fact that the students clearly felt rather vulnerable even raised our concerns further and made us contemplate the value of personal security in fulfilling their potential, as stressed by Wadee, Keane, Dietz and Hay (2010).

In this context, Whitehead's (1989) notion of living theory, which is concerned with the creation of new knowledge leading to enhanced professional practice, seemed to be the best way to research our practice. Zeichner (1998, p.11) referred to this approach of studying one's own practice as "the new scholarship" – a phrase initially coined by Schön (1987) – because it constitutes ways of thinking, theorising and practising and, in doing so, leads to the emergence of new theories and thus allows the reimagining of new forms of practice. Lomax and Parker (1995, p.4) also referred to "educational inquiry" as something epistemological and methodologically distinct because it relates to "values that are educational distinct".

## Our purpose

We want to improve our teaching practice with a view to arriving at better ways of guiding Master's students in Higher Education studies to enjoy their research journey. One of us an experienced supervisor and the other a recently graduated PhD (thus providing an insider's perspective) and colleague, who has in the meantime also become involved in supervision (from an outsider's perspective), we combined our experiences and perspectives to map out this journey. As a team we decided to engage in a living journey with our students by allowing them to experience and live the process, while at the same time gathering information on how to improve our own practice.

## Our positional context

We are both lecturers, and jointly responsible for the research training of our Master's students in Higher Education studies. Our Master's students have three workshops to prepare them for their Master's dissertations or minidissertations, which are presented as follows:

- Workshop 1: three days in November
- Workshop 2: three days in January (the following year)
- Workshop 3: two days in May

This inquiry is a self-study of our practice, located within the field of educational action research. We soon realised that there were contradictions in terms of how we planned and viewed our own practice and how the students benefitted from it. We also realised that if we really wanted to pave the way forward, we had to resolve these contradictions otherwise we would not be capable of improving our practice.

In order to be amenable to required changes in our practice, we had to be authentic and open to divergent ways of doing, and consequently chose to conduct this self-study as a systematic discipline of action and reflection in which cycles and spirals of inquiry have enabled the research to evolve.

# Our epistemological stance

Before we began this process of learning and growth in the scholarship of teaching, we largely regarded our roles as lecturers as involving the transmission of knowledge to be applied. However, now that we have embarked on our living educational theory journey, we regard our teaching practice as guidance towards 'meaning making'. This process can be seen in the context of Bohm's (2004) dialogical 'streams of meaning' that flows through people as new understandings and meanings emerge. Our role shifted from mere knowledge transmission to knowledge generation as our own living theory emerged. Freire (1996, p.61) describes this well: "The teacher is no longer merely the one who teaches, but one who is himself [sic] taught in dialogue with the students, who in turn, while being taught, also teach." In our engagement with our students, we are also 'taught', because we remain reflective about our approaches and the possible value they have on the students' development. Freire (1996, p.71) rightfully stresses that "a dialogue cannot exist without humility" and we may only learn if we are prepared to be open to be 'taught' by our students as we engage in this joint process of learning.

This stance of 'humility' meant that we not only strove to dismantle forms of dominance, but also in finding a balance in our practice by providing ourselves as well as our students with opportunities to find their voices. This stance has further been influenced by the perspectives of Bentley (1998) and Gilligan (1993), in whose work the issues of voice and mind are central themes in the process of acquiring knowledge by moving from silence to a position of constructing new knowledge. Gilligan (1993) in particular focused on the feminist perspective, implying a moral development that is concerned with the relational aspects of humanity.

As our students are mostly senior students in the higher education sector, we saw it as our mission to inspire them to cultivate the same care in their relationships with their students and to establish an emancipatory approach. We believe that this can best be achieved by leading individuals to recognise the value of self-knowledge achieved through critique of their own teaching practice while also developing the voice of their students. Our research training thus focused on our personal learning and the learning and knowledge construction of our students, as well as empowering them to engage in similar relationships with their own practice and their students.

# Approach and method

Our epistemological stance determined our approach and method, which are largely based on Whitehead's (2009a) conception of living theory as a dialectical engagement with the world whereby we become both the subjects and objects of our research.

In the context of dialectic engagement, we planned our research journey in terms of cycles of action and reflection. Through a dialectical approach we hoped to gain insight into the human dimension of our research: those of our students, as well as our own understanding of the process and of ourselves. As action research is concerned with reflection on action and in this case with the purpose of improving our own teaching, it was necessary to engage with the process in cycles.

This improvement focus necessitated that we immersed ourselves in the spiral of inquiry, developing the skills of reflection and critiquing our own practice. This, in itself, could lead to us being the core of the study by being the researchers and being researched. We had to transcend the overemphasis on the 'I or we' (McNiff, Lomax and Whitehead, 2003) and in doing so remained focused on including the dynamics of the group of 31 Master's students as much as possible, while also paying some attention to our teaching.

We followed an action research cycle, which, according to Lomax and Parker (1995), is a logical, intentional and rational way of conducting action research, based on Popperian scientific logic. Our spiral of inquiry, consisting of planning, action, monitoring and reflection, evolved around four cycles:

- The *first cycle* with our students required that they reflect on their own knowledge and skills as well as their fears and insecurities. Our students had to identify their research foci, problems and objectives, and we had to engage with their needs in guiding us to 'listen' to their voices (or perhaps more appropriately 'outcries for guidance'), without harming their self-confidence and robbing them of their own voices of understanding.
- The *second cycle* focused on the theoretical demands of research writing, as well as on applying the various paradigms and the related methodologies to their own projects. During this process our students had to reflect on their emotions and learning by means of paintings.

- Our *third* cycle involved the outward movement in which our teaching and guidance were put to the test during their presentations of their research proposals. Finally, they reflected on their development through paintings and narratives.
- The *fourth cycle* necessitated self-reflection, in which we had to reflect on our own lived experience. This was of a necessarily contradictory nature in terms of our own practices by way of the fact of, on the one hand, our roles as researchers of our students' growth and, on the other, simultaneously being the researched subject.

With reference to the above context, Lomax and Parker (1995) aptly see this process of enquiry as a way of capturing the intra-subjective dialectic of seeing oneself as a living contradiction and helping researchers to produce authentic accounts of practice, which will be dealt with in more detail later in this article.

# Our claim for the validity of our research

According to McNiff and Whitehead (2002), the provision of authentic evidence is a demonstration of internal validity, but that is not enough. We realised that we had to place our claims in the public domain, with an explicit articulation of procedures and methodological rigour. We also acknowledged the value of validation proceedings (McNiff and Whitehead, 2002). Hence, for the purpose of validating our research we showed our cycles, findings and conclusions to five of our students to confirm whether they were a true reflection of the process and their own reflections on it.

# Our research cycles

As we describe the various cycles, we will relate our strategies, as well as the emerging data.

Cycle 1- Exploring students' research knowledge and skills

At the inception of our teaching in November, it was important for us to reflect on and evaluate the knowledge students already had. In order to do so,

we asked our students to rate their knowledge of research by reflecting on their own knowledge and skills as well as on their fears and insecurities.

**Firstly**, our students had to revisit their knowledge and skills with regard to research dimensions, such as planning their research, research paradigms, methods, sampling and data analysis. My colleague and I had long discussions regarding the inclusion of numerical data in this study, but because we had limited time to orientate the students regarding their research projects in order for them to start working during the December recess, we had to assess what background they had and we had to expose our students to quantitative methods of conducting research. We also needed to prepare for the next three-day workshops in January, and such data would be valuable in this regard. We do not claim the data to be generalisable, but merely to serve as a baseline benchmark for this project and for future research, as well as to illustrate to our students how questionnaires can be constructed and data analysed. The questions required certain subjective responses in which our students had to rate their knowledge and skills in research by indicating on a five-point Likert scale how they rated themselves in terms of aspects such as planning the project, formulating a problem and writing a research proposal (Table 1 cf. p.14).

**Secondly**, the students also had to reflect on their own fears and insecurities by means of written comments, which guided our awareness of and concern for their psychological status:

- I feel lost when I hear about qualitative research.
- I have a lack of sufficient computer skills and I feel so lonely.
- How am I going to identify my problem?
- At this stage I feel baffled.
- I feel so completely lost and at the mercy of my lecturer.

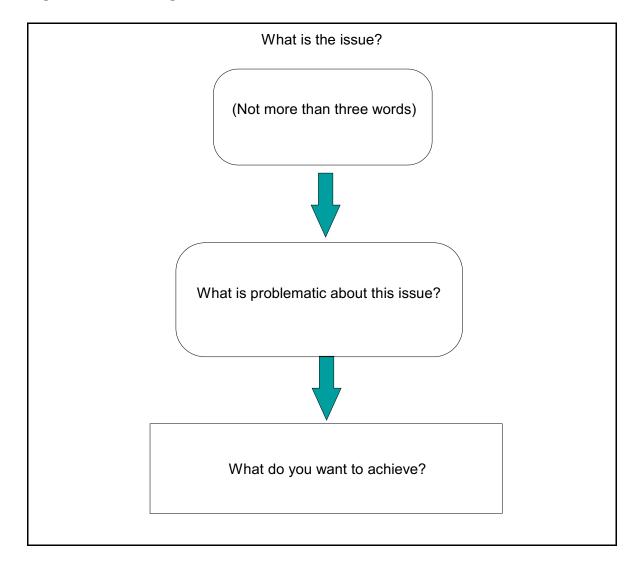
According to above qualitative comments on how vulnerable they felt and the results from the questionnaires, we could understand why they felt so lost. With the exception of a few students, their research knowledge was rather superficial. These tendencies made us even more determined to revisit the ways in which we teach students how to plan their research. Bitzer (2007) and Zhao (2003) emphasised that enabling postgraduate students to become

independent researchers is a complex academic project that proceeds by way of gradual development. We decided to approach our students' development in a scaffolding manner, allowing for the gradual emergence of their own voices.

We wanted to guide our students with enthusiasm, energy and inspiration (Van Zyl, 2009) to put them at ease as they reflect on their own research foci, problems and aims. We found that initially they wanted to work in a broad manner and had difficulty in pinning down the core focus of the study. It seemed as if they wanted to address a wide number of aspects, instead of focusing on fewer but doing in-depth research. In this context the younger colleague made a meaningful contribution by sharing her experiences in this regard. Because she is young, the students could identify with her and did not feel that they were the only ones who had ever experienced problems with focusing their research. All our students were involved in this process of focusing and we tried to stimulate feedback from their classmates. As they increasingly experienced acceptance (Wenger, 1998), they became more involved in the process of developing their own direction. We were very aware of the dynamic nature of such a process: their focus clearly changed as they grew towards maturity. We were constantly involved in facilitating their thinking and argumentation. As the entire class was involved, they shaped one another's thinking through involved and challenging arguments. The students became aware that there is no 'one-size-fits-all' recipe when planning a research project, but rather that the research question, objectives, theoretical framework and research methods should fit the purpose of the particular project; they gained an understanding that what works in one situation or study does not necessarily work for another (Nulty, Kiley and Meyers, 2009). We tried to direct our students to not only focus on solving the problems, but also to reconceive those problems. We did this by assisting them in first identifying an issue of concern and formulating a problem question, and then also conceptualising the problem and making sense of it within the context in which it occurs. This approach was built on Freire's (1996, p.71) notion that we should "become responsible for a process in which all grow".

In guiding the students towards growth, we decided to supply them with a one-pager on which they had to pin down their focus in short sentence, following the layout of Figure 1.

Figure 1: Focusing the research



As our students engaged in contemplating their research and the complexities they had to account for, such as why they selected a particular method and paradigm and how they were going to apply it, we challenged them with facilitative questions to provide opportunities to expand their thinking and consequently improve their intellectual flexibility. The students had to critically engage in aligning the various components of their research and they had to account for the choices they had made. In assisting them, we supplied them with a template (Figure 2). This activity took up quite some time, but they eventually started to see the interrelationship, which required academic argumentation.

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Problem	Problem questions	Purpose	Objectives	Methods	Paradigm	Target group
			_			

Figure 2: Aligning the research components

After this exercise, we divided our students into groups and they had to explain and motivate their foci to their groups. Here we chose to work in groups, because we wanted to create structures of equal power. According to Foucault (1979), equal social structures influence *individual agency*, which we were aiming at. The students "learned as they belonged" (Lave and Wenger, 1991, p.26) as their group members asked one another questions, such as:

- How would you describe the core of your study in no more than three words?
- What is so problematic about this issue that it needs to be researched?
- What do you want to achieve through this piece of research?
- How does this issue touch you personally?

Engaging with their classmates made the students feel more at ease as the power relations were of a more equal nature than would have been the case if one of us directed the foci for them. At that stage, our students started to relax and we could see the light in their eyes. This exercise also made them see their research projects as *chewable chunks* – something more manageable.

By engaging with the above questions from their own personal situations and from the point of view of their group members, different ways of seeing the same issues were revealed. Following the *situated learning theory* of Wenger (2000), we stimulate learning within the context and the social activity in which it is taking place. It seemed as if these different perspectives informed the analyses of their research foci, as they had to make sense of what the problems were and what they wanted to achieve. In addition, becoming

engaged in the thinking and planning of others' research made them see the wider picture, which diminished their alienation from the research process in which they had to engage.

## Cycle 2 - Engaging in the theoretical demands of research writing

During this cycle we focused on the theoretical demands of research writing and applying the various paradigms and the related methodologies to research projects. For this phase, our students had to study some research theory for our next contact session in January. Trafford and Leshem (2010, p.34) state clearly that the "systematic acquisition and understanding of a substantial body of knowledge" is crucial for postgraduate research.

When coming to the second workshop, our students had to reflect on their emotions and learning by means of reflective narratives and paintings. The purpose was self-exploration, which included understanding themselves and making sense of the processes in which they were engaged. Here we drew on Habermass' (1984) and Kolb's (1984) approaches, in which practitioners reflect on their relationships with theory and practice. Schön's theory (1987) of reflective practice motivated us to contemplate the methods of reflection, and we eventually settled on paintings as the preferred method of reflection. According to Hatch and Yanow (2008, p.24), paintings lend themselves to metaphoric understandings of the emerging researchers' worlds just as artists "look at the world around them". As in the research process, most of our students had not painted before and their paintings became an analogy for their research journey: our students had step out of their *comfort zones* by embarking on something that most of them had not done before and reflecting on their feelings and insecurities. They had to explain how they saw their research world as portrayed in their paintings. The following are some of the insights that emerged:

- I still see myself in the dark.
- Doing the literature review feels like a steep mountain to climb.
- The acceptance of my proposal by the Title Registration Committee is as if I am going to be swallowed by a snake.
- This cliff shows my worries of failure.

Against the background of these deep feelings of insecurity, we recalled Reason and Rowan's (1981, p.99) relevant questions a number of years ago: "How can I understand what I have been through and what others have been through?" These questions made us realise that this sense-making stage is not limited to our students, but that self-reflexivity is also required from our side. We realised that there were dimensions of research that seemed obvious to us, but were still viewed as complex by our students. This created an awareness that our students were still in need of much personal and psychological support; this insight helped us avoid going back to the old ways in which merely *taught* our students, and rather strengthened the community of practice. We scheduled three minute oral presentations of the envisaged research and arranged for more group discussions and individual appointments.

The need for psychological support brought new questions to our approach. If we wanted to frame our practice within our planned emancipatory approach, we had to stay focused on knowledge generation within a balanced relationship of power. We also opened a 'chat room' on our Learning Management System (LMS), in which our students could pose questions about their research practices. Here the students started to assist one another and so gained insight into their own work. There was a free and frequent flow of information, advice and support, as well as emergent critical thinking on certain issues, such as formulating the objectives and demarcating the field of study.

## Cycle 3 - Students' reflections on their growth

Our third cycle took place in May (four months after cycle two) when our students had to present their final research proposals. A number of the students were not ready to do their presentations at that stage and we arranged an additional opportunity early in August. Here we opened up the space for an outward movement from our teaching and guidance towards gauging the effectiveness of the process, up to that stage where we had to assess the presentations of their research proposals. Most of the students were able to construct a medium to good research framework, and most of the problems were related to the correspondence between the research problem, problem questions, purpose, objectives and the selection of appropriate research methods. These presentations took place on the first day of the last two-day workshop, which compelled us to contemplate the last day seriously.

Because the students had had the opportunity to engage with their research planning, they were more mature and more ready to reflect critically on the direction of their study. It was clear that some of them realised that their proposals still needed some improvement and alignment. We started the last day of the final workshop with an overview of the entire process up to that stage and then allowed them to reflect on their research in pairs, in order to ensure that their projects were mapped out clearly. We only engaged with the students when they requested our assistance, because we wanted them to make sense of the process themselves and to construct their own knowledge.

However, it was also necessary for us to know whether they had mastered the theory on research and if they felt confident about their research projects. Fifteen items that explored the 30 students' perceptions of their capabilities in attempting the research process were subjected to a t-test analysis using SSPS Version 18, in an attempt to investigate whether they felt more confident and better equipped after the research training had been completed.

Students' ratings of their perceptions of their knowledge and skills Table 1: in the various research dimensions (before and after the series of workshops)

		Training	N	Mean	Std. Dev	t-value	df	*Sig. (2- tailed)
1.1	Planning the research report	Before workshop	30	1/70	.794	-9.726	50	001
		After workshop	30	3.50	.630		58	.001
qu ob me	Aligning problem questions with objectives, research methods, results and conclusions	Before workshop	30	1.60	.855	-7.719	58	004
		After workshop	30	3.33	.884			.001
1.3	Writing a problem statement	Before workshop	30	1.73	.785	-9.234	58	.001
		After workshop	30	3.63	.809			
1.4	Writing a research proposal	Before workshop	30	1.80	.847	-7.150		001
		After workshop	30	3.37	.850		58	.001
	Gathering data by means of quantitative methods	Before workshop	30	1.80	.847	-7.150	58	.001
		After workshop	30	3.37	.850			
1.6	Analysing numerical data	Before workshop	30	1.47	.681	-4.133	58	.001
		After workshop	30	2.47	1.137			
1.7	The paradigm(s) underlying quantitative research	Before workshop	30	1.73	.828	-5.669 5	<b></b>	8 .001
		After workshop	30	3.10	1.029		58	

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The analysis presented in Table 1 showed a difference between the students' perceptions of themselves in terms of various areas they need to master in conducting research and writing a research report. The t-value indicated a difference between the groups of means (Cooper and Schindler, 2006) of how they viewed their knowledge and skills before and after our workshops. The dominant significant differences were found between the groups of means of planning a research report (t = -9.726), writing a problem statement (t = -9.234), the paradigm(s) underlying qualitative research (t = -9.377), aligning problem questions with objectives, research methods, results and conclusions (t = -7.719), writing a research proposal (t = -7.150) and gathering data by means of quantitative methods (t = -7.150). All 15 items revealed a 99% significant improvement (t = -8.001) since our first encounter about six months before.

Although we had our doubts about the appropriateness of the inclusion of the quantitative results, we wanted to ensure the validity of the data by means of method triangulation. During the last hour and a half of the last day of the final workshop period, we engaged the students in an Appreciative Inquiry exercise, in which they had to reflect on their insights and feelings in conducting research and writing it up. Appreciative Inquiry provides the scope to "study what gives life to human systems when they function at their best" (Whitney and Trosten-Bloom, 2010, p.1). In terms of Cooperrider, Whitney and Stravos's (2003) model, this method, as an inquiry, has the potential to uncover profound knowledge entities of human systems to "coconstruct the best and highest future of that system". This Inquiry comprises four distinct phases: the discovery, dream, design and destiny phases Through the Appreciative Inquiry, they were introduced to this method of research at the same time. They had to reflect on what they valued about their training (discovery phase), what their *dream* training workshops should look like (dream and design phases), and how they see their *destiny* in research (destiny phase).

As part of the discovery, dream-design and destiny phases, our students wrote the following:

What do you value most about this course?

- *The directions we received about where we were going.*
- It is exciting, because research can be part of our everyday work.

- The excitement of our lecturers about research. This made us feel positive.
- That we never felt alone and that we never felt that we would not be able to do research.
- That our colleagues in class were always prepared to help one another. It was as if we were all in this thing together.

What was your best single experience during this research training course?

- Getting a perspective on what they (our lecturers) and others were researching.
- Realising that we can also do research.
- The fact that we each owned a project.
- That our research can make a difference in our departments.

What is the one thing in this course that motivated you most to continue with your research study?

- That research adds value to our day-to-day work.
- Hearing about the different approaches to research.
- The positive and supportive attitude of our lecturers.

If you could contribute to designing a 'dream' course, what would you suggest be done differently?

- The inclusion of more discussion forums.
- That we are included in bigger project where we could work together and contribute to a big report.

How do you now feel about your engagement in research?

• I now have other perspectives about the role of a supervisor and my colleagues – I understand what they can add to what I do not understand.

- I know how to write a research proposal.
- I feel better about descriptive statistics and interpreting the data.
- I have become familiar with the building blocks of the structure and approach to research.
- *I now realise that I am primarily responsible for my own research.*
- I now know how to align my problem, objectives and methods.
- I did not have any knowledge and confidence, but now I can confidently say I know I can!

The Appreciative Inquiry revealed that the students' attitudes to research changed significantly and that they felt much more confident. It was evident that they valued the support of their fellow-students and even saw the value of more engagement. Their larger knowledge base contributed to their increased sense of ownership of their research projects.

After this inquiry, each of the students also had to complete their paintings and relate their own verbal narratives to explain their paintings. The photo below shows the quilt that was made of the students' paintings.

Because of the limited space of this article, only one painting, along with its narrative, is included.

Photo 1: Quilt of students' visual narrative on their growth during the research training process



Photo 2: Painting and visual narrative of one students



In my painting on the left I saw myself as someone in the game 'Snakes and ladders'. I knew I had to climb the ladder towards doing my dissertation, but I was swallowed by the snakes. It is I here in the left-hand corner below. After the training I managed to climb the ladder that led me to my goal. On the right-hand part of the painting you can see a house, meaning that I now feel safe and confident to tackle my dissertation. My proposal was accepted by the panel and I am on my way now.

Finding ourselves in a dialectical engagement with the world of research teaching, and coping with the contradictory roles of being both the researchers and the researched, we knew that we had to move to the rather painful act of self-reflection. Up to this stage, we had allowed our students to move from the passive position of listener to that of having a voice — meaning that they were not the mere receivers of knowledge, but that they had to construct their own knowledge. This refers to knowledge about engaging in a research project, but also in being involved in researching the facilitators, as well as reflecting on themselves and their own growth.

### Cycle 4 - Authors' self-reflection

This cycle necessitated us to ask: What have we learnt?

The aim of this project was to improve our teaching practice with a view to generating better ways of guiding Master's students to enjoy their research journey. In doing so, we had to reflect on our own lived experiences, through which we gained a deeper understanding of our practice in terms of research training and the necessity to extend the learning environment to people (fellow students) and systems (LMS) outside the classroom walls. Therefore, we constantly had to confront ourselves with questions such as:

- How could we improve our practice?
- How could we best understand the needs of our students?
- How could we stimulate knowledge creation without creating a power relationship where we as lecturers dominate the process of learning and research development?

We realised that the theory of our practice that emerged from this project proceeds from four premises.

#### First premise: Build a knowledge base

In leading students to become independent researchers, they have to develop a knowledge base on which to draw. Students need to be directed in focusing their research, planning and aligning the project and writing a research proposal. They also need to be informed about aspects such as data gathering

methods, analysis and interpretation of data, as well as the underlying paradigms, referencing and ethical measures.

Students will develop their own voices as they become 'miliar with the building blocks' of research, which enables them to move into new areas of knowledge construction. This is then possible, because they are able to build on a sound knowledge base.

#### Second premise: Build confidence

Emerging researchers have to be exposed to the challenges of research by breaking up the various constructs into manageable portions. This can be done by gradually building new knowledge and skills. They also need to be taken out of their *comfort zones* and exposed to critique in an environment in which they feel safe. Short oral presentations and group discussions are means of such moving outwards and allowing them to venture on their own. As the students realise that their projects are unique and that they can motivate the choices they have made, they develop *individual agency* that reduces their alienation from the research process. By taking ownership of their projects, students gain confidence and start seeing the value of research in their 'everyday work environment' and feel that they 'own their projects' by which they can make 'a difference in their departments'.

#### Third premise: Establish a community of practice

Confidence is built when people feel safe to experiment and challenge themselves and then experience success. Students experiencing acceptance in a relationship of equal power grow more than when they feel threatened. Students must feel that they belong to a group of equals and it is, therefore, important to establish a community of practice. It is advised that they form groups with their classmates who create a space for engagement, feedback and shaping of thinking and argumentation.

Classmates provide relations of equal power and can provide psychological support. As they increase their engagement with one another, whether in or out of the class or by means of discussion forums or online chats, they *learn* as they belong. The more they engage in the research projects of others, the more they see the wider picture of research. The constitution of a research community contributed to students' feelings of belonging as they began to see

that they are all in the process together. As a matter of fact, as indicated by one of the student's comments quoted earlier, they even thought it would be valuable to be part of a bigger project in which they could work together and contribute to a big report.

#### Fourth premise: Stimulate critical self-reflection

The students do not only have to critically reflect on their own work and the work of others, they also have to be guided to reflect on their own emotions as they grow. Self-exploration stimulates self-understanding and sense making of the processes in which they are engaged. Large research projects, such as writing up a dissertation, usually involve a number of emotions; students need to be made aware of this and informed that they are not the only ones experiencing such feelings. As they learn to master these emotions, they grow stronger and gain confidence.

These premises confirmed that traditional dominant forms of knowledge transmission could shut down learning and suppress free and critical thinking. The insights that emerged from our research have helped us to reconsider and reformulate our future teaching practices. Our experience of the simultaneous contradictory roles as, on the one hand, researchers of our students' growth and, on the other, being the researched in terms of our own practices was initially hard to assimilate. There were times at which we grappled with inner conflict and were tempted to revert to traditional teaching, especially when we saw some of our students' vulnerability.

When we embarked on this research we could not foresee what the outcomes could be and were unable to engage critically with the processes that might have emerged. It was rather a case of us having a particular aim and epistemological stance, but being unable to foresee the changes we had to make as we were still very much embedded in the way we had previously taught. At this stage, the kernel of the outcomes of this project is **what** we have learned and **how** we have learned it, and how this influences our transformation and the potential it has for our praxis as well that of our students as higher education practitioners.

The positive influence that our teaching practices had on our students is reflected in the comments below:

- *I have more confidence now.*
- I've learnt that research is not as daunting as I thought.
- Research is fun!
- Everybody can actually do research.
- The guidance and support were wonderful.
- The positive approach that this course has taken is encouraging, even to a novice, and has put one on a firm footing.
- I appreciate the student-centred approach on facilitating research methodology.
- While we were being developed, we were part of a research project as we learnt we experienced!

# The way forward?

At this stage we are planning our next training module and we have to consider all the feedback and suggestions to improve what we have been doing. We realise that although our approach yielded positive outcomes, this is only the beginning of moving from *Good to Great!* 

We will stick with our epistemological stance and put more effort into extending the principles of allowing the students to gain new knowledge and thus find their voices, building confidence, fostering communities of equal relationships and catering for self-reflection for improved meaning making and new understandings.

We want to conclude with the 'double dialectic' of meaning making of valid action research, as Lomax and Parker (1995) described it. This 'double dialectic' of meaning-making involves writing as a sense-making activity for ourselves and for others, such as in the presentation of conference papers and publications for peers and for a critical audience, and this is where we are now.

## References

ASSAF. 2010. The Ph.D.-study: An evidence-based study on how to meet the demands of high level skills in an emerging economy. Academy of Science, South Africa.

Bitzer, E. 2007. Supervising higher degrees as a scholarly practice. *South African Journal of Higher Education*, 21(8): pp.1010–1019.

Bohm, D. 2004. On dialogue. Oxon: Routledge.

Bentley, T. 1998. Learning beyond the classroom. London: Routledge.

Calma, A. 2010. Funding for research and research training and its effect on research activity: the case of the Phillipines. *The Asia-Pacific Education Researcher*, 19(2): pp.213–228.

Calma, A. 2011. Postgraduate research training: some issues. *Higher Education Quarterly*, 65(4): pp.368–385.

Clarke, H. and Ryan, C. 2006. Changing over a project changing over: a project-research supervision as a conversation. *International Journal of Qualitative Studies in Education*, 19(4), pp.477–497.

Collins, J. 2001. *Good to great: Why some companies make the leap. . . and others don't.* New York, NY: William Collins.

Cooper, D.R. and Schindler, P.S. 2006. *Business research methods* (9<sup>th</sup> ed.). New York, NY: McGraw Hill.

Cooperrider, D., Whitney, D. and Stravos, J. 2003. *Appreciative inquiry handbook*. San Francisco, CA: Jossey Bass.

Foucault, M. 1979. Power. In Morris, V. and Patton, P. *Power, truth, strategy*. Sydney: Feral.

Freire, P. 1996. *Pedagogy of the oppressed* (revised edition). London: Penguin Books.

Gilligan, C. 1993. *In a different voice: psychological theory and women's development.* Cambridge, MA: Havard University Press.

Habermass, J. 1984. *The theory of communicative action – reason and rationalisation of society.* Boston, MA: Beacon Press.

Hatch, M. and Yanow, D. 2008. Methodology by metaphor: ways of seeing in painting and research. *Organisation Studies*, 29(1): pp.23–44.

Kolb, D. 1984. Experiential learning experience as a source of learning and development. New York (New Jersey): Prentice Hall.

Lave, J. and Wenger, E. 1991. *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.

Lomax, P. and Parker, Z. 1995. Accounting for ourselves: the problematics of representing action research. *Cambridge Journal of Education*, 125: pp.301–14.

McNiff, J., Lomax, P. and Whitehead, J. 2003. *You and your action research project* (2<sup>nd</sup> ed.). London: Routledge Falmer.

McNiff, J. and Whitehead, J. 2002. Action research principles and practice, (2<sup>nd</sup> ed.). London: RoutledgeFalmer.

Nulty, D., Kiley, M. and Meyers, N. 2009. Promoting and recognising excellence in supervision of research students: an evidence-based framework. *Assessment and Evaulation in Higher Education*, 34(6): pp.693–707.

Pearson, M. and Brew, A. 2002. Research training and supervision development. *Studies in Higher Education*, 27(2): pp.135–150.

Reason, P. and Rowan, J. (Eds). 1981. *The human inquiry: a sourcebook of new paradigm research*. New York, NY: John Wiley.

Schön, D. 1987. *Educating the reflective practitioner*. San Francisco, CA: Jossey-Bass.

Trafford, V. and Leshem, S. 2010. *Stepping stones to achieving your doctorate*. Berkshire: McGraw Hill.

Van Zyl, E. 2009. Leadership in the African context. Cape Town: Juta.

Wadee, A., Keane, M., Dietz, T. and Hay, D. 2010. *Effective PhD superivision: mentorship and coaching*. Amsterdam: Rozenburg Publishers.

Wenger, E. 1998. *Communities of practice: learning, meaning and identity.* New York, NY: Cambridge University Press.

Wenger, E. 2000. Community of practice and situated social systems. *Organisations*, 7(2): pp.225–246.

Whitehead, J. 1989. Creating a living educational theory from questions of the kind, 'How do I improve my practice?' *Cambridge Journal of Education*, 19(1): pp.41–52.

Whitehead, J. 2009a. Using a living theory methodology in improving practice and generating educational knowledge in living theories. *Educational Journal of Living Theories*, 1(1): pp.1003–1126.

Whitehead, J. 2009b. Generating living theory and understanding action research studies. *Action Research*, 7: pp.85–99.

Whitney, D. and Trosten-Bloom, A. 2010. *The power of appreciative inquiry*. San Francisco, CA: Berret-Koehler Publishers Inc.

Zeichner, K. 1998. The new scholarship in teacher education. *Educational Researcher*, 9: pp.4–15.

Zhao, F. 2003. Transforming quality in research supervision: a knowledge management approach. *Quality in Higher Education*, 9(2): pp.187–197.

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