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Improving Research Capacity Development Practice Through Action Research

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ABSTRACT All Public Higher Education Institutions (HEIs) in South Africa are judged and ranked based on their research output. This makes it necessary for universities to guard against decline in research output. From 2010 to date, research output has been declining at the university where researchers work. This inquiry reports part of a study which was conducted to improve the research capacity development amongst academics in the university. Action Research (AR) methodology was employed to conduct the research. Seven Transformative Education/al Studies (TES) project group members participated in the inquiry. The research findings concluded that the heavy teaching workload at the university is problematic and besides teaching, lecturers cannot devote time to carry out research. The recommendation is that research by lecturers should be made mandatory so that university's research output can be improved.

INTRODUCTION

The main objective of this inquiry was to examine the reasons behind the decline in research productivity and research output and how this could be reversed through action research study intervention. To this effect, the cyclic practice improvement model was developed from this study and can be used by research practitioners to increase research output in their own context. The fundamental significance of facilitating research capacity development for the purpose of improving research productivity is somehow measuring academic excellence and ensuring sustainability. This implies that, universities can no longer afford to relegate research. In order to survive, universities must make research a pivot around which all academic activities revolve. According to Pocklington and Tupper (2002: 7) and Barnett (2005: 1), quality research and teaching are informed by research, just as responsive and relevant community partnerships are based on research. Fundamentally, universities mainly operate on the assumption that research and teaching are closely intertwined for mutual benefit. This is why the Southern African Regional Universities Association (2012: 7), contends that research and knowledge creation are defining characteristics of a 'university', and absence or severe diminution of this aspect in a higher learning institution spells an imminent loss of its university status. Consequently, this is the situation in many universities of the Southern African region. As a matter of fact, sustainable income generation for academic activities depends on research. In terms of the Policy and Procedures for the Measurement of Research Output of Public Higher Education Institutions (2003), all public higher education institutions must submit their subsidy funding claims for research outputs annually, in the form of publications to the Department of Higher Education and Training (DHET). DHET allocates research subsidy according to calculations of units for approved publications. This implies that research produced by universities is measured by the number of journal articles, chapters in books, books and conference papers publish annually by the academics in approved local and international publications. For example, a list of all South African institutions with their respective research publications outputs for 2012 is presented below which was published by DHET in February 2014 where universities are rated based on their volume of publications output units, the top

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having the highest number of units, while the bottom has the lowest number of units.

It is always hoped that the DHET's publication of the research outputs report would assist universities to address factors that might have contributed to the decline in research output with a view to having an improved research output in the future. For instance, the research output is of great concern as rating the third from the bottom in 2012 meant that something needs to be done. A recent report of January 2016 on the evaluation of the 2014 universities' research outputs states, "Overall, all institutions showed improved productivity in journal publications compared to 2013 except NWU, WSU and MUT." According to Lewin (1951), in order to make effective changes, people do change (take action) when they experience the need to change (reflect) and will adopt new behavior (new action) based on their values. According to Keegan (2016: 255-284), change is a necessary part of education process. Participation in the change process ensured the commitment of those involved, including academic lecturers as researchers' research participants.

Significance of Research Output and Necessity of Practice Improvement

Judging from Table 1, the researchers' university's decline in research output is the main objective for conducting action research inquiry which began with the question: "How can the facilitation of research capacity development at the university be improved for the better, using action research methodology?" Action research, according to Koshy (2010), is a specific method of conducting research by professionals and practitioners with the ultimate goal of improving practice. This was echoed by the research vision for the university which is about the creation of an enabling environment that empowers academic staff and postgraduate students to conduct research. According to Leedy and Ormrod (2013: 2), research is a systematic process that is used to collect, analyze, and inter-

Table 1: Report on the evaluation of the 2012 universities' research publication outputs published in 2014 as shown in actual units and percentages.

Institutions	*Book publications*		*Published conference proceedings*		*Publicaiton in journal*		*Total units in 2012*	*% of overall sector total*
	Actual units	*% of total publications*	*Actual units*	*units % of total publications*	*Actual units*	*units % of total publications*		
UKZN	64.63	4.5	34.47	2.4	1325.12	93.1%	1424.22	11.5
UP	72.48	5.1	74.28	5.2	1277.35	89.7%	1424.11	11.5
UCT	93.44	6.7	106.12	7.6	1191.33	85.7%	1390.89	11.2
SU	91.56	6.9	73.06	5.5	1158.68	87.6%	1323.3	10.7
WITS	54.13	4.9	49.35	4.4	1010.98	90.7%	1114.46	9.0
UNISA	32.45	3.6	47.64	5.3	812.43	91.0%	892.52	7.2
UJ	31.36	3.6	103.91	11.9	738.64	84.5%	873.91	7.1
NWU	28.51	3.3	50.08	5.8	790.6	91.0%	869.19	7.0
UFS	49.58	7.7	28.28	4.4	566.07	87.9%	643.93	5.2
RU	35.46	8.7	23.87	5.8	350.6	85.5%	409.93	3.3
UWC	12.44	3.4	11.64	3.2	342.8	93.4%	366.88	3.0
NMMU	4.22	1.4	38.79	12.5	268.52	86.2%	311.53	2.5
TUT	0.26	0.1	39.83	17.3	189.8	82.6%	229.89	1.9
UL	0.37	0.2	0.67	0.3	218.19	99.5%	219.23	1.8
UFH	2.24	1.1	4.5	2.2	201.83	96.8%	208.57	1.7
CPUT	0.1	0.1	20.29	12.1	147.12	87.8%	167.51	1.4
UV	7.1	5.6	7.87	6.2	112.88	88.3%	127.85	1.0
DUT	0.47	0.6	12.2	15.2	67.77	84.2%	80.44	0.7
VUT	0	0.0	8.71	11.6	66.59	88.4%	75.3	0.6
UZ	0	0.0	3.13	4.3	69.78	95.7%	72.91	0.6
WSU	0	0.0	3	4.9	57.62	95.1%	60.62	0.5
CUT	0	0.0	4.6	7.8	54.33	92.2%	58.93	0.5
MUT	0	0.0	1	5.7	16.69	94.3%	17.69	0.1
Grand total	580.8	4.7	747.29	6.0	11035.72	89.3%	12363.81	100

pret data so as to increase an understanding of the phenomenon about which a researcher is interested and concerned about. McNiff and Whitehead (2006: 256) also believe that action research is a form of research that enables practitioners to learn how they can improve practice, individually and collectively. For instance, at the researchers' personal level, 'they' wish to improve their personal practices from a collective learning about their practices, and about the process of collaborative learning on how could research participants, from their perspectives, help improve the manner which the facilitation of research capacity development should be done. This implies that the focus was first on researchers in collaboration with their research participants, which refers to Transformative Education/al Studies (TES) Project Group Members whom the researchers interacted with as their research participants. In action research, the objective of the inquiry was not about other people, but 'researchers' in relation with academics with whom they refer to as research participants. In addressing action research as a form of practitioner research related to self-study, McNiff (2002: 9-20), claim that in action research place(s) the 'researchers' at the centre of inquiry process, as a form of self-study or first-person inquiry. These scholars clearly articulate their position in supporting such social research that fits the 'researchers' in the research of action and influence.

The emphasis on the living person 'researchers' shows how individuals can take responsibility for improving and sustaining themselves, and the world they are living in. "Researchers" have the capacity to influence the process of social change in this way, because researchers can influence their research participants in their immediate context, who in turn can influence their colleagues in their own contexts (within the university). The circles of influence are potentially without limit. So, collectively, individuals can generate world-wide change.

This therefore implies that learning to put the researcher at the centre of action research inquiry involved becoming a self-reflective practitioner. To become a self-reflective practitioner was a process of personal and professional development that required a commitment to change ways of doing practice for improvement purpose, in cycles of planning, action, observation and reflection. The aim was to show how researchers hold themselves accountable for what they are doing as they are responsible for the promotion of research culture amongst academics and post graduate students at the university. Such an important work according to Samaras (2011: 21), can be accomplished with the support and critique from colleagues. In that regard, one would refer to the practice and conduct of this inquiry as an educational reformulation, where researchers had to reform their practices first, then the whole process enabled academics whom the researchers interacted with to transform as they possess within themselves embodied knowledge of how could they improve their own practice. This implies that this could only be done via a systematic reflection of the researchers' practice from research practitioners' point of view to provide meaningful insights into their daily practice and offer valid accounts of how they could develop and facilitate research capacity development. According to Coghlan and Brannick (2005: 35), reflection is the process of stepping back from experience to process what the experience means, with a view to planning for further action.

The focus of researchers was not accidental, but a considered response to what they asked academic lecturers as their research participants about the manner at which researchers conduct their practices. They were able to achieve a self-inquiry by collecting and analyzing data and finally came up with recommendations based on this data about themselves. The justification is that researchers were, as the participant researchers, central to the inquiry as they explored their own learning and practice in the university research capacity development responsibility and improvement purposes. As the researchers' research unfolds, the boundaries between researchers and academic lecturers they interacted with began to dissolve, as they all saw themselves as united in a common endeavor to improve their own practices within the university (McNiff and Whitehead 2006: 11). Boundaries began to dissolve, as researchers came to see themselves together with their research participants sharing information about their practices through the conduct of self-reflective cyclic inquiry that helped them collect data in order to develop a common understanding about how their practices should be conducted, according to their perspectives.

Theoretical Framework

Action research is a collaborative approach to inquiry that provides people with the means to take systematic action to resolve specific problems. According to Stringer (2014: 8), action research is not a panacea for all ills and may not resolve all problems but provides a means for research practitioners to more clearly understand their situations and formulate effective solutions to problems they face. Stenhouse (1983), had earlier defined action research as a new dimension because it is about processes of improvement and making claims that something has improved. Following Stenhouse's work in early 1980s, it was Carr and Kemmis (1986: 162) who defined action research as 'simply a form of self-reflective inquiry undertaken by participants in social situations' which they undertook in order to achieve three possible outcomes:

- Improving practice;
- Improving understanding of practice; and
- Improving the situation in which the practice takes place.

The researchers' belief was that, if given an opportunity to work in an environment where learning could be shared collaboratively, researchers' experience would be valued. Research participants that were targeted for the purpose of this inquiry would also be motivated to improve their teaching, research and learning practices, thereby learning through action research as a new and informed action.

Research Aim

The research objectives of this inquiry were as follows:

- To examine the reasons behind the decline in research productivity and research output and how this could be reversed via action research inquiry intervention.
- To engage the skills to enhance the building of research capacity towards a new generation of researchers at the university, and also focusing on postgraduate students' engagement.
- To explore how, researchers can better facilitate research capacity development within the university.

Through the participatory nature of action research when collecting data from academic lecturers, researchers wanted to examine ways in which research capacity building could be used to address present research challenges that have led to decline in research productivity and research output at the university.

This was done for the purpose of establishing an improvement process to explain and describe their feelings and values towards their practices. The end product was an articulation of researchers own living educational practices. Through this inquiry, researchers' understanding of their practices' reflection of their standards and values propelled them towards improvement of the way they ought to do their work. In this way, the challenge of the decline in research productivity of the university could be changed for the better, because thereafter, researchers would be able to know exactly what is it that need to be changed and improved. The process of finding out reasons that have led to the decline of research productivity at this university is not a solitary engagement, and therefore researchers needed to work collaboratively with the academic staff members who helped them reflect on their practices. This also helped researchers come to an understanding as they all brought up their own values about their understanding of the effectiveness and improvement activities required to enhance and sustain the way researchers should facilitate research capacity development. Improving the way research ought to be facilitated and developed would not only benefit researchers but also academics whom they interacted with, as well as the university's research status or rating. Sharing of values in a collaborative manner served the university's research mission and vision which was to create an enabling environment for academics to conduct both applied and basic research and empower academic lecturers and postgraduate students with research knowledge and skills so that the university can contribute to the existing body of academic knowledge.

METHODOLOGY

Research methodology used by researchers engaged them in a method of action research which appeared to be a form of disciplined inquiry which led to the generation of new knowledge. The new knowledge generated by this inquiry was derived from the self-reflective, action research, cyclic inquiry. According to McNiff and Whitehead (2006: 29), the main method-

ological assumptions of action research include the following:

Action research was done by researchers as research practitioners; and fundamentally, the aim of researchers' inquiry was to ultimately improve their practices via self-reflection by their research participants in cycles.

The researchers' main responsibility was to ask questions, and not accept complacency or self-righteous justification of researchers' own or anyone else's. For instance, researchers were compelled to ask why research productivity had been declining at this university since 2006 to date. Did the decline have anything to do with the way researchers do their own work? How could researchers change or improve the way they do their work? This implied that researchers should therefore, change the way they facilitate research capacity development in order to improve their own practice. Researchers, therefore needed to pursue a systematic inquiry into improving their practices which they intended to make public. The greatest value of adopting action research, as an approach to their inquiry was that it would enable them to monitor their learning and the learning of their research participants. This research would be an educative process being carried out in social situations that involved posing of questions and solving problems, thus resulting in a change intervention. According to Wilson (2009: 201), this is why action research inquiry is collaborative. Collaborative action research is a form of participatory inquiry in which researchers worked closely with their research participants to find solution(s) to a problematic situation of declining research productivity in the university where the researchers work.

OBSERVATIONS AND DISCUSSION

In order for the researchers to choose the appropriate methodology, they began by asking themselves the following important questions:

- Will the methodology chosen by the researchers assist with the effective change?
- Will the data collection, analysis and interpretation be adequately assured by the methodology that researchers intended to use?

The action research methodology was important because it was aligned with what these questions wanted to achieve. Researchers therefore, regarded their research methodology as the rationale for collecting data in a particular order to obtain the results that they wanted. Contrary to action research, for traditional forms of research, such as empirical research, researchers carried out their research on other people, but, in action research, the researchers did research on themselves. For example, researchers asked if seven academic lecturers could be their research participants to evaluate them, based on the manner they facilitate research capacity development at the university. Working together with the research participants, researchers found collaborative action research suitable as their research methodology for the purpose of their practice-improvement. The methodology used by researchers was the rationale for collecting and analyzing data, in a particular order, in order to obtain the results that they wanted. According to Whitehead and McNiff (2006: 23), researchers had to constantly check to ensure that what they were doing was really working. Indeed, this methodology increased the likelihood of results that they wanted, meaning that researchers needed to see the feasibility of changing and improving their own practice. Whitehead and McNiff (2006), refer to this kind of methodology as a "theory of how researchers do things". In order to obtain the desired results, researchers therefore used a self-reflective, action research, cyclic inquiry. This methodology was a way of trying out ideas in action, understanding those actions, and then attempting to make some improvements or changes. Action research methodology encouraged researchers to be reflective of their own practice in order to enhance the quality of the facilitation of research capacity development at the university. A self-reflective action research, cyclic inquiry enabled researchers to analyze their research questions from different perspectives. In the light of researchers' self-reflections, in three different cycles and new ways, success is eventually achieved.

A self-reflective practitioner was a process of personal and professional development that required a commitment to change researchers' ways of doing their practice for improvement purposes in cycles of planning, action, observation and reflection. As action research practitioners, the three-action research cycles is a popular model of action research which is being

recognized by many researchers, and this is Kurt Lewin's model according to McNiff (1988: 22). Lewin's model is a spiral of steps or cycles with four stages. This is a dynamic complementarity which links these four aspects into a cycle, and ultimately into a spiral of such cycles. This whole process of action research was an iterative, cyclical process of reflecting on researchers practice, carrying out an action, observing to oversee their action, reflecting, and re-planning in order to take further action to implement their revised actions. This is why researchers' action research inquiry took shape as it was being performed and ultimately improved in cycles. The researchers' understanding, from each cycle, pointed out the way to improve their actions further and further. It was not possible to evaluate the effects of researchers' actions until their research participants had monitored the extent to which researchers had implemented them through their different presentations. It was only then that researchers could plan alternative strategies and implement them eventually in the next cycle. For example, in cycle one, an idea originated from a discussion between the researchers and their research participants around scope of their operation and a plan for how researchers were going to deliver information on ideas (three different topics) that they identified, and they presented them as actions in all three cycles. The general idea in cycle two was then revised so that more information required would be further investigated and eventually implemented successfully in cycle three. This means therefore that researcher's responsibility should therefore be to thoughtfully engage in a practice that helps create desired changes in cycles for the purpose of improving the way research capacity development ought to be facilitated. Researchers recommend their cyclic practice improvement model which appears to be the right approach for any practitioner who wants to improve his or her own practice.

The Practical Self-reflective, Action-research, Cyclic Inquiry

According to McNiff and Whitehead (2006: 7), action research is a form of inquiry that enables practitioners everywhere to investigate and evaluate their work, therefore, researchers account of practice shows how researchers tried to improve their own learning, and influence the learning of others. The researchers' inquiry identified a problem of concern, and then carried out this inquiry, reflecting on what was happening at their workplace, and in the light of their reflections, in three different cycles and new ways, eventually achieved success. Moreover, according to Kemmis and McTaggart (2000: 11), to carry out action research, one has to undertake the following procedure:

Develop a *plan* of critically-informed action to improve a practice;

Act to implement the plan;

Observe the effects of the critically-informed action in the context in which it occurred; and

Reflect on these effects as a basis for further planning, subsequent critically-informed action and so on, through a succession of cycles.

This process tends to be cyclical. As soon as researchers reached a provisional point where they felt things were satisfactory, that point in itself raised new questions so that researchers had to repeat the process. This methodology was a way of trying out ideas in action, understanding those actions, and then trying to make some improvements or changes. Action research methodology encouraged researchers to be reflective of their own practice so as to improve the quality of the facilitation of research capacity development at the university. A self-reflective action research, cyclic inquiry enabled researchers to analyze their research questions from different perspectives. Researchers raised questions about two related processes:

- The first process referred to researchers' concern towards the decline of the research output and its consequences at the university; and
- The second process was in relation to researchers' responsibility of facilitating research capacity development at the university.

This implies that the focus was on researchers in collaboration with academics whom they used as their research participants, the Transformative Education/al Studies (TES) project group members. At a personal level, researchers interacted with the TES group members wanting to find out how could they improve their personal practices from a collective learning about their practices and the process of collaborative learning about how could TES group members whom researchers interacted with, from their perspectives, would help researchers improve the facilitation of research capacity development

at the university. The idea of developing human capability is core to action research. People might have different reasons for starting an action inquiry. Researchers felt that their current practice needed to be changed for better, and they received information from their research participant's perspectives by evaluating their work in order to explain how they had been doing their work previously and what they need to change and for the purpose of their practice improvement. There is a belief that, unless researchers, individually and collectively look at their practices, there would be no improvement anywhere unless one says: 'it begins with me'.

Fundamentally, the Transformative Education/al Studies (TES) project aims to support academic staff members who are pursuing Master's and Doctoral Degree studies using the 'self-study' and 'action research' approach. Collaboratively, researchers interact as colleagues who hold TES meetings during lunch time every Thursdays. In this project, educators/postgraduate students in Higher Education reflect critically on their learning, teaching, assessment, curriculum and educational professional practice in different ways with the multiple benefits of improving the quality of their practice, earning the award of a senior degree and earning research outputs in the form of publications, for the benefit of the university which researchers serve. This simultaneously impacts positively on the quality and the rate of under and postgraduate throughput and research outputs.

Researchers decided to use TES group members as their research participants particularly for the self-reflective, action research, spiral of cycles of inquiry so that their actions could be seen as evidence. Academics were the reliable colleagues whom researchers often interact with and these academics were able to share with researchers ideas on how researchers can improve the way they facilitates research capacity development within the university. The main motive behind following the spiral of cycles was to improve researchers' practices in four stages and in three cycles. It became evident that action research is about changing an environment, system, or practice, and researchers learned about this context by actually changing their own practice, being guided by a feedback they received from the interviews they conducted through the cyclic model of researchers' inquiry.

The whole action research process was an iterative, cyclical process of reflecting on researchers' practice, from the manner they first planned how they could improve their practice, and then took an action, which they had to observe to oversee the action being implemented, and thereafter reflected on it. Also, they would be able to find it necessary to re-plan their action again due to some identified mistakes that needed revision, in order to take further action to implement and revise action, and so on. This is why researchers' action research inquiry took a shape as it was being performed and improved in cycles. Researchers' understanding of each and every cycle pointed out the way to further improve their actions. It was not possible to evaluate the effects of their actions until their research participants (TES) had monitored the extent to which researchers had implemented them via three different actions in cycles of three exclusive different topic presentations regarding their facilitation of research capacity development. It was only through the self-reflective action research cyclic model that researchers could plan alternative strategies and implement them eventually in spiral of further cycles. The ultimate goal of researchers' action research was to use their research findings to make effective changes that would lead towards practice improvement with effective facilitation of research capacity development. Being reflective throughout spiral cycles of inquiry enabled researchers to make collaborative decisions alongside their research participants. Most importantly, researchers' actions in all the cycles had two related motives behind, that is, to improve their actions and the method they used to facilitate research capacity development at the university, from the research participants' perspectives, that is, their feedback from reflections.

Every cycle pointed the way to further improve researchers' actions. It was not possible to evaluate the effects of their actions until research participants had monitored the extent to which they had implemented them via three different presentations. It was only then that researchers could plan alternative strategies and ultimately implement them. For example, in cycle one, an idea originated from a discussion between researchers and their research participants around the scope of researchers' operation and a plan for how they intended to deliver information on ideas that both researchers alongside

their research participants identified for the researchers to present as their action which was observed, reflected and evaluated. The general idea in cycle two was then revised and corrected so that more information required would be further investigated, found and eventually implemented successfully in cycle three. This therefore means that researchers' inquiry became reliable and sufficiently valid after this third cycle, hence, this inquiry resulted in the actual practice improvement eventually.

Research Participants (TES) Feedback-based Practice Improvement and Validity of a New Knowledge

Initially, the success of research capacity development depends on the way the researchers promoted research culture and research productivity amongst academics and postgraduate students. This is why researchers realized that their practice needed to be improved for the better. McNiff and Whitehead (2006: 154) believe that to produce evidence to support a claim that researchers' work or practice had improved, they had to provide evidence from their inquiry and explain how it prove their capacity to realize their values in practice and also their capacity to articulate and communicate their specific standards of judgement to others and the validity of their contribution to the knowledge of their own practice. This implies that if researchers could produce authenticated evidence, then they have satisfactorily demonstrated to themselves, the internal validity of their claim to knowledge of their own practice. For instance, researchers chose to work closer and collaboratively with their research participants, that is, seven TES project group members, because they wanted to get other people to agree that their validity claim was credible, and they are welcome to test it against their critical assessment. The researchers used action research methodology to collect data from seven Transformative Education/al Studies (TES) project group members whom were used as research participants, and drew their perspectives as they were the academic lecturers at the university. This implied that they were more engaged in teaching than research for the purpose of research productivity. It was therefore important for researchers to collect, analyze and interpret data collected from academics. Therefore, the conduct of this inquiry became researchers' theory of practice, not anyone else's, and could therefore be seen as their original contribution to knowledge of their own practice improvement. Through the conduct of such a significant action research inquiry, researchers were able to generate and test their living theory of improving learning, in relation to their own learning, the learning of others in their workplace and the education of social formations. According to Koshy (2005: 123):

"The intention of action research is not to make generalizable claims, but to tell a story which is of interest to other research practitioners who may want to learn from it, or to replicate the inquiry or apply researchers' research findings to their situations."

When researchers made a claim to knowledge they confirmed that they now knew something new (because it is now happening) that they did not know before (because it was not happening). This new knowledge was being put into the public domain for the first time and added to the public body of knowledge. The new knowledge generated via action research is about both practice and theory. For instance, researchers planned, acted, observed and reflected on their previous experiences in order to be able to improve their own practice for the better. Fundamentally, Action Research approach required planning, action, observation and reflection more carefully, more systematically, and more rigorously than one usually does in everyday life, and to use the relationship between these moments in the process as a source of both improvement and knowledge. The researchers conducted these four activities collaboratively, involving their research participants who were affected by the action in action research process. This inquiry was imperative that researchers interacted with their research participants, not only for their own benefit, but also for the benefit of research participants, who were also research practitioners. Ideally, the researcher's action research, as conceived by Kurt Lewin (1946) was indeed an ongoing process of reflection of their action which was revised in three cycles for three times. Kemmis and McTaggart (2000) reiterate that action research involves a self-reflective spiral of activities: planning, action, observation, reflection, re-planning and more action in three cycles. The researcher's action research approach therefore, placed for greater demands on researchers being respon-

sible for most actions in their research. Researchers did, however, fully involved their research participants in the critical reflection process, where their responsibilities for different actions were separated. Research participants reflected on researchers being presenters who were observed and reflected through the evaluation by the research participants. Researchers planned, acted, observed and reflected for the purpose of their practice improvement, but researchers could not do this practice improvement cyclic process alone. Collaboratively, researchers did all this work together with their research participants and also with the help of their critical friend. According to McNiff and Whitehead (2009: 25), an action research report is judged based on how well it demonstrates an understanding of the processes involved in testing the validity of a new knowledge claim. This implies that this research work was judged by different people looking for specific things and using specific standards of judgement as critical friends, who made formative assessment on an ongoing basis, and gave a critical feedback about possible modifications. All this assessment was done for the purpose of changing and improving the manner researchers do their work. Change is usually easier to achieve when those affected by the change are involved. The extent to which one is able to change or improve on research is a question which this inquiry seek to address using action research methodology, as recommended by McNiff (2002: 10). This implies that research capacity development at work is indeed essential for realizing the university's academic status by showing excellence in research and teaching. This would help not only to sustain the development of the university but also development of individual academic lecturers whom researchers used as their research participants. Indeed, this process of reflectively evaluating and assessing the results over the whole action research process helped researchers to know exactly what to do in future and how to improve their practice, that is to say, the way research capacity development is to be better facilitated.

CONCLUSION

Fundamentally, the motive behind the conduct of this action research inquiry was to improve researchers own practice, that is, how they ought to do their work, for the purpose of effectiveness in facilitating research capacity development at the university. From the researchers' research participants' perspectives, about the manner they intend to do their work, their research participants' feedback helped researchers improve and change the way they conducted their own practices. Ultimately, improving their own practice firstly, benefited academic lecturers themselves, especially those who participated in this inquiry as research participants (TES) and secondly, the university research productivity status is hoped to change and improve in future. Consequently, researchers considered action research as a constructive inquiry, during which, researchers were able to construct their knowledge of specific issues through planning, acting, evaluating, refining and learning from the past and the present situation's experiences. Therefore, from this action research inquiry, it became evident that research productivity and research output in the university is very important, hence the Department of Higher Education and Training (DHET) annually urges all institutions to take the university research productivity and research output into consideration, in order to gain subsidy for their survival as universities. Having carried out this inquiry, researchers may now demonstrate the way they ought to facilitate research capacity development for the better. Researchers need to keep in mind that for the purpose of their own practice improvement, as action researchers, they need to, in cycles, plan first, act, observe, and reflect so as to improve any practice, and by returning, by reworking, by thinking through their action research journey within a community of practitioners on similar expeditions, they hope to continue to reform themselves and thus improve what they intend to do with the research participants on similar expeditions. Educationally, this action research inquiry demonstrates that researchers would not have done and completed their inquiry successfully alone. Researchers believe that voices in a community usually have a much stronger influence than a lonely voice. This implies that if this inquiry is not able to generalize in order to help other research practitioners create their own changes for their own practice improvement purposes in the way these researchers did their own practice improvement, then it would mean that these researchers failed to achieve their objectives. However, research-

ers do agree that action research is not a panacea for all ills and may not resolve all problems but provides a means for practitioners to more clearly understand their situations and formulate effective solutions to problems they face.

RECOMMENDATIONS

This inquiry has proved the fact that action research is indeed a systematic approach or investigation that enables researchers to find effective solution to the problem they were confronted with in their work environment.

The basic action research routine which provided the researchers with a simple yet powerful framework of planning, action, observation and reflection which enabled them to commence their activities in a straightforward manner and build greater detail into procedures as the action research process went on.

As a result, academics who were used as research participants thereafter understood what it would take for them to do the same procedure regarding their practice so that the university's research productivity could be enhanced.

Researchers were not in a position to say whether their actions had an impact, it was for research participants to judge for themselves.

The researchers' strength lies in how they changed the rules of their context by eventually changing their practice. This is why researchers found it necessary for them to share their research findings and recommendations with the relevant research participants at the university and also with other research practitioners.

Regarding the building of research capacity at the university the research participants believe that the researchers' operations must involve more academics when promoting a research culture amongst researchers' responsibilities, and academics must find time to engage in research regardless of too much teaching work that they complain about. This means that research must be considered as a must to do amongst their key performance areas.

Researchers must include programs that focus directly on active participation in research in order to increase the capacity of individual researchers and to build a critical mass of competent researchers, perhaps including 'incentives' as a reward to academics who prioritize research. Amongst the measures the university should consider for improving its research productivity are funding of postgraduate studies, the strengthening of postgraduate studies, staff development in certain areas of strength, encouraging interdisciplinary collaboration among colleagues, for example, building of networks for development purposes and mentoring of junior academic staff members.

Every academic institution ought to have the capacity to generate, acquire, adapt and apply modern knowledge if it is to take advantage of the opportunities and reduce the risks posed by the decline of research productivity. It goes without saying that researchers learned from their practical experience, and this is exactly what other practitioners must learn by doing something similar in their own context. For the purpose of changing and improving the way researchers facilitate research capacity development at the university, acting collectively with whom one uses as one's research participant, is a new knowledge and this new knowledge offered possibilities for their own practice improvement.

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