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### Publish or Perish: Impediments to Research Output and Publication

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ABSTRACT Research plays a crucial role in the development and dissemination of knowledge. Scholars as academics should conduct research, publish, and then convey their knowledge to students or apply what they have learned. Research Informed Teaching is not just about pedagogic research or research into higher education; it is about the complex interplay of the core activities of higher education linked by their mutual relationship to learning. There is, therefore, need to reforge the link between teaching–research. The aim of this study was to investigate factors that militate against research output and publication in institutions of higher learning in South Africa as well as suggest solutions with specific reference to one university. Using a desktop and content analysis approaches, the study established that lack of funding, lack of interest, poor research skills and lack of time due to high teacher-student ratios as well as heavy lecturing obligations were some of the impediments to research output and publication. The study, therefore, recommended that academics be given one day out for research per week, writing retreats to be conducted, mentoring of novice researchers, collaborative research, recognising excellence in teaching through research led initiatives and establishment of in- house journals.

#### INTRODUCTION

Research is a general term which covers all kinds of studies designed to find responses to worthwhile questions by means of a systematic and scientific approach. Blaxter et al. (1998) summarize research as involving "the careful investigation of issues of interest... with the aim of exploring existing understandings and/or seeking practical solutions to existing problems or issues". This summary of research encompasses three types of traditional scholarly work: scholarship of discovery, of integration and of application. Kyvik (2003) stresses that the relationship between research and teaching is seen to be a defining feature of a modern university and an academic identity. This suggests that research and writing are important to the continued scholarly development of academics.

According to Sulot et al. (2012), research aims at producing new and better goods and services and developing new and better ways of offering or distributing them. It also results in efficient use of present resources and waste products. Furthermore, McConnell (2002) asserts that university laboratories have become the scene of many technological breakthroughs, including hybrid seeds, satellite communications, genetic engineering, nuclear energy, and the internet, among others. The entire high tech industries such as computers and biotechnology

have their roots in major research universities according to McConnel (2000).

Research capability is measured against the number of Department of Higher Education accredited research outputs ascribed to an institution and the number of National Research Foundation-rated researchers associated with an institution (Sedakiwa 2008). In support (Hadjinicola and Soteriou 2005), claim that research productivity in academic institutions is reflected in the number and quality of articles published by the affiliated faculty. They further assert that research productivity evaluation has a significant impact on tenure decisions and promotions in general, salary raises, and mobility, especially in research-oriented schools.

The importance of research and publication in the growth and development of academics cannot be over emphasized (Anunobi and Emerole 2008). Research and publication is needed to improve problem solving and decision-making in the workplace, to make professional practitioners critical consumers of the research literature, and to better equip librarians to provide optimal information services to researchers in other field (Powell and Mika 2002; Anunobi and Emerole 2008). Furthermore, research has always been the main approach to problem solving by all categories of professionals right from the ancient time (Boaduo and Babitseng 2007).

A study conducted by Sulot et al. (2012) concluded that the staff qualifications, research environment, funding, and time available to staff

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could predict significantly the research output by the university staff. The study therefore recommended that universities and the government must improve the research environment, funding, time availability and hire qualified staff in order to improve research output in the universities

## BENEFITS OF RESEARCH AND PUBLICATION

According to Sulot et al. (2012), the importance of research to a University cannot be overemphasized. They postulate that research leads to generation of new knowledge, engenders innovations, enhances the quality of teaching staff, increases an institution's reputation and its economic status. In the same vein, Ochai and Nedosa (1998) affirm that academics are motivated to engage in research for various reasons. They advanced that research is motivated by: eagerness or enthusiasm to publish; presence of enabling environment and self-perception of individual with respect to his role. In their study, Sulot et al. (2012) concluded that research plays a key role in the development and dissemination of knowledge and that it leads to the development of new knowledge as well as contributing to existing knowledge. Furthermore, it also provides an important background for academic staff to become successful lecturers. According to Lertputtarak, research enhances the quality of teaching effectiveness and reinforces many of the skills that are required for effective teaching (Lertputtarak 2008). It is believed that lecturers actively involved in research activities are usually in touch with the latest developments in their field and are more likely to be on the forefront of their discipline, compared to the research dormant lecturers (Sulot et al. 2012). Further, several academic and research institutions' reward system base the promotion criterion on quantity and quality of research productivity. A study conducted by Perry et al. (2000) showed that academic staff viewed successful research as an important factor in evaluation, and believed that publications are an essential requirement for promotions.

The notion that academics are under a great deal of pressure to publish cannot be overemphasized. According to Hernon and Schwartz (2002) and Lee and Boud (2003), decisions on crucial issues of hiring, tenure and promotion

are largely determined by publication rates and faculty scholarly performance has traditionally been assessed by "straight counts" of publications. These publication rates are used by institutions as an indicator of the institution's performance and are important criteria in securing external funding from government and other sources (Kyvik 2003). Failure to publish within the expected norms established by a college or university can result in a faculty member's termination (Sedikadiwa 2008). He further postulates that publishing is important for other reasons as well such as: offering such perks as visibility, advancement in salary, course releases and a unique and important kind of self-education.

## RESEARCH OUTPUT AND PUBLICATION IN SOUTH AFRICA

South Africa's research output exceeds that of the Southern African Region as a whole and represents around 64% of all research conducted in South Africa (Sayed and Soudien 2005). They further assert that the priorities of the National Plan for Higher Education (formulated in 2001) include increased research output and producing more papers and publications. In 2005, a new funding system was introduced that led to considerable changes in the financing of research work. The financial value of every publication unit was increased, resulting in close ties between research output and the reward.

Research output in South Africa (SA) is measured in terms of a fixed standard, based on the number of permanent teaching and research staff employed by every institution. But all institutions aren't expected to produce the same levels of research. Some of SA's former technikons and some of our previously disadvantaged universities have already been criticised for their inadequate research output (Centre for Higher Education Transformation (CHET) 2010). The State rewards South African Universities directly for the number of papers published in accredited publications by their staff. Papers are subsidised if published in certain accredited journals. The number of research papers produced by SA universities remained stable until 2003, after which it increased significantly until 2006, when the system reached a peak of 7 400 papers. CHET reports that there's evidence indicating universities use incentives to increase staff contribuPUBLISH OR PERISH 59

tions and to encourage postgraduate and visiting students to increase their research output. There was also an increase in the number of local accredited journals. One possible explanation for that is the higher monetary compensation writers receive says (CHET 2010). Research in the higher education sector is dominated by five universities: Cape Town, Witwatersrand, Pretoria, KwaZulu-Natal and Stellenbosch. HEM says they produce 60% of all research and postgraduate output (CHET 2010).

#### LITERATURE ON IMPEDIMENTS TO RESEARCH OUTPUT AND PUBLICATION

The identification of factors promoting or impeding research productivity has been the focus of few studies in other disciplines. For example, a study concerning research publications at an institution of higher learning showed that as faculty size increases, both the total number of publications and the per-faculty number of publications increase (Hadjinicola and Soteriou 2005). Mitchell and Rebne (1995) found that moderate amounts of consulting and teaching lead to an increase of academic research productivity. More specifically, they found that as much as four hours per week of consulting and as much as eight hours per week of teaching facilitate research productivity. Seniority has also been shown to be a factor leading to higher research productivity.

Hancock et al. (1998) surveyed researchers who published in Management Science and Operations Research, during the period 1985–1989. In this study, researchers were classified into two groups, those with high publication rate (published more than thirteen articles) and those with lower publication rate (published less than seven articles. They found that prolific researchers spend 32 percent less time on teaching-related activities and that the research productivity of such prolific researchers increases after receiving tenure. Furthermore, respondents viewed administrative, committee, and teaching duties as the primary impediments to research productivity.

Among the reasons for poor research attitude by practitioners according to Powell (1997) is that they "fail to understand the purpose of research, its limitation or how it might be effec-

tively used". Another important factor that emerged from his study is time. It was noted that practitioners are always engaged in their daily routine than doing research. Sedikadiwa (2005) included lack of funds as part of encumbrances to research and publication. Moahi (2007) in addition to indicating lack of fund also endorsed lack of time and inadequate research skill as part of the hindrances.

Organizational factors affecting research performance are manifold, including funding and other resources, unit or group size, student-staff ratio, diversity of tasks, diversity of people, autonomy of action, leadership, climate or culture, and communication (Auranen 2007). Of these, communication has often proved to be essential factor in successful research. Especially internal communication in groups and units is vital. In their classical study, Pelz and Andrews in Auranen (2007) described eight creative tensions, under which they saw researchers working:

- science vs. application
- independence vs. interaction
- age and specialization vs. diversity
- individual vs. organization
- influence given vs. received
- similarity vs. dissimilarity of peoples' ideas
- broad vs. narrow approach of research
- intellectual combativeness vs. collaboration.

Their large study included researchers and engineers from industrial and government laboratories as well as universities in the United States, representing mainly natural sciences and engineering. It emerged that the most effective researchers worked in environments that allowed them to balance above-mentioned tensions.

Another classical study on research organizations and performance is an international comparative study initiated by Unesco (Auranen 2007), where effectiveness of research units in university and industry sectors in six European countries were analyzed. Among the various determinants of effectiveness, position of the researcher, quality of leadership, size and age of the group, communication, and morale and motivation were linked to effectiveness. Possibility for collaboration in research is a factor that is partly dependent on an organization a researcher is based in. An organization with good collaboration contacts can be an asset for

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its researchers. Empirical studies support the conception, that research collaboration enhances productivity, at least in science systems of the developed countries (Lee and Bozeman 2005; Auranen 2007; Onohwakpor and Tiemo 2006).

A study by Het (2006) found that many academics lack confidence in their writing ability. He further asserts that they may feel that the quality of their work is not worthy of publication or they may believe that they have nothing new or insightful to say. A similar study by Lee and Boud (2003) found that writing actually generated fear and anxiety for a significant number of academics. Furthermore, a perceived lack of skill was a barrier to publication writing as reported by McGrail et al. (2006). Many academics fail to recognize that writing is not a mechanical skills but rather it is a process that clarifies and explores relationships between ideas and can be improved by watching others, collecting pointers from colleagues about better ways to write and by practicing writing (Kyvik 2003)

# THE ROLE OF THE ACADEMIC DEVELOPMENT CONSTLTANT IN IMPROVING RESEARCH OUTPUT AND PUBLICATION

The Centre for Learning Teaching and Development (CLTD) research unit of the University under study is aware of its role with due regard to research. As stipulated in the vision and mission of the University the unit is mandated to fulfill one of its three core functions namely research.

#### MENTORING OF NOVICE RESEARCHERS

The Centre has identified a need to provide targeted small group mentoring to help researchers to adapt the generic principles for their context and submit work that have a high chance of publication. We believe that one strategy that probably results in increasing research outputs is mentoring. According to Durham University (2012), mentoring means that the mentor and the mentee develop a close relationship throughout the research process from proposal writing to paper writing and subsequently to publication of the paper. The centre has put this technique into practice and it seems to work. It is

hoped that this program will contribute to the research output of the university.

Mentors support the individual academics to develop and maintain their research profile and activities. The centre thus regards mentoring as a developmental process. The mentoring process usually takes place through regular meetings, with informal contact between meetings. There is no bureaucracy or heavy paperwork; the onus is on mentor and mentee to meet regularly, rather than the centre having to 'police' the system. This therefore requires commitment to the process on the parts of both mentors and mentees. Carrying out research can be a very lonely process. The primary role of our research mentors is therefore to provide encouragement for, and show an interest in, their mentee's research plans and activities. It is very easy for new academics to spend all, or the vast majority, of their time carrying out teaching (and sometimes administration) related activities, which often involve tight deadlines and prompt feedback. Research often tends to take second place. Research mentors therefore help new staff members with appropriate time planning and management; suggesting time deadlines for achieving agreed targets and checking that these

The length of time over which mentoring should be provided is not prescribed, as this will depend on the progress of the particular member of staff. In general, however, appropriate research mentoring should be provided for at least two or three years.

According to Durham University (2012), mentoring is likely to be directed towards establishing the individual's research by:

- Offering support and encouragement
- Drawing on the mentor's own expertise to help the researcher to develop a personal research strategy, plan and targets
- Helping the researcher to monitor the achievement of targets and outcomes
- Giving constructive feedback on, and acting as a sounding board to explore ideas and issues arising from, the research being carried out
- Reading and commenting on draft papers for publication and offering advice and guidance on suitable journals in which to publish
- Providing guidance on funding opportunities and (as appropriate) collaborators

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- Commenting on draft grant applications
- Providing guidance on supervising research students and postdocs.
- Demystifying the 'rules of the game' what is worth doing and when, where and how to network, developing a career plan, understanding promotion criteria and markers of esteem for national and international standing in the discipline, which sets out an example of a framework for research leadership, which can be tailored to individual faculty or discipline circumstances), and so on.

#### RESEARCH TRAINING

The unit offers generic writing workshops that have proved to be effective in inspiring researchers to improve their publication and provided them with strategies to start writing. The seminar workshops aim to provide faculty researchers with the technical-knowhow and guidelines for writing and publishing a research output in a peer-reviewed journal. These seminar-workshop give special attention to problems and challenges related to publishing from integrative (that is, interdisciplinary and multidisciplinary) landscape research. Identifying and developing research problems, raising research issues and questions, transforming them into research objectives, developing appropriate research methodology are the main focus of these workshops. As part of its ongoing work, CLTD Research Unit also host a number of research workshops which are conducted by research specialists from other universities. Such workshops are organised on issues such as abstract writing, theoretical framework, methods such as conceptual analysis, deconstructive critic and narrative. Furthermore, workshops on methodology, supervision, writing a manuscript, publication techniques, collaborative techniques, coaching and mentoring of post graduate studies are also conducted. The research unit of CLTD offers two workshops per semester and the beneficiaries of all the workshops are the faculty members from different disciplines.

#### **INNOVATION FUND**

A valuable support system for CLTD staff and postgraduate students is the Innovation Fund. The purpose of the Innovation Fund is to create

a research culture, to empower staff and students to be engaged in research and to address equity in research. To achieve funding objective, the research unit submits proposals to research institutes while simultaneously, CLTD members and other University academics are encouraged to conduct research and attend conferences that reflect learning and teaching in their respective departments (CLTD 2010).

#### RESEARCH COLLABORATION

CLTD Research unit strengthens institutional, national and international research collaborative ties between the university and other universities. In this case research collaboration' could be defined as the working together of researchers to achieve the common goal of producing new scientific knowledge (CLTD 2010). Implicit in this enthusiasm for research collaboration and in policies aimed at fostering it is an assumption co-authored publications will emerge, general advice and insights to active participation in specific piece of research will strengthened and in the process researchers will share resources. In other cases, researchers from different organisations are encouraged to collaborate by visiting each other and by so doing a desire to obtain cross-fertilisation across disciplines will increase.

#### INFORMAL COMMUNICATION

CLTD Research Unit encourages informal communication on research among academics and students in all faculties. A central aim of this research Unit is to stimulate academic debate and increase interest in discourses pertaining to research. The intention is to increase research commitment and to help foster relationship among university members of staff. The closer faculties work together, the more research output will be experienced. The more academics and students engage in informal communication, the more the exchange of ideas on what experiments to do next, what hypotheses to test, what new instrumentation to build, how to relate their latest experimental results to theoretical models, and so on will be enhanced. In these and other tasks, members of a research group will not only talk among themselves but will also seek advice and help from others (and will often offer information in return). This kind of 62 NEWMAN WADESANGO

informal communication leads to increasing commitment to co-operate, on many other issues relating to learning and teaching the core business of CLTD (CLTD 2010).

#### **CONCLUSION**

It was established in this study that there are many factors that militate against research output and publication. Some of the factors that emerged were: many academics lack confidence in their writing ability, lack of funding and lack of interest for instance most of the academics fail to understand the purpose of research, its limitation or how it might be effectively used. Furthermore, respondents viewed administrative, committee, and teaching duties as the primary impediments to research productivity. Another important factor that emerged from his study is time. It was noted that practitioners are always engaged in their daily routine than doing research. The study also established that there are measures that can be put in place in an endeavour to promote research output and publication such as: mentoring by established researchers, training workshops, establishing collaborative research areas, providing funding, allowing researchers time out for research and recognising excellence in teaching through research led initiatives.

#### RECOMMENDATIONS

The study recommends the following:

- Establishment of in house and accredited journals
- Writing retreats
- Recognising excellence in teaching through research led initiatives

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