Article

A faculty development strategy among academics to promote the scholarship of research

J M Frantz

Department of Physiotherapy, University of the Western Cape
J M Frantz, PhD, Professor

Corresponding author: *J M Frantz (jfrantz@uwc.ac.za)*

Background. Identifying strategies to promote the scholarship of research among health professionals is essential. The published evidence on which to ground this advice is weak.
Aim. This paper presents an argument for using participatory action research as a powerful methodology for academic development strategies that focus on writing for publication, a key component of research capacity development.
Method. Participatory action research was used and participants were all full-time academics in a department in a Faculty of Community and Health Sciences. Various strategies were adopted to promote the scholarship of research in this department, depending on the experience of the academic and at which stage they were in their academic careers.
Results. Following the intervention strategies the participants were able to use the skills obtained in various activities relating to academia, and most of them were successful in publishing their work.
Conclusion. It is evident that through the process of participatory action research, participants are able to identify their needs, design an action plan, implement the action plan and reflect on the progress made during the process. Creating a conducive environment with resource and human support assisted in creating an environment that promoted the scholarship of research.

AJHPE 2012;4(2):118-122. DOI:10.7196/AJHPE.177

Research capacity development is a global issue that faces all health professionals as it aims to enhance a profession through providing evidence for intervention strategies and thus assist in improving the quality of the healthcare delivered. However, when it comes to identifying strategies to promote the scholarship of research among health professionals, the published evidence on which to ground this advice is admittedly weak. Research capacity development is about producing ability through creating the necessary infrastructure, environment, culture and credibility to enable individuals and departments to undertake these activities.[1] Many health professional academics lack research qualifications and experience, as the majority are clinicians moving into academia. Therefore, it is essential for new academics to actively engage in the process of creating a research portfolio.

In a systematic review of literature on the promotion of research productivity among academics,[2] it was found that departments needed an overall approach that translated into clear strategies which were well managed and evaluated. The authors further highlighted three main conclusions from their study:

- Capacity building has been identified as important for enhancing the quality of professional education and the calibre of health professionals, which ultimately impacts on patient care.
- Very little is reported regarding the processes and outcomes involved in research capacity building initiatives.
- Academic departments need to adopt a clear overarching approach and well-defined strategies, and must ensure effective communication, leadership and managerial commitment regardless of the specific interventions taken to develop capacity.

This paper presents an argument for using participatory action research (PAR) as a powerful methodology for academic development strategies with a focus on writing for publication, a key component of research capacity development. Academic development programmes in many academic institutions may be optional or compulsory and participation may be part of a formal review system allowing promotional opportunities for academics. Such systems are becoming more commonplace as there is an increased call for accountability and performance from academics. Academic development has been operationalised as 'an organised set of activities supporting growth toward competence in various dimensions of an academic's role'.[3] Meeting the needs of new academics remains a challenge. They may find it difficult to strike a balance between clinical supervision, teaching, research and administration. The literature indicates that academic development programmes focus primarily on improving teaching skills and research skills and facilitating professional development.[4] The complex demands placed on university teachers, and the changing roles and work tasks related to these demands, are commonly known. Many academics in health professions education have not received formal training in areas such as teaching, research and clinical supervision but skills have been learned over time through practice.

According to Kolb[5] 'learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it.' The use of PAR in this study has been defined as 'research which involves all relevant parties in actively examining together current action (which they experience as problematic) to change and improve it. PAR is not just research which, it is hoped, will be followed by action. It is action which is researched, changed and re-researched within the research process by participants. It aims to be active co-research, by and for those to be helped. It can also not be used by one group of people to get another group of people to do what is thought to be best for them – whether to implement a central policy or an organisational or a service change. Instead, it tries to be a genuinely democratic or non-coercive process whereby those to be helped, determine the purposes and outcomes of their own inquiry.'[6] Action research is therefore a process in which participants examine their own practice systematically and carefully, using the techniques of research.[7] In academia, the idea is that academics learn to publish by incorporating the disciplined inquiry that is characteristic of action research, i.e. planning a course of action to address challenges currently experienced, enacting their plans based on their own time frames, observing the effects, and reflecting on the results for the purpose of informing future practice. PAR can be carried out within the context of the academic's environment. The aim is that the action research process will help the academic to improve practice. Within all the definitions of action research, there are four basic themes that emerge, which include: the empowerment of participants; collaboration through participation; acquisition of knowledge; and social change. Researchers have highlighted that 'to become scholars, academics must develop competencies such as strategies and skills, self-reflection, and support circles'.[8] By conducting action research, we aim to structure opportunities where academics can continuously reflect on where they are in the process within the necessary support circles. This paper describes the process of action research in enhancing research capacity among health professionals as part of an academic development strategy in a specific department.

Methods

Research setting

The institution identified in this study has an institutional operational plan that expects faculties, departments and individuals to have goals in the following areas relating to research:

- increase publication in accredited journals (at least 1.5 articles per academic per year)
- increase postgraduate qualifications of academics (75% should have doctorate degrees by 2014)
- increase the intake of postgraduate student numbers to 50%.

The Faculty of Community and Health Sciences at the University of the Western Cape has adopted these institutional goals for the academic departments and individual academics. Within the physiotherapy department in the faculty, it was decided that each faculty member should pursue a higher degree (MSc or PhD) and contribute to the body of research knowledge through publication.

Research design

This study uses PAR, as it was identified as appropriate to build a research culture and to develop research capacity within our department.

Participants

Participants involved in the study were all full-time academics in the physiotherapy department in the Faculty of Community and Health Sciences. Of the 10 academics, four were full-time contract staff and the remaining six were full-time permanent staff. Three of the participating academics were new, with less than three years' experience, and four had between 3 and 10 years' experience. Three academics who acted as mentors had more than 10 years' experience. The group had a range of 5 - 15 years of clinical experience.

Strategy

Within this participatory approach, the department adopted various strategies, such as the identification of a research development officer from among the senior staff, bi-weekly research development meetings, study leave rotations, a research day per week for staff, and writing workshops. One of the key strategies employed was dedicated writing interventions for specific groups (participants were grouped based on research experience) in the department, which will be used as the key example in this paper. A summary of the participants for each stage of the intervention is presented in Table 1.

The process involved the phases of action research as indicated in Table 2. Separate group discussions were held by a senior academic with each group and the needs of each group identified. The aims of the research development strategy and envisaged outcomes were also discussed.

During phase 1 a needs analysis of all academics in the department was conducted through informal discussions, followed by designed interventions and evaluation of the impact of the interventions. Following the needs analysis, the department embarked on faculty development retreats with three workshops conducted during the June recess period:

- writing a narrative review
- how to write a systematic review
- writing a funding proposal.

Each workshop was carefully designed and organised by me and a work file organised for each participant. Each workshop began with an introduction to the three days and the envisaged outcome. Following the introduction the participants were given specific tasks appropriate for writing a publication and a time allocation to work towards completing individual tasks. Participants also received workbooks containing the relevant literature for each activity of the workshop. At the end of each session, participants were expected to share their work with a critical reader who could be a peer or senior academic and who provided the participant with feedback. Senior academics in the department supplied the framework for support and academic leadership to the more junior academics.

The impact of this intervention was assessed in several ways. Prior to the workshop, participants had completed a brief questionnaire describing their goals with regard to writing for publication. Immediately after the

Table 1. Participants for each workshop

Variables	How to write a narrative review	How to write a systematic review?	Writing for funding proposals
Participants	3	4	3
Mentors	3	3	0
Gender			
Male	1	2	0
Female	2	2	3
Academic status			
Contract lecturer	3	1	
Lecturer		3	
Senior lecturer			1
Associate Professor			2
Years in academia			
<3 years	3		
3 - 5 years		3	
6 - 10 years		1	1
>10 years			2
Educational level			
Busy with masters	2		
MSc	1		
Busy with PhD		4	
PhD			3
Publications			
New author (<3)	3		
Novice author (3 - 10)		4	
Author with limited experience (11 - 20)			1 2
Established author (>20 publications)			

workshop, the participants discussed and shared their perceptions of the workshop's format and usefulness. At three-monthly intervals, academics were asked to report on their progress and indicate any assistance needed. In writing this paper, quotes from the various sessions highlight the impact of the academic development programme at the various stages.

Results and discussion

The stages of the action research model are used to present the process of the academic development model and the impact. The faculty development approach and environmental support that accompanied each stage are outlined.

Planning

Professional development planning is guided at institutional, departmental and individual level. At the planning stage of the faculty development cycle, academics were asked to identify their needs with regard to writing for publication to meet the institutional requirement of 1.5 articles per year. Responses in identifying the needs were centred around personal needs:

'I have no idea where to start writing an article.'

'What information do I have to write an article?'

'How can this impact on my PhD?'

Faculty development approach. At this stage some senior academics were identified as mentors to help guide participating academics to identify data for a possible article. The process involved assisting academics in highlighting ideas and data from which to choose information for an article. In addition, the research development officer in the department ensured that the article was within the scope of the academic's current work and not an additional academic burden. During this planning process the allocated mentor also identified the existing resources available to meet the mentee's needs. In addition, by acting as mentors the senior academics played an active role in promoting the visibility and importance of research in the department.

Environmental support. Creating a climate that emphasises innovation includes providing resources for workshops and other vehicles (Google docs, social networks) for sharing ideas and exchanging information on effectiveness.[9] Support was provided by allocating dedicated research time for each academic on a weekly basis, and using third-stream income to organise writing workshops and ensuring that all staff have laptops to work off-site.

Acting

All participating academics were provided with the opportunity to develop research skills through writing workshops and bi-weekly research meetings. Academics were also held accountable for the use of dedicated research time to ensure that all staff had tangible outputs at the end of the year. The involvement of the participating academics at different phases allowed them to implement the information learnt during the workshop to enhance their own personal academic development. All information gained during the writing workshops and meetings became the responsibility of the individual to carry to completion. Success was dependent on the individual's drive and motivation, support from the surrounding environment, and the drive to carry the process through.

'I am able to use the information gained during this process to supervise my students more effectively.'

'Finding the time to complete this article is going to be a challenge.'

'Drafting this funding proposal is great to have a draft as opportunities arise.'

Faculty development approach. In the Department of Physiotherapy, academic development activities were geared towards providing ongoing support to ensure that each academic was able to keep the cycle going. The support strategies consisted of continued support by the mentors and monthly follow-up meetings with the departmental research development officer. The department continued with the use of critical readers for novice authors to share their work and obtain critical feedback. In addition, the bi-weekly research meetings were used to encourage and support new academics.

Environmental support. The existence of an in-house faculty journal encouraged new academics to submit their work for peer review and publication.

Reflecting

Within the PAR cycle, reflection occurs when academics consider information on the effects of their past practice in terms of its implications for future practice. Developmental gain depends on the quality and depth of this reflection, as it generates the next cycle of learning in defining a need to

Table 2. The academic development process

	Who?	How?	What?	Outcome
Phase 1 Identifying the problem	All participants per group	Informal discussions	Group 1: Busy with master's degree, need to write a good literature review Group 2: Busy with PhD, need to conduct a systematic review as part of PhD objectives Group 3: PhD holders need to obtain research funds for bigger project	Three different goals and needs according to stage in academic development
Phase 2 Action plan: Planning	Group 1: Young academics Group 2: Academics registered for PhD Group 3: Senior academics	Group discussions relating to current status and needs	Group 1: Writing retreat with mentors to guide Group 2: Writing retreat with supervisors to guide Group 3: Writing retreat with several guidelines of funding agencies	Clear objectives defined for each group Group1: How to write a narrative review linked to their master's research topic Group 2: How to conduct a systematic review linked to their PhD topic Group 3: Writing for funding proposals linked to promotional status of each academic
Phase 3 Taking action: Acting	All participants in separate groups	Group meetings to decide upon time, dates and venues suitable for the group Co-ordinator organised funding and relevant literature for each session	Clear programme designed for each group. Information needed prior to workshop identified and participants engaged in discussion to what they needed	All participants were involved in decision-making process and were thus expected to reflect on the stage of the growth they are in. The participants were required to assess the status of their development and ensure that they would be at a certain level at the time of the workshops
Phase 4 Evaluating: Reflecting	All participants in separate groups	One-on-one sessions with mentors and group discussions	Groups reflected on the process and the achievements as individuals	Three funding proposals were submitted Three articles were published from the literature review group in a peer-reviewed journal Two systematic reviews were submitted, of which one was published Two systematic reviews in progress
Phase 5 Specifying learning: Observing the effects	Participants and mentors	Focus group discussions	Applying the information learnt by participants in their supervision of students Mentors learnt the process of feedback and how to deal with it Participants had written articles and funding proposals	Knowledge translation from input to action

address or a general direction to pursue.[9] The academics primarily used this new information to guide their postgraduate studies and write their research chapters. The three new academics were able to submit their articles for consideration in a peer-reviewed internal faculty journal and have since started new research projects and articles.

'Submitting my first article was both exciting and scary … what if it's not good enough?'

'Getting feedback during the process prepared me for the process of reviewer feedback.'

'How will I cope with rejection?'

Faculty developmental approach. Reflecting on the process using the three reflective directions, i.e. reflection-on-action, reflection-in-action and reflection-for-action, is a characteristic of PAR.[10] During the workshops reflection-in-action was applied as participants were expected to write a section of the article, obtain feedback from a critical reader, reflect on the feedback and make the necessary changes before proceeding to the next stage. In the period after the workshop, reflection-on-action was used by participants who were asked to reflect on the skills and knowledge obtained during the workshops and to apply it in their academic writing. In addition, as part of the research development in the department, the participants

were expected to act as critical readers for other authors and also submit their work for further scrutiny among colleagues in the department. Participants were asked to reflect on the phase of how they could use the knowledge and skills gained in their own professional development and the development of others. Therefore, the phase of reflection-for-action was incorporated.

Environmental support. There is a culture of reflection on research in the department, thereby creating the opportunity for novice authors to enter into discussions on writing for publication. In addition, the research development officer encourages the participants via e-mail to continuously reflect on the process and challenges they are experiencing in completing the task.

Observing

As the process continued, the academics learnt of their effectiveness through gathering data about impact. At a very basic level, they could judge this by simply looking at the comments from the critical readers as they went through the process. More information was gathered by submitting to a journal and getting reviewer feedback. The external review could be compared with previous feedback obtained from the critical readers and this new understanding can influence future articles. It is important for academics to continuously collect systematic and meaningful data to modify practice in the future.

'I've submitted my article … do I have the confidence to start another one [laugh]?'

'Rejection … not easy. Will I start again?'

'The process was good, mentoring and encouragement from peers kept my momentum going.'

Faculty development approach. At this point mentors needed to encourage academics to start the publication of new articles. As the participants complete their master's degrees, they will be given the opportunity to supervise undergraduate research projects which can translate into publications – as the outcome for these projects is an article. This PAR process assisted in the translation of knowledge into action.

Environmental support. Doing research with more experienced authors enhanced growth and professional development. Mentors in the department continue to assist in encouraging publications from both formal degree programmes and ongoing academic activities, such as undergraduate research. Monitoring of research outputs and celebrating achievements can assist in promoting continuing publication.

Conclusion

A research capacity development strategy must use academics' needs as a departure point for designing activities that support them throughout the process. This paper highlights the process of engaging all academics in creating a research culture in a department and ensuring that the participants see the relevance of engaging in research. At the time of publication, within the narrative review group, all three participants had published articles in a peer-reviewed faculty journal. The systematic review participants had published one article in an accredited journal and two articles have been submitted to peer-reviewed journals. From the funding proposal group two proposals have been submitted to funders and to date one was successful in obtaining funding. Investing in research capacity development strategies for academics should be high on the agenda of higher education institutions.

References

1. D'Auria D. Building a research capacity for occupational medicine. Occup Med 2000; 50(2):79.
2. Segrott J, McIvor M, Green, B. Challenges and strategies in developing nursing research capacity: A review of the literature. Int J Nurs Stud 2006;43:637-651. [http://dx.doi.org/10.1016/j.ijnurstu.2005.07.011]
3. Suplee P, Gardner M. Fostering a smooth transition to the faculty role. J Cont Educ Nurs 2009;40(11):514-520. [http://dx.doi.org/10.10.3928/00220124-20091023-09]
4. Wilkerson L, Irby D. Strategies for improving teaching practices: A comprehensive approach to faculty development. Acad Med 1998;73(4):387-396.
5. Kolb D. Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, New Jersey: Prentice Hall, 1984.
6. Wadsworth Y. What is Participatory Action Research? Action Research International. Paper 2. 1998. Available online at: http://www.uq.net.au/action_research/ari/p-ywadsworth98.html (accessed 1 November 2012).
7. Watts H. When teachers are researchers, teaching improves. J Staff Dev 1985;6(2): 118-127.
8. Heinrich E, Milne J, Ramsay A, Morrison D. Recommendations for the use of e-tools for improvements around assignment marking quality. Assess & Eval Higher Educ 2009;34(4):469-479.
9. Chism N. Using a framework to engage faculty in instructional technologies. Educause Quarterly 2004:39-45.
10. Schön D. The Reflective Practitioner. Aldershot: Ashgate Publishing Ltd, 1991.