Mentoring in higher education to improve research output: an ethnographic case study

First submission: 6 August 2008

Acceptance: 8 May 2009

This article reports on the implementation of a model of mentoring in higher education to improve research output. A number of mentoring models were analysed before implementing a new model for research mentoring. The ethnographic case study reports on the mentor's observation of different influences on the mentoring process after having implemented the model for a few months. The study revealed that the implementation of the model was influenced by the university context in which it took place, the dynamics of the three groups that functioned as communities of practice, and the individual dispositions of the participants.

Hoëronderwysmentorskap ter verbetering van navorsingsuitsette: 'n etnografiese gevallestudie

Hierdie artikel rapporteer die implementering van 'n model om navorsing in hoëronderwys te mentor om navorsingsuitsette te verbeter. 'n Aantal mentorskapmodelle is krities ontleed en 'n nuwe model is geïmplementeer. Die etnografiese gevallestudie rapporteer die mentor se observasie van verskillende invloede op die mentorproses nadat die model vir 'n paar maande geïmplementeer is. Die studie het aangetoon dat die model beïnvloed word deur die universiteitskonteks waarin dit plaasvind, die dinamika binne die drie groepe wat as praktykgemeenskappe funksioneer en die individuele ingesteldhede van deelnemers.

Prof S Schulze, Dept of Further Teacher Education, University of South Africa, P O Box 392, Unisa 0003; E-mail: schuls@unisa.ac.za



Acta Academica 2009 41 (4): 138-158 ISSN 0587-2405 © UV/UFS https://www.nfs.ac.za/ActaAcademica



Through research the effectiveness of operational activities can be enhanced, and job satisfaction will be increased (Focus. Staff newsletter April 2008:11).

t the launch of a Professional and Administrative Research Group in March 2008 at the University of South Africa (Unisa), staff members were urged to contribute to research output of the university and be trained to do so.

According to the research policy of Unisa where this study was undertaken, academics are expected to publish at least the following number of research articles over a period of five years: professors, seven; associate professors, six; senior lecturers, five, and so on. However, an analysis of the research outputs of three related departments at the institution indicates that the majority of academics do not meet expectations. Only a limited number of employees publish articles. Press statements confirm that the research output at Unisa is relatively low (Rademeyer 2006: 5), that the majority of researchers who publish are older than 50, and that the general quality of journals (research reports) published in South Africa is poor (Brits 2006: 6).

In view of the above, Unisa management designed new research policies and plans, and tabled a document entitled Agenda for transformation 2015. One of the objectives of the institutional research plan is to develop women, black and younger researchers to the point where they would account for not less than 30% of the total crop of researchers at Unisa by 2015 (Unisa 2007a: 6). Objectives listed in the Unisa (Unisa 2007b: 1) women in research initiative document include: "to facilitate the transfer of skills between developing and proven women researchers" and "to develop strategies that will grow and nurture a new generation of women researchers of good standing".

In a report by the School for Graduate Studies, the lack of both an efficient mentoring system and a nurturing environment for developing researchers is identified as a factor militating against delivering quality research by this group. The Unisa (2006b) research policy also indicates that experienced researchers should regard it as their duty to mentor novices, in particular young, black and female researchers. Unisa therefore gave a number of presentations to senior academics and managers on the benefits of mentoring, the roles of

mentors and *protégés*, mentoring implementation, and guidelines for successful mentoring.

In view of the above, a model for mentoring of research novices has been designed to improve the research quality and output of novices. This article aims to describe one mentor's (the author's) experiences of influences that impacted on the implementation of the model. To this end, the following issues are presented: a definition of mentoring; an explanation of situated learning as the theoretical framework of the study; an analysis of the advantages and disadvantages of various mentoring models, and a description of the mentor's initial experiences of the mentoring process.

1. Mentoring

The literature contains a vast array of definitions of mentoring. Blackwell (Johnson 2007: 19) defines mentoring as a process whereby persons of superior rank and prestige instruct, guide and facilitate the intellectual and/or career development of *protégés*. In an earlier definition, Levinson added age to the definition by describing the mentoring relationship as a close non-familial relationship between a younger person (between the ages of 28 and 35), the *protégé*, and an adult (10 to 15 years the *protégé*'s senior) (Perna *et al* 1995: 34). Both these definitions are problematic in terms of this research since many relatively experienced and senior academics, some of whom are managers, are novice researchers.

Steinmann (2006: 3) defines mentoring as a relationship that involves a more experienced professional (in a particular field) who "acts as an advisor, guide and role model for a less experienced person [the *protégé*]". Another useful definition is that of Levinson (Johnson 2007: 6) who prefers to define the mentoring relationship by its character and function: it is characterised by commitment and passion (Johnson 2007: 24) aimed at "significantly influencing the *protégé* in the realisation of potential" (Steinmann 2006: 3).

Erikson's development theory partly explains the willingness of competent researchers to mentor novices. When mentoring, the mentor turns from the self to others and thus moves towards a healthy resolution of the seventh stage of psychosocial development. Erikson refers to this outward focus as generativity, which opposes self-absorption and stagnation (*About.com.Psychology* 2009: 1). During this stage, adults "create and nurture things that will outlast them, often by [...] creating a positive change that benefits other people. Success leads to feelings of usefulness and accomplishment [...]". Thus, the novice receives support and guidance to become a competent researcher. The mentoring model used in this study to facilitate the acquisition of research knowledge and skills has been influenced by situated learning theory.

2. Situated learning theory

Situated learning theory is based on two principles: learning that occurs as a function of the context, culture and activity in which it takes place, and social activity as a critical component of situated learning. As such they are useful for understanding the learning of novice researchers when they are mentored by means of the model used in this study (Wenger 2000).

Two concepts are important in Lave & Wenger's (1991) theory of situated learning, namely community of practice (CoP) and legitimate peripheral participation. A CoP is the context in which an individual develops the practices and identities appropriate to that community. Wenger (1998: 73) identifies three elements that define a CoP: mutual engagement of participants in actions, the meanings of which they negotiate with one another; negotiation of a joint enterprise, which creates relations of mutual accountability among participants, and development of a shared repertoire, including language, conventions and understandings. Within the CoP, learning is usually unintentional rather than deliberate (Lave 2008: 1).

Novices are legitimate peripheral participants in the practices of their communities. Practice is defined as "undertaking or engaging fully in a task, job or profession" (Handley *et al* 2006: 644). New members are allowed to participate in the practices of the community (the curriculum) in order to learn. As they acquire the knowledge and skills of the practice, they proceed to more key participation and

ultimately assume the role of experts (Fenwick 2001: 41-6). However, not all learners aspire to or acquire full participation (Handley *et al* 2006: 644).

Lave & Wenger (1991) view learning as a social process, where identity, membership ("we need to belong in order to learn") and interpersonal relations are significant. As newcomers participate, their identities develop according to how they experience themselves as well as the feedback and acceptance they receive from others (Wenger 1998: 149). Although participation entails the possibility of recognition and the ability to negotiate meaning, it does not necessarily result in collaboration, equality or respect. Hodges (1998) points out that practice and identity are continually informed and reconstructed, and that participation can lead to dis-identification if practices are experienced negatively. To some extent this refers to the dynamics of power and the power relations within the community.

Situated learning theory is useful despite its limitations which include the following. Hodkinson & Hodkinson (2003a & 2003b) state that there is a tension in Lave and Wenger's theory with regard to how spatially close practitioners need to be in order for learning to take place, although Wenger (2001) acknowledges that some communities of practice meet regularly while others may communicate primarily by means of email networks. Legitimate peripheral participation is not a simple linear centripetal process, as Wenger (1998) also acknowledges, since negative experiences may cause disidentification as mentioned above (Hodges 1998). Wenger's theory also underestimates the significant differences between learning for full members and learning for newcomers which is of particular importance for this study, given that senior academics may be novice researchers. Wenger also neglects the role of individual perspectives because newcomers can fail to learn how to belong if they are not motivated to learn. Implicit in Lave and Wenger's theory is a message that a CoP works well only if conflict and power inequalities are levelled; however, conflict and collaboration are significant in determining the learning that takes place. Unlike some authors (for instance, Handley et al 2006: 647), Wenger compartmentalises different communities of practice, arguing that there is little transfer of identity between them. Finally, there is some difficulty in operationalising participation since individuals may go through the motions without a sense of belonging. Handley *et al* (2006: 651) therefore define participation as meaningful activity. The research activity on which this article reports was carried out within a mentoring model influenced by various other models.

3. Different mentoring models

The literature reveals a number of different informal and formal mentoring models. In general, the informal one mentor-one protégé model seems to prevail and results in the greatest mentoring benefits according to some authors (for instance, Goodwin et al 1998: 341, Henry et al 1994: 39). As indicated by Carger (1996) and Lasley (1996), protégés can be involved in more than one informal mentoring relationship throughout their careers, each forming a CoP. Levinson (Perna et al 1995: 34) describes an informal mentoring relationship as a close non-familial relationship between a younger person, the protégé, and an adult, 10 to 15 years the *protégé*'s senior. It develops spontaneously, based on mutual interests, and arises because the mentor and the *brotégé* recognise each other's potential. In terms of this model, the *protégé* often undertakes the more mundane tasks involved in the mentor's work. This has exploitative potential. In the Unisa context the need for mentoring is also too urgent to rely on a model in which mentoring should develop spontaneously.

Novices often prefer formal mentoring arrangements (Thomsen & Gustafson 1997: 30) because this obliges mentors to actively support protégés and to be accessible (Borisoff 1998: 87). It has been found that a formally arranged CoP consisting of one mentor and one protégé is useful if their research areas match and mentors are enthusiastic, respectful in their criticism and committed while still allowing protégés to grow in their own ways. The research also found that protégés prefer self-determination in choosing a mentor of the same gender, race, ethnicity, or sexual orientation (Wilson et al 2002: 329). In the mentoring projects reported by both Quinlan (1999: 36) and Henry et al (1994: 40-2), mentors and protégés received training related to the concept

of mentoring and the roles of participants; contracts were mutually negotiated in which goals were set, and pairs were monitored. The project reported by Henry et al (1994) is useful for illustrating the role of trial periods and voluntary participation. Voluntary participation is in keeping with Wenger's (2001) theory. Although this model is useful in the Unisa context, it is advisable that experienced researchers mentor more than one protégé, considering the fact that a small pool of individuals need to support a large group of novices. Moreover, most of the prolific researchers are white males, implying that mentoring needs to cross cultural and gender boundaries.

The one mentor-group of *protégés* model benefits collaborative learning which is in line with situated learning theory that pinpoints social activity as critical for learning. Mentoring in a group also creates a sense of community which provides a safe place for interaction with peers to construct knowledge by reflection-in-action (Simon 2003: 79). This enhances membership (we belong in order to learn) and identity development as researchers. Peer modelling and active participation in and commitment to the learning process are important (Evenbeck & Williams 1998: 44). This is a useful model in the Unisa context since one mentor can support more than one *protégé*. The research reported by Balint et al (1994: 14) illustrates that in the context of the one mentor-one group of *protégés* model, the mentor must be an expert researcher; have collaborative skills to facilitate sharing, growth, trust and commitment; help the group set realistic time frames, and meet with the group regularly. The research also identifies time limitations, failure to move to mentorship closure as well as uncertainty about roles and relationships as disadvantages of this model.

The advantages of forming a formal CoP consisting of a group of mentors and a group of *protégés* include, among other things, that institutions can provide newcomers with a team of mentors, as was the case in the New Faculty Program at Montclair State University (Pierce 1998). A group of novices met weekly with a group of five mentors for a period of one year, allowing the *protégés* to benefit from the wisdom of a group of mentors. In addition, novices were not paired with unhelpful mentors. The model also has the advantage of significant social activity in accordance with situated learning theory.

However, an important disadvantage of the model in the Unisa context is the issue of arranging times for meetings that would suit all participants. It would also be easy for mentors not to assume responsibility to actively support *protégés*, believing that the other mentors would do so. Different mentor views on the research process could cause significant confusion among learners and thus hinder learning and identification with mentors as role models.

A new model for research mentoring has been designed based on the abovementioned advantages and disadvantages of the different models within the conceptual framework of the study, and on the views of eleven novice researchers at Unisa. This model involves one mentor and more than one group of *protégés*. The model enables one proven researcher to mentor a number of *protégés* divided into small communities of research practitioners according to interest. This provides novices with the benefit of numerous social learning opportunities in accordance with situated learning theory. In contrast to Lave's (2008) view that situated learning is usually unintentional rather than deliberate, the specific aim of mentoring would be to develop novice researchers to become productive researchers who contribute towards the research output at Unisa. The remainder of this article reports on my experiences as mentor of three groups of novices in the implementation of this model.

4. Implementation of the model

4.1 Initiation phase

Since Wenger (2001: 41) pointed out that managers cannot prescribe to a CoP the way it sets up a task force, the mentoring project started with my invitation extended by email to all novice researchers in two similar departments to my own to participate in a research mentoring project. I conducted interviews with the novices primarily to form small groups according to their needs, levels of experience and research interests. Thus, three groups were formed (with two, four and five members, respectively). At a first meeting with each group, ethics, clarified roles and responsibilities, as well as identified

research projects, aims and outcomes were addressed. Decisions were made about time frames, and ground rules were set. The novices were asked to commit themselves to the project and to undertake to meet weekly in their groups.

4.2 Cultivation phase

Each group embarked on its research projects. Active learning took place with the research project as the curriculum. The groups were united by passion, commitment and identification with the research projects (Wenger 2001: 41). The novices met frequently (generally weekly) in their groups to report on progress, and to discuss or debate difficulties and possible solutions. I met with the groups regularly, generally monthly, but was available for consultation as needed. I often received written work and consciously responded with constructive criticism, support and guidance. All three groups planned to submit abstracts for an upcoming conference. This was in line with the aim of each project to culminate in a conference paper and ultimately in a publication in an accredited journal. This would signify that the research quality was of acceptable standard.

4.3 Separation phase/"weaning" (Steinmann 2006: 148)

Mentoring would continue until the abovementioned aims had been reached. This is in accordance with Wenger's (2001) view that a CoP should last as long as there is interest in maintaining the group. Novices had to move from peripheral participation in the community of research practitioners to more central participation.

4.4 Redefinition phase

The relationship between the mentor and the novices had to change as they became independent and their identities as competent researchers developed. They had to be able to do independent research and some would have to become mentors themselves

5. Research design

The exploratory research was an ethnographic case study with observation as main data collection method (Henning 2004). The aim was to reflect on the implementation of the research mentoring model (initiation and cultivation phases) in order to identify influences on its functioning. It was therefore necessary to do the evaluation as soon as possible — in this instance after having implemented the model for a period of approximately three months (one group) and six months (two groups).

The participants in the mentoring project were selected as follows. I experienced a sense of responsibility regarding the mentoring of novice researchers in the field of education because I am also from this field and a research representative on the College Research Committee. I therefore circulated an email message to the relevant departments, inviting novices to participate in a mentoring programme that would last approximately one year. I would be the mentor. The eleven academics who immediately volunteered had the freedom to choose me as their mentor (cf also Wilson *et al* 2002: 329). Such a voluntary, spontaneous selection of participants for a CoP is in line with Wenger's view of the nature of communities of practice (Wenger 2001: 40). Three participants were black men and eight were women (seven white and one black).

I met with the groups monthly. At the time of writing, I have had six personal meetings with the one group and four meetings with a second group. The third group consisted of two more experienced researchers who wanted to improve their research skills. It was difficult to schedule suitable dates for meetings and, after two face-to-face discussions, it was decided that we would interact electronically. All participants in the groups regularly also carbon copied the work they submitted to one another to me (for instance completed literature review sections). On several occasions participants contacted me telephonically or electronically as required.

During this time data were captured by means of updated field notes, in particular after each meeting and after having evaluated written work by groups or participants. Informal interviews were conducted and noted throughout, and some institutional documents formed part of the raw data. Electronic and hard-copy folders of each group were kept up to date, and all written work received was filed.

The abovementioned data were analysed by means of Tesch's method (Poggenpoel 1998: 343). The steps are briefly as follows. The researcher obtains a sense of the whole by reading through the field notes and analysing these for underlying meaning in order to identify topics. The researcher then makes a list of all the topics, and clusters similar topics together to form categories. The relationship between categories may also be determined. Inferences are also made based on gut feelings formed during the project, as ethnographers often do.

The trustworthiness of the findings relates to the fact that I conducted observation and informal interviews in the natural setting of the university campus; I complemented observations with informal interviews; I used concrete, precise descriptions from field notes; I confirmed observations and participants' views with others through casual conversations, and I monitored myself continuously for bias.

Ethical principles that were adhered to included voluntary participation, informed consent, assurances of confidentiality and anonymity, and that all participants would be treated with care and fairness.

6. Findings

It is clear from the analysed data that the main influences on the implementation of the mentoring model relate to the following:

- the university context, including financial incentives and support, infrastructure to support research, time, research collaboration and research training;
- the dynamics in the communities of practice, for example, the role of *protégés*' experience, and
- individual dispositions of the participants such as individual needs and approaches to research.

6.1 The Unisa context

This study confirmed principles of situated learning theory and findings of others (for instance, Eraut 2000: 130) that the acquisition of knowledge and skills is shaped by the context(s) in which the skills are acquired and used. The Unisa context which influenced the research mentoring and consequently the quality of novices' research may be divided into the five broad categories as indicated above. The impact of each of these on the mentoring process is considered briefly.

6.1.1 Financial incentives and support

The financial policies and practices of the institution impact both positively and negatively on research mentoring. The university offers special financial support for designated groups – women, black and young researchers – who have been targeted for mentoring (Unisa 2006a). This is in line with Wenger's (2001: 42) view that managers should invest money to help communities of practice reach their full potential. However, the bureaucracy involved, with regard to not only the application process but also continual reporting on how the research was progressing, sometimes discourages applications for financial assistance. In one example, two researchers applied for funding for an ambitious project in a disadvantaged, rural community that focused on the support of orphans. However, they were discouraged by being sent from manager to manager during their application and by an expected output of four articles (two articles each) published in accredited journals.

On the other hand, financial incentives for publications include conditional grants for domestic and foreign conference attendance (Unisa 2006a). This serves as venue for novices to enter the research arena and offers them the opportunity to learn from others. A portion of the money earned by the institution for an academic's publications is returned to his/her personal research funds for research-related or other use. This motivates novices to become involved in the practices of the research community and the research mentoring projects.

6.1.2 Infrastructure to support research

Unisa has merged with two other institutions, resulting in significant internal restructuring with some negative consequences for the quality of research. For example, as part of the restructuring process, a number of research institutes that used to conduct research or offer research support were closed down. Of particular relevance for this study is the fact that those research institutes that focused on offering research support to staff and, in particular, to novices at the expense of their own outputs, have been dissolved. Transformation has also resulted in only one person being employed to provide statistical support to staff and students who do quantitative research. This had an impact on my research mentoring, since one group embarked on a quantitative project for which statistical support was essential. On the other hand, the infrastructure that is available to support research mentoring and quality includes offices with modern computer facilities, a well-resourced library with efficient staff and a Dept of Language Services that edits research reports. These are examples of how learners (protégés) cross boundaries between different communities of practice in support of learning.

6.1.3 Time

Wenger (2001: 42) points out time as an issue in the functioning of a CoP for participants to reach their potential. The research was influenced by a lack of uninterrupted time. In this project, this was the result of participants' onerous teaching duties arising from the diversity of programmes on offer and a serious administrative overload caused by continuous transformation and an auditing culture. The auditing culture, in particular, requires the completion of countless forms and the attendance of numerous meetings. Constant auditing means an increased workload for academics, who now have to comply with the resultant paperwork; this in itself means less time for research. Constant auditing also leads to stress – this may be motivating for some, but it is definitely counterproductive for others (Yates 2005: 399).

Special academic leave for research purposes is available under supervision of the chairs of departments. Novices are often able to use this if they do not have pressing commitments related to teaching and administration. Referring to the chair of her department, a protégé commented favourably on being able to use academic leave for research purposes: "She never said 'no'" the novice declared.

6.1.4 Research collaboration

In line with situated learning theory that emphasises learning as a social activity, the institution recognises the importance of research as a communal activity. However, a lack of emphasis on group research is reported in the minutes of a College Research Committee meeting. According to these minutes, this factor militates against quality research. For example, group outputs are not rewarded as one output per author, but shared equally among all concerned. Since learning is viewed as a social process and social activity is a critical component of situated learning, this lack of motivation for group research has the potential to impact negatively on individuals' active participation in mentoring groups as communities of practice. Evenbeck & Williams (1998: 44) also emphasised that peer modelling in the learning process is important.

6.1.5 Research training

Unisa frequently arranges and funds workshops that focus on writing for publication, the effective use of the internet for research, action research, and so on. Research training provided in this way means that the knowledge presented is abstract and out of context. According to Lave & Wenger (1991: 21), training programmes should not separate instructional settings from actual performance, since this could split learners' ability to manage the learning situation from their ability to perform. Consequently, this is generally not regarded as a useful avenue to explore for learning research skills during this mentoring project. However, if research training is provided at the specific stage when certain skills are required, *protégés* would be motivated to participate and immediately apply what they have learnt.

6.2 Research communities of practice

The three mentoring groups functioned as small communities of practice within the broader research community to develop practices and identities appropriate to the community. The participants

would learn to do research by engaging meaningfully in the activities of their research projects (Fenwick 2001: 42). During their weekly meetings *protégés* discussed issues, reported back to one another and defended viewpoints. In line with situated learning theory, which regards social activity as a critical component of learning, these meetings provided opportunities to improve research knowledge and skills. When we met once a month, I facilitated discussion and decisions about individual responsibilities, commented on completed work and gave guidance as needed. The fact that I was from the same broad research field (education) as the novices increased my opportunities to provide support (also pointed out by Neumann 2001). Lave & Wenger (1991: 53) state:

Activities, tasks, functions, and understandings do not exist in isolation; they are part of broader systems of relations in which they have meaning. These systems of relations arise out of and are reproduced and developed within social communities, which are part of systems of relations among persons.

Learning is regarded as an evolving form of membership.

One group included two researchers who were not complete novices – they had already participated in research but wanted to improve their practices. Since they were both in leading positions in their respective fields with limited time available, we had difficulty in arranging convenient meeting times. Ultimately we decided on mentoring via the electronic media. They still met frequently, but submitted any written work to me electronically and I gave support and guidance in this way. Hodkinson & Hodkinson (2008) pointed out that there is tension in Wenger's theory about how spatially close practitioners need to be for learning to take place although Wenger (2001: 40) acknowledges that some CoP may connect primarily by email networks. I believe that this "electronic" approach is unsuitable for groups in which the participants are complete novices. In this project the groups consisting only of complete novices needed to meet with me regularly and in person so that issues could be discussed and misconceptions clarified.

6.3 Individual dispositions

In accordance with Hodkinson & Hodkinson's (2008) findings, individual dispositions of protégés played a significant role in the mentoring process. In my research this became apparent at the start of the project when the groups (each as a CoP) needed to be formed. Four novices who had indicated interest in the project at first, dropped out. Some seemed to prefer one-to-one mentoring while others were under the impression that the groups were formed along racial lines to which they were opposed. Two novices who were friends also indicated that they wanted to form their own group, excluding others, because they had some research experience, were not completely peripheral participants, and wanted to improve their practices without being inhibited by more inexperienced participants. This was granted because group structure and cohesiveness were important issues to consider. As a matter of fact, group structure and cohesiveness are key to the acquiring of research knowledge and skills in a social context (Handley et al 2006: 636).

Individual dispositions also played a role in other ways. One participant was a strong, independent individual who described herself as opportunistic. She tended to approach research intuitively rather than systematically. Although she could not attend all the weekly meetings of her group, she confidently moved ahead in directions that proved inappropriate in the light of research design decisions taken by the group later. This forced her to retrace her steps, and raised the issue of identification versus dis-identification, because participants can sometimes move from more central to peripheral participation as indicated by Hodges (1998). It also confirmed that legitimate peripheral participation is not a simple linear centripetal process, as pointed out earlier.

The above example raised the issue of power relations within the CoP. By contrast to some participants (such as the example mentioned above), two participants expressed the need for a strictly hierarchical relationship between them and me. One stated: "As mentee [protégé] you should realise that you do not want to be a know-all but be sort of submissive [...] a student-teacher relationship, a learning attitude; appreciative of the opportunity". This presented me with

a challenge, since novices needed to learn by debating issues critically. Hierarchical relationships reproduce homogeneity and can be exploitative (Perna *et al* 1995: 34).

Protégés' personal expectations of me as mentor and the extent to which I could meet these expectations would also influence their continuing motivation to participate. For example, one said:

A mentor is a person that stimulates another's creativity so that the mentee [protégé] reaches levels that she would not reach on her own; a person that gives guidance on how to write articles and how to get them published. A mentor gives positive criticism. I am a beginner. I want to learn to submit something that I know has been panel beaten and is okay. Therefore a mentor is a more experienced and knowledgeable person that leads and inspires others.

As mentoring was not part of my work allocation and my involvement was with three groups simultaneously, there was a time issue that I needed to address constantly. In addition, my research areas (research methodology) did not match those of the protégés. I could therefore evaluate completed work but could not give certain direction, apart from the empirical investigation, and I could not guarantee publication. Neither did I want to cultivate over-dependency. Thus my own individual abilities and disposition influenced the mentoring process. It may also have affected the motivation of some individuals, especially those who were less motivated and more opportunistic. Different levels of motivation were illustrated by the fact that *protégés* initially stated that every participant needed to "assume responsibility to do their bit". However, in accordance with the theoretical framework of the study, not all learners aspire to or acquire full participation, although their inclusion in the groups had been voluntary, consistent with situated learning theory. It soon became clear that while some assumed leadership roles, others seemed to function as peripheral participants and did not engage meaningfully in the research activities of the group – an important aspect of learning (cf Fenwick 2001: 42). This could lead to dis-identification as researchers (Hodges 1998).

7. Conclusion

The aim of the study was to identify influences on the implementation of a model for research mentoring in higher education. The model that was implemented illustrated the possibility that one researcher could mentor more than one group of brotégés within the specific university context with its support systems and constraints. The implementation of the model is still in the initial stages, but it has raised various issues. In view of the theoretical framework of the study, the findings reveal the necessity of further investigation into the influence of the following factors on novices' learning: the development of participants' identities as research practitioners. In this regard mainly three issues need to be explored: the identities of newcomers versus those of participants with some prior experience; the influence of participant feedback, and the role of individual dispositions. Some participants may lose interest in learning to do high-quality research or fail to learn for various reasons. Related to the previous point is the role of power relations and conflict within the groups and how these influence learning. Learning facilitated by mentoring via electronic media versus mentoring with face-to-face meetings also needs to be investigated in order to explain the question how spatially close mentors and *protégés* need to be for effective learning to take place. Feedback from participants may indicate to what extent the model can be improved in order to enhance the research knowledge and skills of protégés and to enable them to do high-quality research. Ultimately mentoring can contribute to increased research output of the University. Moreover, research can enhance the effectiveness of operational activities at the institution and increase job satisfaction.

Bibliography

ABOUT.COM.PSYCHOLOGY

2009. Erikson's stages of psychosocial development.

http://psychology.about.com/ library/bl_psychosocial_summary. htm>

BALINT M, R FINLAY, J LONG & R TINKER

1994. Research mentoring in a changing environment: a case study. *Higher Education Research and Development* 13(1): 13-21.

Borisoff D

1998. Strategies for effective mentoring and for being effectively mentored: a focus on research institutions. *Journal of the Association for Communication Administration* 27(2): 84-96.

Brits E

2006. SA navorsingsjoernale se gehalte wek kommer – verslag. *Beeld* 15 Mei: 6.

CARGER C.L.

1996. The two Bills: reflecting on the gift of mentorship. *Peabody Journal of Education* 17(1): 22-9.

DE Vos A S(ed)

1998. Research at grass roots: a primer for the caring professions. Pretoria: Van Schaik.

ERAUT M

2000. Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology* 70: 113-36.

EVENBECK S & G WILLIAMS

1998. Learning communities: an instructional team approach. *Metropolitan Universities: An International Forum* 9(1): 35-46.

Fenwick T J

2001. Experiential learning: a theoretical critique from five perspectives. Information series, 385. Columbus: Ohio State University.

Focus, Staff Newsletter April 2008. Unisa staff encouraged to tackle research endeavours. Pretoria: Unisa Press: April 2008.

GOODWIN L D, E A STEVENS & G T BELLAMY

1998. Mentoring among faculty in schools, colleges, and departments of education. *Journal of Teacher Education* 49(5): 334-43.

Handley K, A Sturdy, R Fincham & T Clark

2006. Within and beyond communities of practice: making sense of learning through participation, identity and practice. *Journal of Management Studies* 43(3): 641-53.

HENNING E

2004. Finding your way in qualitative research. Pretoria: Van Schaik.

Schulze/Mentoring in higher education to improve research output

HENRY J S, M S STOCKDALE, M HALL & W DENISTON

1994. A formal mentoring program for junior female faculty: description and evaluation. *Initiatives* 56(2): 37-45.

HODGES D C

1998. Participation as dis-identification with/in a community of practice. *Mind, Culture and Activity* 5(4): 272-90.

HODKINSON P & H HODKINSON 2003a. Individuals, communities of practice and the policy context: school teachers' learning in their workplace. Studies in Continuing Education 25(1): 3-21.

2003b. Rethinking communities of practice: a case study of school teachers' workplace learning. Unpubl presentation at the 3rd international conference on Researching Work and Learning. Tampere, Finland, July 2003. http://www.tlrp.org/dspace/retrieve/842/HRethinking CommunitiesofPractice.htm>

JOHNSON W B

2007. *On being a mentor: a guide for bigher education faculty*. Mahwah, NJ: Lawrence Erlbaum.

LASLEY T J

1996. Mentors: they simply believe. *Peabody Journal of Education* 71(1): 64-70.

Lave J

2008. Situated learning. http://tip.psychology.org/lave.html

LAVE J & E WENGER

1991. Situated learning. Legitimate peripheral participation. Cambridge: Cambridge University Press.

NEUMANN R

2001. Disciplinary differences and university teaching. *Studies in Higher Education* 26(2): 135-46.

PERNA F M, B M LERNER &

M T YURA

1995. Mentoring and career development among university faculty. *Journal of Education* 177(2): 31-45.

PIERCE G

1998. Developing new university faculty through mentoring. *Journal of Humanistic Education and Development* 37(1): 1-10.

POGGENPOEL M

1998. Data analysis in qualitative research. De Vos (ed): 1998: 334-56.

Quinlan K M

1999. Enhancing mentoring and networking of junior academic women: what, why, and how? *Journal of Higher Education Policy and Management* 21(1): 31-42.

RADEMEYER A

2006. Pandor prys Tuks vir hoeveelheid navorsing. *Beeld* 12 Mei: 5.

Acta Academica 2009 41(4)

Simon CJ (ed)

2003. Mentoring for mission: nurturing new faculty at church-related colleges. Cambridge: William B Eerdmans.

STEINMANN N

2006. Fundamentals for effective mentoring: raising giant killers.
Randburg: Knowres Publishing.

THOMSEN S R & R L GUSTAFSON 1997. Turning practitioners into professors: exploring effective mentoring. *Journalism and Mass Communication Educator* 52(2): 24-32.

University of South Africa (Unisa)

2007a. *Unisa research plan*. Pretoria: Unisa Press.

2007b. *Unisa women in research initiative*. Pretoria: Unisa Press.

2006a. *Unisa policy on grants from the research fund*. Pretoria: Unisa Press.

2006b. *Unisa research policy*. Pretoria: Unisa Press.

Wenger E

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

2000. Communities of practice and social learning systems. *Organization* 7(2): 225-46.

2001. Organically grown. *T D* 55(6): 40-2.

WILSON P P, A PEREIRA & D VALENTINE

2002. Perceptions of new social work faculty about mentoring experiences. *Journal of Social Work Education* 38(2): 317-32.

YATES L

2005. Is impact a measure of quality? Some reflections on the research quality and impact assessment agendas. *European Educational Research Journal* (4): 391-403.