Abstract: This paper examines some crucial issues on ‘research as professional development’ in distance education (viz. systemic versus discipline research, identity and learning, scaffolding and mentoring in researching at a distance, role of incentives in distance education research, and research training) for further critical reflection and for setting up an agenda for implementation and follow-up of institutional and collaborative research at a distance. It raises research as well as professional-managerial questions on research policy, research mentoring, and promotion of research through institutional support including incentive, which are crucial to sustaining research in general, and research in adult and distance education in particular. This has been examined in a context where exchange, support and collaboration are possible through information and communication technologies (ICTs). As a conclusion, the paper highlights some of the training issues relating to research as professional development in distance education.

Research as Professional Development

At the special lecture to the ICDE Vienna Conference delegates in 1999, Otto Peters had remarked that every university needs to be an open university in several aspects, and that they should be student oriented, practice oriented, and future oriented. In doing so, he remarked, “On the whole, the university of the future will have to be the result of a fundamental process of transformation in which it changes into a university which mainly enables self-studying in all its forms, oriented towards the research process, supports this and in the end makes it into the foundation of its curricula and teaching...” (italics emphasised) (Peters, 1999). Peters underlined placing research and development (R&D) at the forefront of organizational development, and, in a way, providing holistic guidance, and geared towards the learner, the teaching-learning practice, and the future development of the field. Much of what he said may be termed by some as futuristic, but it holds good for any university – conventional or open. While commenting on this very aspect for the distance education system, Evans seemed to me more straightforward: “… Open universities need to take the issue of research seriously if they wish to be at the forefront of higher education nationally and internationally, and if they wish to be seen as universities...” (Evans, 2000a, p.2). Similarly, Michael Young’s address to the UK Open University’s 25th anniversary celebration in 1994 noted: “… Discourse, dialogue, discussion, research are essential to all academic progress but with open learning a very special effort needs to be made to foster research into open learning itself” (Young, 1994, quoted in Perraton, 1999). The above statements are
symptomatic of the view that open and distance teaching universities (or programmes/provisions) need to undertake significant research activities, otherwise they may be considered inferior to the ‘real’ universities on which they heavily depend upon. These notwithstanding, and irrespective of whether or not a research discipline of distance education (Holmberg, 1987) has emerged, it is imperative that all the activities and practices within distance education must have sound empirical base through research (Moore, 1988; Jegede, 1991).

As shall be argued later, based on what Evans and Nation (1989) point out for critical reflection and for grounding the practice of adult distance learning in research (and, especially systemic research), it should not be restricted to a few; rather, all teaching, academic and professional staff should be involved in (action) research as part of their reflective practice through critical reflection. This categorically refers to research on various aspects of teaching-learning of a particular (teaching, training, extension, research) programme at a distance including the related aspects of instructional delivery, learner support, and other services. Besides institutional and/or action research which contributes to immediate decision making and practice and its quality, it is imperative to undertake basic research in the field of distance education (may be by specially trained and designated group of researchers) to help it grow and be a co-partner to the contemporary established as well as growing disciplines, especially in the social sciences.

If a close relationship between research and practice in distance education needs to be established (Calvert, 1989), those who practise it cannot be separated. Even today, we have instances where research is being undertaken by those who need not implement the outcomes and that research outcomes are generally shelved to be preserved or used for tenure and promotion and/or for further funding, rather than being utilised for informed decision making and improvement of practice. However, in an educational community of practitioners, research, reflection and practice cannot be separated. This also raises the issues of identity and belongingness to the community of practice (Wenger, 1998). Professional practice is grounded in reflection, and reflection in professional development is grounded in research.

While pleading for action research as a tool for professional development, Passi (1999, p.2) pointed out that this is the best form of professional development because such research studies “can employ indigenous methodologies, identify self-generated resources, and find local solutions”. This also develops personal knowledge base, reasonable level of expertise, atmosphere of self-reliance, and invigorates the entire educational environment. Besides action research, there are other forms of research which constitute important aspects of an institutional research profile. Though it is beyond the scope of this paper to engage in a detailed discussion on this, a brief mention is worth the task since it has implications for mentoring, rewarding and training.

**Research Policy**

Distance teaching institutions (DTIs) or departments devote considerable amount of time debating the focus of research effort concentrated either on one’s own discipline or on the distance education system and practices. This debate brings into fore the importance of examining the nature of research activities as also institutional
research policy. Usually, the argument put forward by teachers and academics is that they need to be in touch with and contribute to the growth of their respective mainstream disciplines, and that they neither have the required research skills nor consider it necessary to investigate into the pedagogic and operational aspects of their discipline distance teaching, which is seen by them as more ‘educational’. The argument seems to be true in its own right. The argument seems more attractive when one finds that even in traditional mainstream universities, all the teachers are not engaged in research, and, more so, in research on educational pedagogy. Simply, doing a doctorate in one’s own discipline entitles one to teach that discipline. But, it must be underlined that the nature of teaching and the role of teachers are undergoing dramatic changes, and that continuing professional development is being visualised not only as a prerequisite to tenured promotion, but more as development of skills of learning to learn and lifelong learning, so essential for the changing teaching profession itself. Such professional development requires evolving grounding in the discipline-based body of knowledge, and, as Michael Young’s statement noted above shows, open and distance teaching-learning requires research on open and distance teaching (and open and distance learning) itself.

In the context of research contributing to professional development in distance education, the following selective questions with regard to research policy are pertinent, and need to be addressed:

- Does the institution have a research policy, (and especially for research on processes of teaching-learning), and what is the nature of that research policy?
- What is the status of institutional and individual research: what sort of research, who does it, for whom, in which areas, with what intention and funding support?
- What are the result outlets/forms: institutional, individual course-related, individual projects, doctoral work, course research projects, routine evaluative research, a research course?
- Are there differences in pedagogic and operational aspects between discipline-based and (distance education) system-based research? In what way and with what consequence can institutional and individual research be distinguished/integrated?
- What kind of research areas do we need to give priority to so as to facilitate independent and collaborative adult distance learning more effectively?
- How can the everyday work of an academic be integrated with action and other kinds of research in DE? And, how much time/workload for research?

It is not our intention to address these issues here, but to underline that such questions are of vital importance to be resolved, so that the strategy of ‘research as professional development’ gels significantly into the strategic and holistic institutional planning, and that a scheme of mentoring support, a reward system and a framework of (virtual) training can be initiated and sustained.

**Scaffolding Distance Education Research**

Traditionally, in the conventional mainstream universities, research has been confined to doctoral work and individual/group projects with external funding support. In especially doctoral work, it is presumed that there is a strong disparity of
knowledge between the research supervisor and the research student, which characterises this kind of investigation; and that there is an intense polarisation of knowledge in favour of the supervisor (who eventually knows more), and the investigation is largely linear (as guided by the supervisor). While this disparity and polarisation characterise doctoral work, this has led to a superior ‘status’ enjoyed by the supervisor (Misra, 2000). In distance education, due to the changing nature of (team) work undertaken by a variety of functionaries, and that the student population is supposedly more matured and experienced, the disparity and polarisation turn towards collaborative exploration as joint venturers and/or surrogate students, and multi-dimensional respectively; and the superior status enjoyed by the supervisor takes the form of multiple and multi-dimensional roles played by the teacher-researcher. Instead of linearity, the exploration becomes multi-dimensional, with multi-perspectives and creative exploration. In the process, therefore, while research is not confined to a few (i.e. only teachers), the nature of research scaffolding and mentoring undergoes significant changes.

Mezirow (1990) suggested, in the context of adult learning (which is largely the case in distance learning), that all learning should gear towards transformation of perspectives and higher meaning making. In a community of practice, as distance teaching professionals are, change in professional identity is crucial for the practitioners to grow and effectively participate in the practice of the (professional) community (Wenger, 1998). Individual reflection through individual construction of meaning and collaborative knowledge construction and negotiation of meaning play a significant role in more qualitative learning and meaning making, and can be facilitated by collaborative peer and supervisor scaffolding. Mentoring can take the process further, and it is essential to explore it in the context of both conventional and virtual distance learning.

**Mentoring Research in DE**

Experience tells us that traditionally, in general, research has been largely linear with greater disparity between the supervisor and the student. In the context of distance education too, research supervision has almost been the same; and for other forms of research (viz. institutional studies, and basic and action research by the faculty) supervision and guidance is minimal, and at times non-existent, except that the teacher-researcher has to meet the requirements of a few committees to obtain internal and external research grants. However, the age-old scheme of supervisor-subordinate student hierarchy in research relationship is gradually changing. What is said by Sayles (1993) about government and business enterprises (that workers are being viewed as more desirable than before due to their multifunctional specialism, and that the management is also functioning in a more collaborative and interactive fashion than before) equally applies to distance education practices (vis-à-vis research): that there is increasing multi-functional specialisation, downsizing, collaborative decision making, and linking research to development. These, then, suggest for broad basing the definition of ‘mentoring’ research in distance education, and the way it takes place. In other words, the scheme of supervisor-researcher (within which the researcher explores on guidance received from the supervisor) changes to that of collaborator-researchers, and collaborative exploration at a distance. The process involves continuous reflection and professional development for both.
Therefore, mentoring in DE research needs to be viewed in both the contexts of institutional/individual/group research projects, and other research courses and training programmes. The mentoring support and mentoring relationship shall be productive provided the institution and/or the special research interest groups (SRIGs) value research as nothing but essential, and develop committed and long term mechanisms to reduce the gap between what is expoused (i.e. theory-in-use) and what is practiced (i.e. reflective practice). In a collaborative professional community, mentoring assumes significance in that it supports critical reflection of the practitioner-researchers, facilitates social construction and negotiation, and strengthens professional identity and belongingness to the community of practice. A mentor is the one who is more than a supervisor and guide – a peer supporter, guide, guru, well wisher and joint venturer in a situation of one-to-one relationship. The role of the senior researcher or the researcher-boss as an authoritarian guide changes towards that of a ‘mentor’ collaborator, joint venturer, and surrogate student. Further, mentoring also provides opportunities to the seniors to learn from their juniors, and promotes meaningful learning by both the mentor and the mentoree (Cohen and Galbraith, 1995).

In distance teaching institutions or programmes, generally, we have the situation of either the supervisor (i.e. teachers) guiding research students for doctoral work, or the senior investigator of a group project leading and guiding the peer project investigators, or even an individual academic doing an individual research project (through largely self-guidance). This situation necessitates significant broad basing if we intend to: involve wider academic and professional community in DE research, introduce distance mentoring, increase research productivity, and enhance the quality of research processes and outputs. We have a dilemma to resolve: while on the one hand wide variations exist in the interests and abilities of teachers and academics to conduct research in DE, on the other hand the suggested process of mentoring is visualized to take the strand of joint exploration! What is, therefore, required is development of research mentoring systems and research resources, including capacity building thereof, so as to instil seriousness into this collaborative process.

Based on a three-dimensional mentoring model of Smit (1999), Morgan and Smit (2000) experimented mentoring in distance education, which could also be used for developing a mentoring system for DE research. The three-dimensional model comprised the key factors distinguishing mentoring relationship (i.e. degree of power, level of identification with the mentor, and programme implementation by involvement of the mentor and the mentoree together). The authors have noted that mentoring in DE creates multiple discourses, helps overcome isolation, facilitates development of work-based competencies, ensures higher flexibility, and bridges theory and practice. Based on this model, and especially in the context of what is noted earlier that mentoring in research embraces multi-dimensional roles and perspectives, research investigation in distance education may be visualised to take place on-site or on-line (or a combination of both) for project development, research process support, and for research evaluation. This mechanism needs to be built into the research policy of institutions, networks, and consortia. In essence, therefore, research mentoring may take place face-to-face, at a distance, on-line or even through a judicious mix of these. Trading such a path shall necessitate further
development and testing of such mentoring models, analysis of processes and roles, and flexible and comprehensive training for mentoring.

The foregoing discussion further raises the question of who should be a mentor, and what could be the nature of training of the mentors. It was noted earlier: i) that (all) teachers/academics and professionals involved in distance teaching-learning need to do some kind of (institutional, action, basic) research on distance education, and ii) that the mentors (may be, those with superior research skills and experiences) from within the same institution, and/or across national boundaries, should nurture the responsibility of exploring together with colleagues and new research entrants, and grow professionally together. This brings to focus the recognition of multicultural issues (i.e. gender, class, caste, ethnicity, race, religion, language, physical and other ability) in the mentoring relationship and operationalisation of the research mentoring system. There is also a need for use of information and communication technologies (ICTs) for developing networks, professional groups and associations and SRIGs through the use of information and communication technologies (ICTs), and for further promoting research mentoring and research professional development. The professional support networks may use collaborative mentoring models, which could be practitioner-centred, experiential, research-oriented (including research on ‘mentoring’), reflective, and empowering (Mullen, 2000). Seen from this perspective, clearly then, while distance teaching institutions or programmes impose many restrictions on (both discipline-based and systemic) research, there is a need to resist those impositions, and carve out distinct policies for distance education research practices.

Some of the questions relating to ‘mentoring’ research in distance education include the following, and need attention of distance education researchers:

- What should be the nature/characteristics/parameters of mentoring in distance education research?
- Who should qualify to be mentors in DE research, and what sort of training would they require?
- What sort of mentoring support does exist for DE research in institutions across the globe?
- What is the role of language and culture in distance and cross-national mentoring?
- What effect do institutional research policy and faculty attitude have on development and operationalisation of a research mentoring system?
- What kind of mentoring support is needed by young researchers of distance education?
- After all, is mentoring a pre-requisite to do any research in DE, more particularly doctoral research, if one has been working with the (DE) system for quite some time and/or possesses preliminary research degrees?

Researching ‘Mentoring in Distance Education’

The above discussion suggests consideration of inclusion of ‘mentoring in DE research’ as one of the research areas in distance education. This will facilitate us for further operationalisation and improvement in the process of research mentoring. Such research may bring to the fore some of the gender and language issues in
mentoring; and, this shall also facilitate in identifying/recognizing and institutionalising ethical standards in DE research (Evans and Jakupec, 1996), especially in the context of use of information and communication technologies. In a recent investigation on mentoring in DE in the context of supporting practicing student doctors, it was found that the performance of those supported by mentoring was superior in terms of depth of treatment, range of perspectives, and localisation of diagnosis and treatment than that of those who were not exposed to it; and that cultural variations also affected perception of diagnosis and professional practice (Panda and Jena, 2000). This may be applicable to mentoring research at a distance, and is just indicative of such needed research in this area which can reveal the dynamics and processes of mentoring relationships in research in DE, and eventually suggest mechanisms for increasing the quality of research and research productivity.

One of the frameworks for researching this area is the input-process-output framework (Figure 1).

**Figure 1: Input-process-output framework for research**

*Inputs* may include: institutional research policy and valuing research as essential; research processes and types of research; institutional support for SRIGs, collaborative research, including research funding; staff/faculty development, perception and policies, and embedding research into reflective practice; incentives and rewards; general institutional academic and management culture; academic and research freedom; workload; and the like. The *process* of mentoring involves mentoring relationship for joint exploration in research investigation face-to-face or at a distance/online; and *output* may encompass quality research output; application of research results; development of theories; development of good research practices and institutional/national/international research culture; development of research networks, collaborative work, and significant self-reflection and professional development.

The questions that need to be further explored include:

- What kind of mentoring relationship upholds the procedure and data integrity in research in DE?
- What methodologies of mentoring subsume cultural differences in mentoring and ensure effectiveness of research output?
• What incentives and rewards sustain motivation for and commitment toward research mentoring relationship?

**Incentives and Rewards**

Increasing the effectiveness of research output necessitates incentives and rewards; this is more so in the context of dual-mode distance education where distance teaching is considered as outreach and soft pedagogy (Walcott, 1997), and also in single-mode distance teaching institutions where more time is spent on course creation, delivery, and organisation and management of learner support. Generally, there is rarely defined institutional provision for rewarding good research, and providing incentives to effective researchers and mentors. There are instances in India, where the teachers of dual-mode university correspondence course institutes would generally like to shift to the mainstream university faculty (Sahoo, 1985) (though this may not be the case for open universities); and that research did not rank high in the priority of the distance teaching faculty (Jegede, 1993). In a recent study, Walcott (1997) found that in the USA in the sampled institutions, distance teaching was not valued highly and was not considered as a scholarly activity; distance teaching was less related to promotion; and that rewards for distance teaching depended on the commitment of the concerned academic unit to distance education. DE was often considered as an outreach programme; and, outreach in combination with technological innovation, was poorly rewarded (Dillon and Walsh, 1992).

We are reminded of what Stein (1961, quoted in Black 1992) said nearly forty five years ago about home study in the United States: that distance educators have to be more active professionally, and should do quality research and always be concerned with high standards of (distance) education. (Since then, though, significant distance education research and leadership changes have taken place.) Research in DE is hardly considered as a career path; and the DE faculty, like the mainstream faculty generally, have the incentives of research publication in institutional and national/international journals, research publications as institutional monographs, award of Ph.D. degrees; salary increments due to completion of Ph.D.; research paper presentations in conferences; etc. It needs radical changes in institutional policy to value research for appointment, promotion (tenured and otherwise), and for extra incentive/encouragement for a variety of research-related institutional and professional benefits as outlined above. Further, there is also a need to balance teaching-training-research-extension in institutional policy, funding support and faculty workload. If research is the basis of institutional operation and management, and if all the teachers, academics and professionals need to do (action) research to further strengthen the base of the activities, what is the incentive are we looking for?

In so far as incentives and rewards are concerned, researchers need to further explore the relationship of the reward system with traditional institutional culture, traditional staff culture, pattern of research funding, institutional research policy, faculty workload, and the like. Further:

• What incentives are expected and for what purpose, in relation to the status of existing incentive and reward schemes?
• What incentive patterns are recommended for research mentors?
• What effect incentives and rewards have on faculty research productivity and quality of research output?

**Role of Information and Communication Technology (ICT)**

ICT plays an important role in a research mentoring system. It is amazing the way ICT has facilitated gathering and storage of enormous data on learners and facilitators within distance education. Institutions, which undertake such institutional and mission critical research (Cookson, 2002), have full control over these data; and, these can be accessed by authorized users for informed decision making, and by the researchers for further analysis, theory building and reforming practice. However, as Evans and Jakupec (1996) and Evans (2000b) have noted, irrespective of ICT facilitating this process, ‘ethical standards’ need to be exercised while obtaining and using these data.

Just connecting to the Net does not ensure interactivity in learning – it needs to be designed. McDonald and Reushle (2000) and Taylor et al (2000) have noted three types of learner in the context of a research framework for online education – independent learner, interactive learner, and collaborative learner – and the need for designing the Net for three different, but inter-related, types of technology-mediated learning. Like online education, online research mentoring too requires effective message and content design, and adoption of different approaches for different types of mentors, mentorees and mentoring relationships.

The rapid developments in ICTs shall obviously facilitate collaborative research and research mentoring and hence the need to explore the role of ICT in facilitating mentoring, and networking and collaboration. A recent success story is the use of electronic conferencing environment for collaborative research (Jegede et al, 1999) which may be replicated in other contexts and explored further. What Moore (2000) noted, while referring to the first symposium on international distance education research held in Venezuela in 1993 regarding setting up of international cross-cultural research teams, much more holds good today; he had cautioned “… The technology now is more ready … I hope we are……” (p.10).

**Training Issues**

The general state of affairs of research and researchers in open and distance education calls for significant continuing training of researchers and the faculty in distance education research methodology. The comment by Moore (1985) on the state of affairs within DE research (in comparison to that of adult education) and the ongoing quantitative vs. qualitative debate calls for a professionally developed and implemented international research training exercise for both mentors and researchers with the objective of developing a committed band of researchers internationally. Some of the difficulties faced by researchers may guide us in designing a training scheme: time allocation, lack of personal interest, finding researchable problems, political interference, lack of personal enhancement from research, funding support, and others (Jegede, 1993). The recent reviews by Murphy and Yuen (1997), Cookson (1989), Panda (1992), Panda et al (1996) and Berge and Mrozwoski (2001) may also facilitate this task. Research training is possible through research courses (of masters programmes like that of IGNOU, Deakin, UKOU); on-
the-job training (IET, UKOU, and ACDE, Penn State); and international research gathering like RIDE and CRIDALA. What is most important is development of training toolkits for researchers and professional development kits for research mentors for training through both in-house and distance mentoring. The recently developed PREST training materials of COL and IRFOL, and the ongoing PANdora research in Asia (Malik et al, 2005) and research on virtual research training (Panda, Librero and Batpurev, 2005) should be of use to the researchers of distance and online learning. A significantly important area of investigation being student learning (Morgan, 1984, 1993) this necessity is felt more than before. Considerable collaboration and networking is needed to explore and address the issues of training resources, training mechanisms, institutional research policies and practices, and international funding for researching distance and online learning.

Notes

1. Throughout the paper, ‘distance education’, as a generic term, denotes contexts of open universities, single mode distance teaching institutions, consortia as also distance education in dual mode institutions (including distributed learning and/or online education and training).

2. This paper is the revised version of a keynote address delivered by the author at the 1st International Conference on Research in Distance & Adult Learning in Asia, Open University of Hong Kong, June 21-24, 2000. The author duly acknowledges CRIDALA, and the discussion among and feedback from the participants at the Conference.

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