

Title: Development of a Cadre of Teacher Educators: Some Lessons from Pakistan

Journal: International Journal of Educational Development
Authors: Anil Khamis Ph.D., Lecturer – Education and International Development, Institute of Education, University of London
E-Mail: a.khamis@ioe.ac.uk

Pamela Sammons Ph.D., Co-ordinating Director, International School Effectiveness and School Improvement Centre,
E-Mail: p.sammons@ioe.ac.uk

Key Words: International Education, Development, Educational Policy, Teacher Education, School Improvement, and Pakistan

Abstract

This article is based on an educational innovation, the creation of a cadre of teacher educators, in the developing world. Professional Development Teachers were trained in an in-service two-year teacher education programme leading to a Masters of Education Degree. The Professional Development Teachers were expected to play three roles in their home schools upon completion of the Degree Programme: (a) Exemplary Teachers; (b) Teacher Educators; and (c) Change Agents within their home schools to effect improvement.

This article reviews education in Pakistan and the innovations that have come to inform the need to focus on teacher education as a primary area of investment and presents findings of a three-year longitudinal study of a selection of Professional Development Teachers trained at The Aga Khan University's Institute for Educational Development. The main findings of the study indicate that teachers benefited significantly as individuals with enhanced career prospects, identified themselves more and preferred the role of teacher educators as opposed to classroom-based teachers, and sought opportunities outside their own schools but their role as change agents was more limited. Those teachers who maintained links with their schools beyond the three-year bonding period (a condition of being admitted to study for the M.Ed.) varied in the extent to which they managed to initiate and sustain school improvement efforts as indicated by changes in the structures and relationships within schools affecting the teaching-learning offered to pupils.

Words:

1.0 INTRODUCTION

For over a decade now sister education institutions that form a part of the Aga Khan Development Network (AKDN) have attempted to develop innovations to effect school improvement in Asia and Africa. The AKDN is a group of social, economic, and cultural institutions with affiliated programmes devoted to working in Asia and Africa's most disadvantaged populations targeting activities that meet communities' holistic needs. Primarily, the educational initiatives of the AKDN from the late 1980s involved the upgrading and certification of untrained teachers, building schools in rural areas, and engaging schools in curriculum development.

The Aga Khan University's Institute for Educational Development (AKU-IED) based in Karachi, Pakistan, has sought to build on these initiatives to develop an educational initiative at the tertiary level. Serving teachers from schools are selected to undergo a two-year M.Ed. Degree. The 'co-operating schools' that AKU-IED works with agree to undertake various school improvement activities. The graduates of the M.Ed. are bonded for a period of three years to work for school improvement in their home schools as well as undertake in-service teacher education responsibilities at AKU-IED. This article is based on a longitudinal study that followed-up the work of the first two cohorts who graduated from the M.Ed. programmes offered between 1993-1995 and 1996-1998. The data set comprises of teacher, student, and head teacher surveys and questionnaires. Questionnaire data were generated by a specially designed questionnaire for M.Ed. students (based on Black et al. 1993 used for previous Aga Khan Foundation School Improvement Programme evaluations); AKU-IED faculty questionnaires; and school case studies as part of a larger action research study funded by the International Documentation and Research Centre (Ottawa Canada) to impact the development of the M.Ed. programme and to learn lessons about the implementation of educational innovations in a developing context.

The Questionnaire was administered to the M.Ed. graduates based in Karachi (N=44). A sample of students representing different national and geographical contexts was further interviewed via focused group discussions to allow more detailed exploration of the views expressed in the questionnaire.

1.1 Improving the Quality of Education – A Focus on Teacher Education

The World Bank (1990) and UNESCO (1998) recognised the need for teachers in the developing world to be better trained and placed emphasis on in-service rather than pre-service training, which has subsequently been reflected in the Jomtien (1990) and Dakar (2000) Education for All background documentation. Whilst such a strategy may assist teachers to be more effective pedagogues, Bacchus (1996) questions whether this is enough to professionally equip teachers for the role they are required to play as effective teachers and change agents in order to promote improving schools. Bacchus (1996) contends that teacher educators need to be aware that learning to teach is influenced by a multiplicity of factors that must all be considered in planning an effective teacher education programme.

Bacchus' conclusion should be read in light of traditional teacher education programmes that emphasise the role of theory and the available knowledge base that is the substance of such programmes (Lanier and Little 1986, Hoyle and John 1995). This type of teacher education has been cast in Schon's (1987) critique of a technical-rational approach that attempts to train prospective teachers by those who are removed from the reality of the classroom and the process of education in the schools. Barone et al. (1996) are also critical of training programmes that consist of a collection of separate courses in which theory is presented without consideration of the classroom practice that is the primary concern for teachers. Ben-Peretz (1995:546) holds:

The hidden curriculum of teacher education tends to communicate a fragmented view of knowledge, both in course work and in field experiences. Moreover, knowledge is 'given' and unproblematic. These views of knowledge are likely to become quite problematic as teachers gain experience.

Zeichner and Tabachnick (1991) building on the work of Lortie (1975) showed that many of the benefits of teacher education programmes were 'washed out' during the field experiences of the graduates and that the programmes ultimately were of little value to practising teachers. The work of Brouwer (1989) in the Netherlands supports the conclusions of Lortie and others that teacher development is most influenced by the school and not teacher education programmes. Farooque (1993; 1997) supports the above contentions in the context of Pakistan where teacher education programmes are determined to be both overly theoretical and removed from current knowledge about teacher development and do not meet pupils' and teachers' classroom-based pedagogical needs.

An argument arising from the above is that the quality of education offered to students in developing countries is dependent, in large part, on the quality of their teachers. However, to provide such teachers given the limited educational provision and the overloaded educational systems is the major barrier to change.

Teacher education programmes have come to assume a central position as the fulcrum for development of the school as an organisation, improved student outcomes, and status of the teaching profession therefore. Teacher education programmes, however, need to function in tandem with administrative support to be effective. Fullan (2002, 1992) and others have argued that headteachers' development and management development are vitally important issues if a school is to bring about sustained improvement over time and this is widely supported by other researchers (Reynolds 1989, Reynolds and Cuttance 1992, Mortimore 1994, Sammons 1995). Indeed administrative and management systems are seen to be the major levers of change in developing contexts (Heynemann 1984). Thus, a danger of traditional teacher education programmes and their consequent effects can be 'washed out' when teachers – especially in in-service programmes – need to re-enter the same school ethos as previously (McIntyre et al. 1994).

2.0 THE AKU-IED INTERVENTION

Recognising that there are many variables involved in school improvement, the AKU-IED innovation chose to focus its programmes on teachers within the context of schools. Therefore, conditions prevailing in the context and factors affecting teachers become important considerations for programmatic provision. A concentration on teachers necessitates a focus on the context of teaching. To embed teacher development within the particular context of teaching partnerships were formed with co-operating schools. These co-operating schools entered into agreements to support changes their graduates were expected to initiate in concert with AKU-IED faculty and further in-service programmes for school colleagues.

2.1 Assumptions Underlying The AKU-IED Intervention

From the above stated aim and a consideration of the available research literature on school improvement from developed countries several assumptions were made that informed the AKU-IED programme. The principal assumption was that schools in Pakistan and

developing countries are 'total institutions' (Goodlad 1984) with a network of relationships that can support or reject changes. The AKU-IED model, therefore, decided to work with schools as a whole. Another assumption made is that change can be either internally or externally driven (Fullan 1998). The most potent change was assumed to be the creation of internal change mechanisms. Thus, all stakeholders of the school including the head-teacher and governing body or government education officers were involved in selection of candidates for the M.Ed.

Despite evidence beginning from Coleman (1966) that qualifications beyond a certain point makes no difference to one's teaching, this was not considered to be the case in Pakistan. Indeed the central focus was to work with teachers and accredit them with an internationally recognised Masters Degree that was validated by colleagues from AKU-IED's partner: Oxford University and the University of Toronto. The M.Ed. Degree holders would be known as Professional Development Teachers or PDTs and expected to play the central role in any school improvement attempts as:

- They are professionally acceptable to other teachers to bring about change
- They can play an individual role if they are professionally equipped
- They have a professional standing/reputation in schools (Judge 1991).

A further assumption derived from the concentration on teachers was that a critical mass is required to support change within schools. The graduates of the M.Ed. were to be supported in their professional development activities by Visiting Teacher Programme graduates from the same schools who were to undergo two-month field-based in-service teacher education programmes in four subject areas: English; Mathematics; Science; and Social Studies. The PDTs would be expected to build teams with the Visiting Teachers to support and implement changes in their schools. Training of Visiting Teachers was considered to be important because of the absence among most teachers of professional and pedagogical skills which require to be updated and with the hope that the Visiting Teachers would work with other colleagues who were untrained or those who could not access the in-service programmes.

Another assumption was that practising teachers who had shown a commitment to their own further professional growth, had practised for a number of years, and had been involved in school improvement efforts were the ones to invest in and would be well placed to act as change agents for the school. The criteria for selection of candidates for the M.Ed. reflected these assumptions

Accordingly, AKU-IED developed the following operational objectives in its M.Ed. programme:

- a) Give teachers a direct opportunity to test things out in the schools to link the theory presented with real classroom experiences. As each classroom is different, course participants (CPs) were presented with techniques devised in more developed societies with the expectation that they are to be modified for each particular situation. In this strategy, the message given is that it is important to experiment and attempt different approaches with one's professional practice to modify it under the conditions of the classroom reality and with expected outcomes.
- b) The overarching guiding factor or teaching methodology of the faculty was to be indicative of the pedagogy being propagated. Thus, it was not acceptable that when considering co-operative learning strategies in class, for example, the course participants sat through a lecture on this strategy.

3.0 OUTCOMES OF THE M.ED. PROGRAMME

The investigation of the development of the role of the PDT in their home schools allows a focus on the extent to which teachers can initiate and sustain school improvement. These findings suggest important directions for teacher education reform in developing countries. The main and most remarkable outcome of the M.Ed. programme is the high degree of fidelity of PDTs' work to the training they received at AKU-IED. This is reflected in the PDTs' efforts at school improvement.

The demonstration of teaching ability and teacher education expertise by the PDTs and its acceptance in schools is a clearly positive outcome that reveals the ability of the AKU-IED programme to reach a diverse cohort of students representing different contexts and conditions in the public and private sector. It also suggests that AKU-IED imparted

standard and requisite expertise to all of its graduates via its teacher development programme. However, it can be inferred that AKU-IED had a particular and probably established notion of, or vision for, school improvement and educational development that it pursued in all the various contexts represented by the PDTs without sufficiently differentiating amongst them. The important question arising is whether the expected work of the PDTs should correspond to their training at AKU-IED, or whether the AKU-IED programme needs to respond to and be in consonance with the needs of the context? That is, how responsive and reflective is the AKU-IED programme to the teacher education needs of participating teachers and schools?

3.1 The Role Played by Professional Development Teachers

This section considers primarily whether a focus on teacher education and the development of teacher educators initiated improvement in the participating schools. Here by school improvement is meant the introduction of innovative teaching practices that improve the quality of education offered to students in addition to the development of in-school processes that enable teachers to work together under the professional leadership of the PDT. A total of nine case studies were conducted for this study with several suggesting that the AKU-IED approach has had a positive impact in some schools. The most useful resources, according to the schools, pupils, and other teachers seem to be the ‘transformed’ PDTs themselves. These ‘changed persons,’ as PDTs are sometimes called, take on greater responsibility in school and are generally the most powerful testimony of AKU-IED’s success. The apparent success and professionalism of the PDTs has led to an increased number of schools and individuals seeking affiliation with and resources from AKU-IED from an initial fourteen to more than 100 schools within the first four years.

Evidence from the case studies suggests that teacher education can be a potential means of school improvement, but only when it is supported by other measures. One such measure is apprising the headteacher of the content and ideas espoused in the teacher education programme. This allows headteachers to understand and facilitate the work of the returning teachers. A further measure is to provide on-going professional support to the returning teacher. In one government school case study the teacher (a Visiting Teacher programme participant in a school with no PDT) reported she was reverting back to her ‘old’ teaching methods as she had no one with whom to generate ideas, discuss concerns, and collaborate to initiate and sustain changes.

However, in schools where a PDT remained in the post – five PDTs of the graduating class of 21 remained in their schools after the three-year bonding period – the scenario was different. Teachers were able to meet and discuss ideas under the leadership of the PDT. These meetings led to teachers experimenting and investigating the applicability of new ideas and teaching methods, critiquing established norms, suggesting alternatives for the school's development and providing moral and professional support to one another that manifested in classroom-based pedagogical experimentation. These meetings, however, were in the beginning unstructured and unplanned. If teacher education is to be more effective such activities need to be structured and have a planned follow-up linking the training to the goals of the school. One PDT voiced her concern in the M.Ed. questionnaire: *'We had gone back on the basis of expectations raised (within ourselves) at IED. But in the initial month we floundered and fumbled our way through.'* Another PDT mentioned that for an on-going relationship to be continued: *'IED should work closely with (our school) systems so that perceptions and philosophies are synchronised.'* The majority of responses (79%) called for some form of follow-up to be provided by AKU-IED to facilitate the role of the PDT in the schools/system and for further professional development.

The PDTs were cognisant of the roles they were expected to play by AKU-IED after the M.Ed. programme, with the role of teacher educator increasingly emphasised at the expense of classroom teaching.

From the experiences of the returning PDTs, it is possible to identify factors that seem to play a greater role in the success of the programme and in the various school improvement models evolving in the co-operating schools. A key assumption of the AKU-IED model is that improvement in teaching is predicated on the professionalism and certification of teachers. It is, therefore, important to gauge the extent to which teachers were able to fulfil their roles and responsibilities as a result of these qualifications. Research evidence shows that *'in less structured models, whose sponsors emphasise active experiential learning, participation by children in planning their curriculum, and the role of teachers as facilitators of children's growth for effective in-service training of teachers may be more complex and therefore require more time'* (Rhine 1981:302). It is necessary, therefore, to

judge the efficacy of the AKU-IED teacher education programme and its development in the context of each participating school.

Some of the questions that must be investigated in the co-operating schools are:

- (a) What changes have occurred in schools?
- (b) What roles did PDTs play in bringing about these changes?
- (c) How did PDTs surmount problems they faced?
- (d) How did PDTs help colleagues to improve classroom practice?
- (e) How did PDTs improve their own work?

3.2 PDTs as Exemplary Teachers

The PDTs, even before graduation, were acknowledged by AKU-IED in various national and international seminars to be exemplary teachers who could marshal an array of teaching methods and skills not previously available to the school and their reputation as good teachers preceded them in most cases – one of the conditions of their selection for the M.Ed. in the first place. Upon returning to their schools, PDTs in all cases and quite spontaneously began to conduct demonstration lessons which were well received and they began to attract the attention of their colleagues and the school management even when there was no overt or explicit support for their work. In the case of one government school PDT, an inspection team was so impressed with her teaching that it proved to be the spur for all the subsequent school improvement processes supported by the district education officer.

However, one drawback of relying on the PDTs' teaching expertise as a tool for improvement is that it remained largely theoretical as most PDTs were not given the opportunity to practice in a regular classroom of their own, except in one school. The case of the PDT from another school exhibits most graphically that PDTs' 'teaching expertise' became more theoretical and 'expert' and probably did not further develop to meet the actual needs of the schools. Comments, especially those from government school Visiting Teachers, suggest that the teaching methods propagated by PDTs during Visiting Teacher programmes were deemed too theoretical and not possible to implement in their classes. Nevertheless, typical classroom observation data clearly indicate that Visiting Teachers were regularly and consistently practising innovative teaching-learning approaches they

were exposed to at AKU-IED to a greater degree than their counterparts who had not benefited from in-service training at AKU-IED as shown in the table below.

Table 1: Visiting Teacher and Non-Visiting Teacher Classroom Observation Summary and Analysis¹

Visiting Teacher	Non-Visiting Teacher
Obliging to school's requirement e.g. lesson planning and add sections for reflection and critique their own lessons	Conform to school's requirement of lesson planning which are present in their registers, but do not reflect critically on their lessons; lessons are detached from one-another
Lessons are less textbook dependent. Lessons build from ' <i>What we did last time was ...</i> '	Lessons are more textbook based and dependent, ' <i>We were on page number ...</i> '
Lesson plans, when done separately from the teacher register, have considerations of teaching methodology to be employed.	Lesson plans only done in specified format of the teaching register with consideration of how to teach and activities to be used.
VTs show more consideration for the pupil's genuine concerns for not following a lesson; less brutal with students.	Emphasise discipline, obedience, and following instructions from teacher. Teachers portray image of the teacher knows best and knows all.
Use more English than Urdu in class	Classes predominantly in Urdu, with a few English words and phrases used.
A distinct order in the progression of class in terms of ideas presented, activities conducted, and construction of knowledge.	Lessons characterised by either a continuous monologue by teachers or lack of coherence in the activities conducted.
Activities, when used, are broken into distinct cognitive/learning steps.	Confusion in the instructions given, expectations from activities, and nature and variety of activities.
Use of varied teaching strategies and activity-based learning.	Teaching repertoire limited to lecture, Q/A, and exposition. Demand from students to write/copy from blackboard or dictation.
Classroom management techniques consistent with teaching methodology and regard for students.	Exhibit strict disciplinary techniques, including rudeness to students. More evidence of student indiscipline.

¹ N=84 p<0.005

The use of AKU-IED advocated methods was especially evident when they worked in mentoring and peer coaching relationships with PDTs who opened their own exemplary classroom practice or during demonstration lessons.

3.3 PDTs as Teacher Educators

The second role PDTs were prepared for proved to be the most successful in terms of the aims of the AKU-IED intervention. All the PDTs who participated in this study (86% of all

graduates of the first and second cohorts of the M.Ed.) described themselves primarily as teacher educators.

Table 2 Students' self-perceived primary role (N=44)

	M.Ed. I n=14	M.Ed. II n=30
Teaching	31%	7%
Teacher Education	36%	50%
Change Agent	26%	43%

The subsequent cohort of PDTs, graduates of the second M.Ed. programme, were even more convinced of their role as teacher educator and did not consider themselves to be 'ordinary' teachers. Most PDTs expected to work in a teacher educator's position outside the classroom (away from classroom teaching). The conclusion that must be reached is that there is a strong tendency in the AKU-IED programme to emphasise the role of teacher educator, albeit as the means to initiate teacher development, and this is evidenced by a reduction in the field-based component in subsequent M.Ed. programmes.

Again the effect of the PDTs and thus the M.Ed. extends to the practice of Visiting Teachers who worked closely with PDTs at both AKU-IED and the schools. In the majority of co-operating schools the heads complained that a large percentage of their Visiting Teachers came back to schools after their eight-week in-service programme thinking of themselves as teacher educators. The Visiting Teachers' action plans called for the opportunity to work with colleagues to improve teaching in the school rather than primarily implement what they had learnt in their own classrooms, which raised practical difficulties in some schools. The primary complaint registered by headteachers was that Visiting Teachers were more concerned to 'teach' other teachers than to attend to their own classrooms. The heads felt that Visiting Teachers' attitudes towards the school management had become condescending and they challenged the school's other initiatives for improvement- sometimes even working at cross-purposes to the work of the PDT. In a number of cases, some Visiting Teachers became frustrated and left their schools.

The dominance of the role of teacher educator was regarded as a cause for concern, especially in the case of one PDT (School 'B' Case Study). Initially, she considered herself an expert during the first cycle of her work at the school. It was only after she had reflected on her approach and considered she may be perceived as too domineering that the teachers

were doing '*what Jasmine wanted them to do*' that she changed her approach to one which can be described as seeking to learn together with the others. The experience of the PDT from another school is also revealing. In her case, the head did not give blanket acquiescence to do what she originally planned at AKU-IED; she had to justify and develop a well-structured plan that included a full teaching load for herself in accordance with the school development plan (which she had assisted in creating).

3.3.1 PDTs and their Predecessors: The AKES Master Trainers

This paper has highlighted the work of the PDTs which indicates their ability to reflect on the educational situations they face, the innovations they have managed to bring to their schools, including the use of diverse and contextually appropriate methods whilst working with colleagues. They have demonstrated an effect on a repertoire of teaching strategies and methods that are generally acknowledged to be useful and relevant in their colleagues' classroom practice (although the charge of advocating practices is seen to be too theoretical in many cases). This cadre of teacher educators, the PDTs, exhibited significant differences as compared to their predecessors, the Master Trainers of the Aga Khan Education Services.

The PDTs overcame many of the deficiencies identified in the work of Master Trainers (Anderson and Sumra 1994, Bude 1994, Black 1993). Unlike the Master Trainers, the PDTs did not circumvent the problems they encountered, but challenged the issues they confronted and in so doing influenced their resolution. Such problems were other teachers' initial reluctance to participate in the changes PDTs advocated, dealing with the logistics of working with peers in the classroom, and developing action research projects to illuminate problems facing teachers and establishing an ethos of experimentation in the school.

A further, very important difference, between PDTs and the Master Trainers is that the PDTs were knowledgeable (from the research literature as well as to some extent from the field-based component of their studies) about the approaches they were using and advocating, and the various possible alternatives available, to reach the goals they themselves had helped to set. The Master Trainers made frequent references to the 'School Improvement Programme' model but were unable to justify why that particular model was being used (Black 1993). PDTs, it can be contended, were the primary initiators of the school improvement projects in their schools.

AKU-IED's emphasis on the role of teacher educator has implications for enhancing the improvement potential within schools that are both positive and challenging in the context of Pakistan. However, the emphasis on this role has implications and ramifications for AKU-IED's programmes that have become less field-based and as a consequence are moving towards a separation of theory and practice. It must be noted, however, that this is a consequence of the greater demand placed upon the tertiary institution to not only train greater numbers but also to create more institutional capacity (by way of professional development centres) in the region. This is an important theme and central to teacher development as argued in the research literature cited above.

3.4 PDTs as Change Agents

The third role that PDTs were prepared for in the schools has proved to be the most problematic and has had the most profound effect on the majority of PDTs' career choices. During the course of the M.Ed. PDTs were made aware of the poor state of education in the regions they come from and the efforts required to overcome this situation. The title 'change agent' was applied to PDTs in various meetings, seminars, conferences, and presentations. It appears that PDTs formed an attachment to this term and developed an exclusive identification with it. AKU-IED was anxious that its graduates be regarded as special and valuable. The success of the AKU-IED's subsequent school improvement work, to be led by the PDTs, relied on the acceptance and the acknowledgement of the increased value of the PDT by schools and education administrators.

The PDTs were unwittingly given the sense that it was their (exclusive) skills, aptitude, and concern for education that could enable them to lead educational change. However, their efforts to act as change agents proved very problematic. As soon as PDTs completed their programme they had to confront many resource constraints. The ample time to deliberate and debate ideas and thoughts during the M.Ed. was unavailable when they were back in school. Here the overriding concern was to ensure each class had a teacher and the PDT was treated like any other teacher when faced with shortages. Further, it was the head or principal of the school who made the decisions. In contrast to their experience at AKU-IED there was no process to build consensus and negotiate options; decision-making was not the automatic right of everyone involved. The experiences of the PDTs indicate that they faced a great deal of frustration during the initial period of their return to the

schools, prior to being seconded to AKU-IED to conduct the Visiting Teacher programmes, as a consequence of this mismatch in expectations. However, all the PDTs demonstrated that they had changed and had the skills to reflect on their experiences over the three-year bond period after their M.Ed. studies.

In the case of four PDTs from the study schools for this research, after initial setbacks to their AKU-IED developed action plans, they were able to marshal resources, build alliances, and confront the barriers to improvement with varying degrees of success. A weakness highlighted in AKU-IED's approach is that whilst PDTs underwent a reconceptualisation process the schools did not. This is an important learning that must form a feature of field-based teacher development programmes.

It is relevant to note that the various stresses inherent in the role of PDT ultimately led to 16 of the 21 PDTs from the first cohort of graduates to leave their school after their three-year bonding period. This can be seen as a severe constraint on their role as change agent in school. Participating schools may have concluded that investment of time and resources in PDTs was wasted due to their mobility which explains why only two of the original five co-operating schools opted to have another PDT trained in the second M.Ed. programme.

The PDTs' role as change agent was found to work best in the private school sector that has processes akin to schools in the West (many private school students opt for the Cambridge curriculum and sit the British O-level and A-level examinations), which is not representative of the majority of schools in Pakistan. Also in the vast majority of cases, in the public education sector, teaching and management positions are determined in advance and the requirement for most heads is to fill the vacancies that exist. Many PDTs found that they were hard-pressed to fill a position that did not give them either the opportunity or leeway to put into practice what they have learnt at AKU-IED.

4.0 SUMMARY OF PDTs' EXPERIENCES

Below are presented the salient aspects of the chronological analysis of the PDTs' work and the role they perceived they have developed and played as teacher educators over the course of their three-year contractual period. All the PDTs interviewed for this study (9) have gone through the following generic experience upon completion of the M.Ed.

Table3: PDTs generic experiences post-M.Ed.

M.Ed.	Re-entry module – visit to schools/system
School/System Cycle 1	Attempts at Teacher Education / School Improvement: general and undetermined/unspecified.
AKU-IED VT 1	Further professional development Time to reflect on role of a PDT
School/System Cycle 2	Change in attempts at Teacher Education / School Improvement: specific and targeted work with a number of schoolteachers.
AKU-IED VT 2	VT Programme informed by reality of the classroom and challenges faced by teachers in the school
School/System Cycle 3	Final attempts at Teacher Education / School Improvement: refinement of intervention with development of mechanisms and structures to support initiatives; involvement of VTs.
AKU-IED VT 3	Link established with schools; simultaneously working at IED and school.
End of 3 year contractual period	PDTs decide to remain at school/system or leave

Three of the nine PDTs interviewed reported having some classroom teaching responsibilities when they returned to their original schools. All three chose to have such a role, which was not made compulsory. All PDTs concentrated upon the development of their role as teacher educator. The specific work done by PDTs, in the schools, was determined largely by themselves.

However, the manner in which PDTs were able to play their role, dependent on the school's organisational structure, required them to undertake the dual task of developing the role of teacher educator and shaping how that role was perceived by the school personnel. The three male government PDTs were placed in a newly created Government Guidance Cell (GGC) with teacher education responsibilities for more than 130 schools, and thus had no direct role in their original schools. The female government teacher returned to her own school. There she was given teaching responsibilities initially for a subject outside her field of expertise and discouraged from any official school improvement activities. The three Aga Khan Education Service (AKES) teachers initially returned to their schools and were subsequently formed into the Academic Development Cell (ADC). Like the government sector, AKES PDTs were to work with the three Karachi-based schools, the school in the interior of Sindh province, and the new initiative of the community-based schools supported by AKES. The two teachers from the private schools worked closely with teachers in their original schools conducting workshops and teacher development activities.

Only for one PDT had the school (School ‘A’) negotiated her role and made explicit its own priorities for school improvement and how the teacher would on these. The other private school (School ‘B’) PDT was left to her own devices without the support of the management and implicit resistance from some, especially the primary school headteacher, to her initiatives in the school. The table below provides a summary of the work nine PDTs engaged in and states what they were doing after their three-year contractual period.

Table 4: PDTs summary of outcomes

School	PDT	Outcome
A	Masuma	School Improvement Director at the school
B	Jasmine	AKU-IED – PhD
C/AKES	Iman	AKU-IED – PhD
AKES	Bibi	PhD – USA
AKES	Larki	School Improvement efforts system-wide
Government	Amin	Guidance Cell
Government	Riyaad	Guidance Cell
Government	Salim	Guidance Cell
D/Government	Shirin	Seconded to AKU-IED

Except in the case of School ‘A’ PDT, the focus of PDTs has shifted away from their home school. These PDTs effectively were barred from working in one school and to make that school the focus of their change efforts despite all of them stating that to be their intention and expectation after the M.Ed. All the PDTs, excepting Masuma, sought opportunities elsewhere, primarily at AKU-IED in which some were successful. The government PDTs, not accepted for positions at AKU-IED, re-entered a culture of inertia and lack of accountability of their work. This evidence strongly challenges whether the role of the PDT as it is currently developing can effect sustainable whole school improvement.

School case studies conducted during this longitudinal study (Khamis 2000) provide indicators of facilitating and hindering factors faced by the PDTs in their various attempts at teacher education and school improvement.

PDTs felt the AKU-IED experience led to dramatic changes in their perceptions of their professional role and practice and through their work registered changes in their colleagues’ behaviours at schools. Changes in behaviour were apparent in the way teachers prepared for classes: lesson planning; the nature of their interaction towards colleagues, both fellow teachers and headteachers, in the school; and towards pupils. The school community reported that the behavioural changes of teachers trained at AKU-IED, especially the PDTs but also the Visiting Teachers, were quite stark. Pupils described them

as *'more friendly'*, *'caring'*, *'prettier and better dressed with make-up'*, *'smiling'*, and *'more helpful'*. Heads and other administrative staff said that teachers were *'more patient'*, *'forbearing'*, *'helpful'*, *'took initiative to assist heads'*, and *'explained processes of their school improvement attempts to other teachers'*. Fellow teachers commented how *'studious'*, *'knowledgeable'*, *'hard-working'*, and *'professional'* teachers had become.

PDTs themselves were able to describe the process of change that they could discern and which had had an influence upon them and had assisted them to apprehend their role and responsibilities in the school, as follows:

Stages in the process of PDT's work in schools:

- Upon re-entry PDTs faced several different choices in terms of the role they were to play. They initially analysed the situation and problematised their role.
- They were able to reflect upon the situation that confronted them and had the ability to determine various options available to them.
- After reflecting and deciding that particular courses of action were open to them, they considered what strategies were available and weighed the options for the results they desired. In doing so, they had recourse to their existing knowledge, especially of teacher education, education change and school improvement processes that they had been exposed to at AKU-IED.
- Upon determining the most viable course, they began to experiment/action research with one or more options using the various strategies they had devised.
- PDTs also actively sought or capitalised upon opportunities when such were present seizing the appropriate chance to further their work within the current administrative structure.
- Finally, PDT obtained extra-school support, for example from AKU-IED and District Education Officers, to put pressure on the school to continue to bring change.

The PDT case histories illuminate factors involved in developing a cadre of teacher educators in the context of Pakistan. The implications from these lessons need to be considered as the AKU-IED model evolves and, if such a model is to stimulate further school improvement efforts.

Table 5 Factors involved in creating a cadre of teacher educators in the context of Pakistan.

Initiating factors	Supporting factors	Sustaining factors
<ul style="list-style-type: none"> Enhanced role at school upon re-entry. Assigning classroom responsibilities to test theories. Demonstrating efficacy of innovative teaching methods. Provide the flexibility to experiment with existing teaching-learning processes with interested teachers. Support from school management to develop school improvement plans. 	<ul style="list-style-type: none"> Availability of resources to conduct action research studies, including most importantly, time to plan, reflect, and analyse results. Reporting mechanisms to keep management informed of improvement efforts; disseminate efforts and results to colleagues, students, and parents. Involvement of interested teachers in re-working plans according to feedback from school community. Acknowledge levels of responsibility and roles to continue school improvement efforts. Reward teachers involved in school improvement efforts with increased responsibility and positive feedback, along with financial remuneration. Diversify efforts according to the needs arising and concerns voiced of teachers and management; identify and train teachers to play specific roles. Establish formal school structures to ensure ownership is shared as is work and efforts at improvement, including time-table and curricular changes. 	<ul style="list-style-type: none"> Concentrate improvement efforts beginning with the teacher educator's own classroom and extending efforts throughout the school. Evolve teacher educator's role from one who leads improvement efforts to a co-ordinator of teacher development activities ultimately involving all the teachers. Challenge entrenched systems, with approaches such as action research, which are barriers to further improvement, for example, in-school examinations. Devolve decision-making responsibility for professional development to teachers supported by the formal structures established earlier.

Factors that hindered the development of the role of in-school teacher educators were also identified.

Table 6 Factors involved in hindering the development of the role of teacher educators in the context of schools in Pakistan.

Factor
<ul style="list-style-type: none"> Role ambiguity and competition for the available human resource. Focus of improvement not on the school; one ramification of the availability of skilled human resources is a career path leading outside of the school to teacher training institutions. Efforts of the teacher educator not viewed as a priority by school management. Self-perception of the teacher educator as an expert and not 'just a teacher'. Initial intensity and demands placed upon teacher educators to initiate, plan, and support improvement efforts without the requisite assistance or support. Lack of a school vision leading to lack of support from management, system inertia, and competing demands placed upon teachers. Inadequate acknowledgement or compensation for efforts of the teacher educator. Disregard of the teacher educator's professional skills and judgement. Requirements to work away from own school to train VTs soon after re-entry.

5.0 Conclusion

The AKU-IED teacher education programme built on the available teacher development literature that has consistently stressed the importance of field-based rather than university-

based programmes (Sparks and Loucks-Horsely 1989, Lanier and Little 1986, Joyce and Showers 1988, Guskey 1985, and Fullan 1991). However, in its execution to date as far as it was to impact whole school development, the AKU-IED programme has taken on a 'cascade' model. Accordingly, trained PDTs became adjunct faculty at AKU-IED who trained Visiting Teachers. These in turn became responsible for improvement in the classroom in the absence of the PDT.

It must be reiterated that the subsequent programmes developed by AKU-IED, especially the school management programmes aimed at headteachers, were responses to and in support of the initial innovation of the PDT. These programmes conceptually rest on the primacy of the role the PDT should play in the school as primarily an agent of change. However, to date, the AKU-IED co-operating schools, the Provincial Governments with which AKU-IED works with (Sindh and Balochistan), and its principal funding agencies (The European Commission, Canadian International Development Agency, and The Aga Khan Foundation) have all endorsed the work of AKU-IED in their various evaluations (Boak 1999, European Commission 1996, 1999).

REFERENCES

- Anderson, S and Sumra (1994), *The School Improvement Programme AKMSS - Evaluation Report*, AKF Geneva.
- Bacchus, M.K. (1996), The Role of Teacher Education in Contributing to Qualitative Improvements in Basic Education in Developing Countries in Brock-Utne, B and Nagel, T. (eds), *The Role of Aid in the Development of Education for All*, NASEDEC conference, University of Norway, pp. 134-160
- Barone, T., Berliner, D.C., Blanchard, J., Casanova, U. and McGowan, T. (1996), A future for teacher education in Sikula, J. (ed), *Handbook of research on Teacher education (2nd Ed)*, New York, Macmillan pp. 1108-1149
- Ben-Peretz, M. (1995), Curriculum of teacher education programs in Anderson, L.W. (ed), *International encyclopaedia of teaching and teacher education*, Oxford, Pergamon
- Bennett, C.R. and Hundey, I. (1991), *Creating a Culture of Collaboration and Collegiality within a Preservice Partnership*. American Educational Research Association.
- Benton (1990), *The Oxford Internship Scheme*, Oxford
- Black, H., Govinda, R., Kiragu, F. and Devine, M. (1993), *School Improvement in the Developing World: An Evaluation of the Aga Khan Foundation Programme for The Scottish Council for Research in Education*, ODA, and AKF.
- Boak, T. (1999), *CIDA Final Evaluation of AKU-IED Phase I*, for AKF, Canada
- British Council (1988), *The Pakistan Teacher Training Survey*, London
- Brouwer, C.N. (1989), *Integrated teacher education, principles and effects*, Amsterdam
- Bude et al. (1992), *An Evaluation of the Northern Areas Field-Based Teacher Education Programme*, AKF, Geneva
- Coleman, J.S., Cambell, E., Hobson, C., McPartland, J., Mood, A., Weinfield, F. and York, R. (1966), *Equality of Educational Opportunity*, Washington, Government Printing Office.
- European Commission (1996), *The IED Mid-Term Evaluation*, Brussels
- European Commission (1999), *The IED Phase I Evaluation*, Brussels
- Fullan, M.G. (1991), *The New Meaning of Educational Change*, London, Cassell.
- Fullan, M.G. (1992), *Successful School Improvement*, Open University Press
- Fullan, M.G. (1993), *Change Forces: Probing the Depths of Educational Reform*, London, Falmer Press.
- Fullan, M.G., Galluzzo, G., Morris, P. and Watson, N. (1998), *The Rise and Stall of Teacher Education Reform*, Washington, AACTE Publications

Fullan, M.G., and Hargreaves, A. (1991), *What's Worth Fighting For: Working Together for Your School*, Toronto, Ontario Public School Teachers Association.

Goodlad, J.I. (1984), *A Place Called School*, New York, McGraw-Hill

Hoyle, E. and John, P.D. (1995), *Professional knowledge and professional practice*, London, Cassell

Judge, H. (1998), Preface in Fullan et al. *The Rise and Stall of Teacher Educational Reform*, Washington, AACTE Publications

Judge, H. (1991), *A Proposal to The AKU Board Of Trustees*, Karachi

Khamis, A. (2000), *The Various Impacts of The Aga Khan University Institute for Educational Development in its Co-operating Schools in Pakistan*, Ph.D. Thesis, University of London, London

Lanier, J.E. and Little, J.W. (1986) Research on Teacher Education in Wittrock (ed) *Handbook of Research on Teaching*, New York, Macmillan

Lockheed, M.Ed. and Verspoor, A.M. (1990), *Improving Primary Education in Developing Countries*, Washington, World Bank

Lortie (1975), *School teacher: A sociological study*, University of Chicago Press

McIntyre, D., Hagger, H. and Burns, K.(1994), *The Management of Student Teachers' Learning: a guide for professional tutors in secondary schools*, London, Kogan Page

Mortimore, P. (1994), A glimpse of tomorrow, *Managing Schools Today* 3:9 pp. 11-13

Qaisrani, M.N. (1990), *Effect of Teacher level and Quality of Formal Schooling and Professional Training on Students' Achievement in Primary Schools in Pakistan*, BRIDGES, Harvard

Reynolds, D. (1989), School effectiveness and school improvement: A review of the British literature, in Reynolds, D., Creemers, B.P.M., and Peters, T. (eds), *School Effectiveness and School Improvement: Proceedings of the First International Congress*, Gronigen, RION Institute for Educational Research

Reynolds, D. and Cuttance, P. (1992), *School Effectiveness: Research, Policy and Practice*, London, Cassell

Rhine, R (1981), *Making schools more effective: New directions from follow through*, New York, Academic Press

Sammons, P., Hillman, J. and Mortimore, P. (1995), *Key Characteristics of Effective Schools: A Review of School Effectiveness Research*, London, OFSTED/ULIE

UNESCO (1998), *World Education Report: Teachers and Teaching in a Changing World*, UNESCO Publishing

Verspoor, A. (1990), *Implementing Educational Change: The World Bank Experience*, Washington, World Bank

World Bank (1988), *Pakistan: Education Sector Review*, Washington

World Bank (1990), *Education for Development: Evidence for New Priorities*, Washington

World Bank (1995), *Priorities and Strategies for Education: A World Bank Review*, Washington

World Bank (1996), *Improving Basic Education in Pakistan*, Washington

Zeichner, K.M. and Tabachnick, B.R. (1991), Reflections on reflective teaching in Tabachnick, B.R. and Zeichner, K.M. (eds), *Issues and practices in inquiry-oriented teacher education*, Philadelphia, Falmer Press, pp. 1-21