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Understanding the Evolving Roles of Improvement-Oriented High School Teachers in Gilgit-Baltistan

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In this paper the author presents a framework for understanding how improvement-oriented high school teachers' accounts of change experiences portray their evolving roles as change agents in school reform. The data on which this paper is based come from a one-year long in-depth study (doctoral thesis research project) in which the author set out to investigate how improvement-oriented teachers pursue important changes in the realm of classroom, school and community; how the teachers-initiated changes can be characterized; and how the teachers' roles evolve with their change practices. The researcher employed qualitative case study methodology, using in-depth interviews, classroom observations, post-observation discussion, and document analysis, as the main sources of data. The teachers whose change practices and values are depicted in this report recognize their roles in pedagogical, institutional and social change, and wherever possible, they try to engage in efforts to bring these changes about. Through the study the author recognizes an inherent link between teachers' endeavors aimed at bringing about fundamental change in the classroom and their efforts towards promoting institutional change in the schools and social change in the community.
Key Words: Qualitative Research, Case Study, Educational Change, Improvement-Oriented Teachers, Pedagogical Change, Institutional Change, Social Change, Teachers' Evolving Roles.

This paper I describe a framework for understanding the nature, scope and complexity of teacher-initiated changes in the socio-cultural context of Gilgit-Baltistan. I examine the ways in which teachers frame their roles in the multiple contexts of their work. Gilgit-Baltistan, most recently known as the *Northern Areas*, is a partially self-governing territory under Pakistani control. It forms parts of Pakistan's international borders with China to the northeast, Afghanistan to the northwest and Indian-and Pakistan-administered Kashmir to the southeast (Hafiz & Yuri, 2005).

Following the creation of an independent Pakistan in 1947, as a result of the partition of the Indian subcontinent, the people of Gilgit-Baltistan liberated themselves from the Dogra regime of the former princely state of Jammu and Kashmir. Immediately after this liberation, on November 1, 1947, administrative control of the region was handed over to Pakistan's Federal Government, which has since administered the region through the Ministry of Kashmir Affairs and Gilgit-Baltistan (Dani, 1989). The political future of Gilgit-Baltistan is yet to be decided because the status of the Gilgit-Baltistan remains tied to the disputed territory of Kashmir; Pakistan has not accepted the division of Kashmir between Pakistan and India (Streefl, Khan, & Lieshout, 1995). On August 29, 2009, the Gilgit-Baltistan Empowerment and Self-Governance Order of 2009 was passed by the Pakistani cabinet and signed by the country's president (Associate Press of

Pakistan, 2009). This order granted self-rule to the people of the former Northern Areas, now renamed Gilgit-Baltistan, creating, among other things, an elected legislative assembly. The local parliament, known as the Gilgit-Baltistan Legislative Council, consists of 24 directly elected members, besides six and three seats reserved for women and technocrats respectively (Government of Pakistan, 2009).

At the last census of 1998, the population of Gilgit-Baltistan was 870,347. The population is growing at the rate of 2.8% per year and, according to a recent estimation, the population has approached one million (Government of Pakistan 2009). The population of Gilgit-Baltistan comprises several ethnic sub-groups with varied linguistic backgrounds and cultural orientations (Lagendijk, 1993). The major languages spoken in the region are Shina, Balti, Brushaski, Khowar, Wakhi and Urdu. Urdu, the national language of Pakistan, is the lingua franca of the region and as well as the medium of instruction in schools. The dominant religion is Islam, divided into four major sects—*Ahl Sunnat, Shi'a Ithnasharis, Shia'a Norbukhshis (*only in Baltistan) and *Shi'a Ismailis* (Streefl et al., 1995).

Gilgit-Baltistan, a vast, rugged mountainous terrain, is home to five peaks above 8000 meters and to more than fifty peaks above 7000 meters. Gilgit and Skardu, the main political centers, are the two hubs for expeditions to those mountains. The region is home to some of the world's highest mountain ranges—the main ranges are the Karakoram and the western Himalayas. The Pamir Mountains are to the north, and the Hindu Kush lies to the west. Among the highest mountains are K2 (Mount Godwin-Austen) and Nanga Parpat, the former being the second highest in the world after Mount Everest of Nepal. Prior to 1978, Gilgit-Baltistan was cut off from Pakistan due to harsh terrain and the lack of accessible roads. With assistance from the Chinese government, the construction of Karakoram Highway (KKH), which connects Islamabad (capital of Pakistan) to Gilgit and Skardu and Gilgit to Taskurgan and Kashgar in China via Khunjerab Pass was completed in 1978. This led to phenomenal change in the socioeconomic outlook of the region, which had been neglected for centuries due to being the remotest region of Pakistan.

Despite some positive socioeconomic changes, the region remains one of the most disadvantaged in Pakistan. The geographical isolation, hard climatic conditions, mountainous environment and scarcity of resources contribute to the region's continuing socio-economic backwardness. People have very limited access to essential facilities such as health care, education, communication, electricity, and transportation. Most people (nearly 90%) live in sparsely-scattered remote villages; only 14% of the population lives in urban areas (Directorate of Education Northern Areas, 2005). The annual per capita income is estimated at 60% of the national standard of US $1047 (Government of Pakistan 2009). The communities depend for their livelihood on a variety of sources such as substance farming, employment with government and private sector organizations and limited commercial activities (e.g., trade with China, tourism, retailing, transport, and running restaurants). The major source of livelihood, however, remains subsistence farming of wheat, corn, barely, vegetables, fruits, and cattle. Marking of fresh and dried fruits such as apple, pear, cherries, apricot, almond, and walnut contribute to families' income (The Aga Khan Rural Support Programme, 2000).

Educational Statistics and Schooling

The education indicators for Gilgit-Baltistan Pakistan fall below the national average, and the quality of education in the region is inferior to that of the rest of Pakistan (The Aga Khan Development Network, 2001). The literacy rates are 64% for males and 34% for females (Government of Gilgit-Baltistan, 2010). The gross school enrollment and literacy rates, particularly the level of participation in middle and secondary education, vary substantially from place to place within the region, both rates being generally lower for women (The Aga Khan Development Network, 2001). The overall educational situation and female participation in middle and secondary education in the region are improving, largely due to the work of NGOs, such as the Aga Khan Education Service, Pakistan (a non-profit organization), which is the second largest provider of education after the government.

High schools in Gilgit-Baltistan are generally small in terms of student population and size of teaching staff compared with the high schools in urban areas. Student enrollment in a typical Government school in Gilgit-Baltistan would range from 430 to 500 boys or girls, with a teaching staff of 20 to 25 men or women teachers, depending upon students' gender. Most of the high schools are single-gender—separate schools for girls and boys. The number of students of Grade nine or 10 in a typical class ranges from 40 to 50 boys or girls. Typical high schools in fact enroll students from Grades one to 10, divided into primary, middle and secondary sections housed in one building with the same headteacher and teaching staff. In some situations, high school teachers are required to teach students belonging to any age group (Grades 1-10). However, senior (upper salary scale) and academically more qualified teachers teach only upper-grade (Grades 8-10) students. The teachers are expected to organize the instructional periods in accordance with the syllabus provided by the Examination Board. Completion of the prescribed syllabus within a stipulated time is compulsory, because the Board examination questions cover all the syllabus content.

Teachers' lives inside and outside school are inseparable. Teaching in Gilgit-Baltistan is considered a noble profession; a teacher is believed to know more than those whom he or she teaches. As models of good character, teachers are expected to preach and practice all the noble virtues, such as honesty, integrity, trustworthiness, justice, fidelity, and fairness. Teachers are active and influential members of their communities; in the remote rural areas of Gilgti-Baltistan, where adult literacy is low, teachers assume leadership responsibilities in social and religious organizations and have a great deal of influence on community affairs.

Despite this positive image of teaching and these expectations about teachers, schoolteachers do not enjoy the kind of status or public respect attached to professionals or authorities such as doctors, engineers, police, army officers, religious leaders, and so on. Factors such as low salaries, minimal power or authority and lack of recognition for teaching as a full-fledged profession (i.e., becoming a teacher does not require certification) all contribute to teaching's lower status. But teaching in a government school is much more attractive for educated youths, due to comparatively high salaries, other service benefits and job security.

Literature Review

Recently, the processes of school improvement and educational change have attracted much attention from researchers and educators around the world, particularly those in developed countries. The school improvement models, frameworks and approaches, and the educational change theories that have emerged from these studies, tend to emphasize the centrality of teachers in initiating, managing and sustaining educational change and school improvement (e.g., Creemers & Reezigt, 2005; Drake & Miller, 2001; Farah, 1995; Flecknoe, 2005; Fullan, 1992, 1993, 2001; Hargreaves, 1994; Lieberman & Miller, 1994; Reezigt & Creemers, 2005; Scheerens & Demeuse, 2005; Stoll, 1999). Creemers and Reezigt (2005) argue, "Schools do not change if the people within the schools, particularly the teaching staff, do not change" (p. 365). Fullan (1991) concurs, "In the final analysis it is the action of the individuals that counts" (p. 77). Calderhead's (2001) extensive review of the literature on *international experience of teaching reform* led him to conclude: "If educational reform is to be systematically and effectively managed, the roles of teachers need to be fully recognized and incorporated into the reform process" (p. 797).

The Committee of Experts on Standards of Education Improvement at Secondary and Higher Secondary Levels, Government of Pakistan (2002) also seems to be in tune with these perspectives in its strong emphasis on the "pivotal" importance of teachers in school improvement. Fullan (1982) concludes that the neglect of the phenomenology of change—that is, how teachers and others in the educational system experience change, as distinct from how change might have been intended—was "at the heart of the spectacular lack of success of most reforms" (p. 4). There has been no substantial work towards understanding the change process from teachers' perspectives since Fullan pointed out this gap almost three decades ago.

The insights from empirical research and from the ongoing discourse on educational change and the teacher's role in reform also underscore the need to expand the expectations for teachers' roles in school reform beyond the classroom to include the school and the community (e.g., Creemers & Reezigt, 2005; Niyozov, 2001; Scheerens & Demeuse, 2005; Stoll, 1999; Thiessen, 1993; Thiessen & Anderson, 1999; Wikeley & Murillo, 2005). These three distinct contexts of teaching interact to shape teachers' professional roles and dispositions and, in turn, students' educational experiences and development (Calderhead, 2001; Cochran-Smith & Lytle, 1993; Fullan, 1993; Guskey, 1995; Lieberman & Miller, 1994; Randi & Corno, 1997; Thiessen & Barrett, 2002).

Despite the growing realization and the blossoming rhetoric about teachers' pivotal role in school improvement, educational research has not paid adequate attention to the extent and ways in which teachers influence school improvement by getting involved in the improvement efforts inside and outside school (Honig, Kahne, & McLaughlin, 2001; Thiessen & Barrett, 2002). Thiessen and Barrett (2002), for example, note the lack of emphasis on teachers' extensive roles in school reform, roles that include teachers' persistent efforts towards improvement of practices, procedures, routines, policies, and relationships in the school and in the community. These authors argue that the literature's ongoing emphasis on teachers' classroom work "fails to adequately acknowledge the work of teachers in other contexts and, consequently, underplays the interdependence of what teachers do inside and outside the classroom" (p. 761). Though

much of teachers' work is based in the classroom, the literature recognizes that their work and change efforts also occur outside the classroom, at the school level (with colleagues, headteachers, etc.) and in relation to others in the school community (e.g., parents, families, school district, personal-consultants, resource people, administrators, etc.). However, much less is known about teachers' improvement experiences in these latter two realms or about how teachers' work in one realm interacts with their change activities in one or both of the others.

School Reform in Gilgit-Baltistan

The various school improvement initiatives undertaken in Gilgit-Baltistan have tried to address various educational issues at different levels. The teacher professional development programmes initiated with funding from international donor agencies have considered teachers as key players in school reform. These programmes assume that their intended results (e.g., visible improvement in students' learning and development) could not be achieved until all key stakeholders—teachers, headteachers, educators, parents, the local community and education officials work together to improve schools. It is also recognized that the teachers' role in school change requires them to lead activities, communicate and collaborate with all stakeholders, generate support and resources, and address the challenges that inhibit improvement (Kanji & Ali, 2006).

Overall, the literature paints a bleak picture of the challenges facing school improvement in the region. The most widely recognized challenge to school improvement in Gilgit-Baltistan comes from deeply entrenched instructional practices which make students memorize a great deal of information with the limited purpose of reproducing it in the Board Examinations (Aga Khan Foundation, 1998; Shafa, 2003; World Bank, 2004). A report by the Aga Khan Foundation (1998) notes, "Teaching methods are teacher-centered and do not encourage student participation. Rote memorization and moral dictates go hand in hand with a punitive school environment" (p. 24). The report further points out that the quality of education is particularly low in the rural areas, because schools have insufficient material resources and staff; teachers are either untrained or poorly trained. The report also says that most teachers have little exposure to English and few opportunities to practice it and that, in many cases teachers have inadequate content knowledge, particularly in Mathematics and Sciences.

Shafa (2003) categorizes these challenges under three broad areas: *school environment*, *examination system*, and *external forces* (p. 252). The *school environment* includes a school's physical and social environment. In Gilgit-Baltistan, it is typically characterized by insufficient, small and stuffy classrooms, no washroom or toilet facilities for students, and a shortage of material resources, a lack of collaboration among teachers, and a lack of teacher commitment. The examination system, controlled either by schools themselves or by external Boards, is afflicted by "rampant acts of corruption," making it "unreliable and devoid of credibility" and a serious threat to any school improvement efforts that aim to improve students' academic achievement (Shafa, 2003, p. 240). Shafa also reports a negative correlation between teacher commitment and the *examination system*; the latter's emphasis on syllabus coverage and memorization destroys teachers' initiative and enthusiasm.

Shafa's (2003) *external forces* refer in part to divisions within a school's local community that lead to sectarian conflicts and violence, which can fuel sectarian sentiments in the school and disrupt the teaching and learning conditions by triggering hostility among the students or causing the closure of the school. The external forces also include the difficulties involved in the relationship between schools and the Central or District Offices, mainly lack of communication between schools and the Central office's inability to provide support for school improvements. Shafa also says the communication gap between parents and schools limits school improvement. He reports teachers' apprehension about the nature of the District Office's approaches, which they perceive as overtly bureaucratic. In sum, the various geographical conditions and social realities and institutional and material challenges discussed above make the work of school improvement difficult for teachers in Gilgit-Baltistan, especially by reducing their commitment, which is crucial to school reform.

Emergence of the Study

I believe that the portrayal of improvement-oriented teachers (IOTs) and their work needs to be viewed from a cultural context, as the relationship between teachers' identities and their work is influenced by different practices, organizational conditions, socio-cultural circumstances and relations with the broader environment. This suggests that "teaching" and "school" are both culturally related phenomena. Similarly, the conception, the attributes and the roles of a "good teacher" will vary cross-culturally; hence, the role of "improvement-oriented teachers" will differ among cultures.

My interest in understanding teachers' experiences from their own perspectives is influenced by the philosophical perspectives grounded in phenomenology and social constructivism. Phenomenology is concerned with describing and interpreting the phenomenon of people's personal lived experiences: how they construct, interpret and enact these experiences (Eisner & Peshkin, 1990). Similarly, social constructivism is premised on the belief that all knowledge is constructed in an interactive, dynamic process influenced by the historical, social, and cultural ethos (Eisner & Peshkin, 1990), and that knowledge and truth hence depend on one's perspectives (Guba & Lincoln, 1994).

During my over 19-year teaching career, I worked and gained experience as a teacher, headteacher, teacher educator, and an external change agent in both Government and NGO high schools in Gilgit-Baltistan. I functioned as a headteacher while still teaching full-time. The headteacher role involved multiple duties and responsibilities: dealing with day-to-day administration and emerging situations in the school, as well as interacting and communicating with parents, the community and senior management. Still later, my teaching responsibilities were reduced, and I was assigned to facilitate a school-based, in-service teacher professional development programme. As a Mentor, I worked with high-school and middle-school teachers to enhance their understanding and skills in child-centered pedagogy.

My perception of high-school teachers' work was further influenced by yet another experience, participating from 1999 to 2002 as an external change agent in the Whole School Improvement Programme (WSIP) administered through the Professional Development Centre North. My main responsibility in the programme was mentoring

teachers, which included a wide variety of activities ranging from conducting periodic workshops for practicing teachers to organizing reflective sessions in order to encourage reflection and sharing among the teachers. In addition, I reported weekly to the Professional Development Centre about what occurred in the school, what challenges were confronted during a particular visit, how those challenges were addressed, and by whom.

My work in the schools as an external change agent in some respects confirmed my previous learning in high school. However, my diverse roles and responsibilities as an external change agent engendered new experiences and the formation of new perspectives about teachers' work and about the wide variety of issues, tensions, and challenges involved in school improvement, particularly that mandated from outside. My experiences suggested that any large-scale change initiative designed outside the school and taken to the school as a "recipe" may not resonate with the feelings, choices and abilities of the headteacher and teachers who must implement the change.

From all these experiences, I came to believe that an inquiry into improvement oriented teachers' (IOTs) experiences would help in recognizing and appreciating the values, practices and abilities they bring to their change agent role. The IOTs' reflective voices can provide a means to better understand these teachers' perceptions, practices and underlying values, thus gaining information and feedback for school improvement, teacher development, and re-conceptualization of other educational innovations such as reform curricula and student assessment practices in Gilgit-Baltistan.

Methodology

The core purpose of my study was to present a comprehensive description of the experiences, contributions and concerns of improvement-oriented high-school teachers in the unique socio-cultural context of Gilgit-Baltistan. The significance of the study lies in the paucity of such culturally-specific data and insights into contextual opportunities and challenges. To guide the data collection, I asked three general questions:

- What important changes do the IOTs pursue in the realm of classroom, school and community?
- How can the teachers-initiated changes be characterized?
- How do the teachers' roles evolve with their change practices?

I used qualitative case study methodology to generate data in the study. I am a proponent of the interpretivist worldview, which holds that realities exist in multiple forms and are constructed culturally, socially and linguistically (e.g., Eisner, 1991; Eisner & Peshkin, 1990). Qualitative research helps us gain a wider, holistic and context-specific picture of the researched phenomenon (Eisner, 1998; Glesne, 1997; Lincoln & Guba, 1985). It allows multiple viewpoints and interpretations for understanding dynamic, ever-changing and complex social realities (Guba & Lincoln, 2000; Merriam, 1988; Schwandt, 1994). Qualitative case study method is useful in in-depth investigation of phenomenon; it is therefore a suitable methodology for dealing with critical problems of practice and extending the knowledge base of various aspects of education (e.g. Lincoln & Guba, 1985; Merriam, 1988; Stake, 1995). The literature on qualitative inquiry

views the case study method as an appropriate tool to better understand the dynamics of interactive social, cultural, personal, and academic phenomena in a school setting (Hitchcock & Hughes, 1995). The topic I investigated dealt with all of these aspects. My study aimed at contributing to the understanding of how, despite facing difficult working conditions, IOTs in Gilgit-Baltistan pursue improvements in order to promote meaningful learning in the classroom and influence changes in practices and situations inside and outside school. Their efforts constituted the main focus of the investigation, or the "heart of the case," of this study (Hitchcock & Hughes, 1995).

Ethical Considerations

My study involved human participants; therefore, it was imperative to make an Ethical Review application and have it approved by the Ethical Review Committee of the University where I pursued my doctoral studies. Since the study involved minimal risk, it qualified for an expedited review. After having been granted permission, I proceeded with the data collection process. Through written application I obtained administrative consent from competent authorities of the schools and from the participants. I provided the authorities and the participants with detailed information about my study: the purpose of the study; its intended benefits; sampling criteria; the demands on teachers' time; the timeline of the study; data collection tools and procedure; and assurance of confidentiality and anonymity.

Site Selection and Sampling

The intent of this study was not to prove the participants are improvement-oriented teachers; rather, their proactive orientation to improvement was a crucial criterion for selecting them. My concept of IOTs therefore does not necessarily refer to ideal or exemplary teachers. Instead, IOTs are good teachers whose sustained commitment to improving their profession and their schools involves both *perspective* and *practice*. *Perspective* includes their espoused theories, their progressive ideas, their optimism, their advocacy of change in formal and informal ways, and their positive social and moral values. *Practice* can include such actions as: Engaging in planned changes; making small, self-initiated, structured or unstructured improvements; restructuring, adapting and modifying practices; experimenting with innovative instructional strategies and techniques; taking on additional responsibilities inside and outside school; pursuing continued professional growth; and promoting collaboration. For IOTs in contrast to other teachers, both perspective and practice are consciously directed toward improvement.

I selected school sites in which I might find my teacher-participants on the basis of my own prior knowledge of the schools and the information publicly available (e.g., school and district reports). All the information suggested that these schools differed from other high schools I surveyed in two respects: first, their students performed better in the Secondary School Certificate Examination conducted by the Examination Boards; second, the schools have initiated positive changes or innovations over a period of time. I visited a total of six high schools in two districts (Gilgit and Ghizar) of Gilgit-Baltistan and gathered information about the schools and teachers. I collected this information,

which I noted in point form, through face-to-face meetings with headteachers, teachers and supervisors; also, I read through the documents (e.g. examination results, reports), I obtained from school and District offices. I collected information from about 50 teachers from the six schools I visited. I carefully analyzed the available information in order to select teachers who ideally met my criteria.

Recruitment of the Research Participants

I selected four research participants, three were male teachers, and one was a female teacher. Two of the participants belonged to the government system, while the other two teachers were selected from a non-for-profit private school system.. Drawing on my prior experiences, information locally available about teachers, and insights from literature, I had developed selection criteria that included the following conditions: (a) The participants must have at least five years of teaching experience as regular teachers in a high school setting; (b) they must demonstrate commitment to student learning and development; (c) there should be evidence that the teachers contribute to the efforts, initiatives, and innovations that are intended to improve teaching and learning practices inside classrooms, process, structures, and relationships in the school, and relationships between school, parents, and the wider community; (d) the teachers are mindful of and skillful in the strategies that might help to promote change and address challenges along the way; (e) they are optimistic, positive, knowledgeable, articulate, and curious; (f) there is variation in the sample by gender, religion, and ethnic diversity; and (g) the participants should show interest in my study and be willing to participate in it.

After having identified the participants, I shared with them the purpose of my study, my research ethics and details of the research activities, including the demands the study would place on their time and energy. I formally invited them to participate in the study and obtained their consent on a written form that I provided.

Data Collection

An inherent strength of the qualitative case study design is that it allows a variety of data collection tools suitable to the research situation at hand. Typically, these consist of observations, semi-structured and unstructured interviews, participant observation, field notes and analysis of archival data. Given the wide range of options, and seeking to triangulate in order to enhance the "trustworthiness" (Guba & Lincoln, 1981, p.120) of the findings of the research in my study, I used semi-structured in-depth interviews, classroom observation and post-observation reflections, teachers' reflections, document analysis, field notes, and a personal methodological journal.

Semi-structured interviews. My study, exploratory in nature, elicited the participants' responses (e.g., experiences, practices, values, and attitudes) in relation to their involvement in school reform. Semi-structured interviews are useful when collecting information on a large scale or when the research is exploratory in nature (Hancock, 1998) like mine. Such in-depth interviews provide a more systematic approach to gathering detailed information about specific topics across a sample (Creswell, 1998).

I conducted five 60-minute, in-depth, face-to-face semi-structured interviews with each research participant. The interview schedule I used in order to facilitate these interviews consisted of three major parts. Each part consisted of a set of open-ended questions concerned with each of the three work realms (classroom, school and community) of my organizational framework. In interviews one and two, under parts I and II, the interview focused on the following: the "personal dimension", which involved the teacher's biography; and the third and fourth interviews elicited responses to a set of questions related to the teacher's improvement efforts in the classroom, in the school, and in the community. In the fifth interview, we returned to issues within all three areas (classroom, school, and community) in relation to our previous discussions or to any observation or the teacher's and my notes.

I recorded on audio-cassettes the interview conversations so as to allow me to capture the details of our conversations in full. I listened to each interview recording in order to note points and be prepared for the next interview. Formal transcription of the interviews began immediately after termination of the data collection phase. I transcribed all the interviews by myself. The interviews took place in different places, that is, in the school (staffroom or head teacher's office), in my residence or in the teacher's residence or in a hotel, according to our convenience.

Classroom observation and post-observation reflective discussion. Hancock (1998) views observation as a well-established method for exploring the social world; he recommends the use of observation in situations where detailed descriptions of a setting, activities and people's meanings and values are to be explored. Classroom observations help in drawing pictures of learning activities, the general ethos of the classroom, the challenges, dilemmas and difficulties the teacher faces, and the way the teacher responds to these challenges. As well, observations provide a context within which to engage the teacher in a reflective discussion on what the teacher did in the classroom, and how and why he or she went about it. Acknowledging Hancock, I engaged in extensive classroom observations, and seized the opportunity for post-observation reflective discussions to help me gain a wider and deeper insight into the teachers' classroom innovations, pedagogical choices, challenges, coping strategies, remedial actions and underlying beliefs and conceptions.

To observe the teacher and students in action in the classroom and to understand the details of the complex classroom interactions, I took a seat at the back of the classroom and jotted down what I saw, heard and felt during the lesson. According to Heck and Williams (1984, p.107), "Observation data contains more than what is seen. They include which is heard, smelled, felt, sensed." I recorded classroom events and observations as they occurred. During the observation, I highlighted important points and questions related to any aspect of the teacher's action, the students' reaction or what clicked in my mind as an important item that required clarification or probing in the post-observation meeting.

Post-observation reflective discussions. The classroom observations were followed by post-observation reflective discussions with the participants (usually at the end of the school day). These taped reflective discussions were focused on making explicit the teacher's perception of problems, as well as the teacher's thinking, actions,

behaviours, and decision-making during the lesson. I later labeled these discussions with codes (pseudonyms, date, and serial number) and transcribed them in full.

To begin the reflective discussion, I asked each teacher to describe what he or she did during the lesson and explain why he or she did so. My observations from these post-observation reflective discussions informed the five primary interviews discussed above. The data from this source, along with my field notes from my classroom observations, provided additional data to help triangulate the teachers' practices in relation to the thoughts and beliefs they expressed during their in-depth interviews. In particular, the reflective discussions were useful in revealing the underlying beliefs, perspectives, experiences, ideas, and biases that determined the teachers' decisions, behaviours, attitudes, approaches, and actions during the lessons.

Teachers' oral reflections. Teachers' oral reflections about their ongoing experiences in the context of classroom, school, and community are another important source of data in this study. These reflections differ from the post-observation reflective discussions above, in that they focus on the teachers' everyday experiences outside the classroom (school and community). Originally, I had planned to obtain teachers' written reflections (two pages, focusing on one or two events) weekly, but this strategy did not work, as time constraints prevented the teachers from writing reflections on a regular basis. As an alternative, I decided to request "oral reflections:" I asked the participants to jot down, in point form, their significant experiences, reflections on one or two classroom events, feelings, or whatever topic they wanted to talk about, on a piece of paper in order to collect their thoughts, and then to talk to me about them. This strategy worked well, because it did not place an extra burden on the teachers and it provided them with the opportunity to fully express themselves, and thereby quenching their thirst to speak more. It also enabled me to record detailed reflections on a range of the teachers' experiences, issues and events during the past week. In addition, it provided me with the opportunity to probe deeper into issues, critical incidents and the teacher's experiences in a reflective, dialogical environment. Teachers felt that the practice helped them to critically reflect on a wide range of professional issues and to deepen their insight and understanding about those.

Document analysis. The analysis of documents was also used as a source of data. Through a written request, I obtained documents from the organizations to which the teachers belonged. These documents provided information about school improvement programmes and statistics about schools (teachers, students, and infrastructure). I also reviewed documents provided by the participants. The participants provided me with a detailed description of the activities carried out in a typical working day (the activity and time spent on it inside the classroom, in school and in the community or home after school hours). This record was aimed at depicting "a typical day in the life of a high school teacher"—a strategy used by Heck and Williams (1984) to recognize and characterize different images of dynamic, effective or good teachers.

Field notes. I kept a methodological journal in order to document my own reflections, observations and experiences during the fieldwork. These observations focused on the internal dynamics of the school (e.g., interaction among teachers in the

staffroom and outside it). I documented my informal conversations with the research participants, which took place at different times during school visits. I also noted the obstacles or challenges I came across during data collection on a day-to-day basis. The field notes helped me identify, record, and describe challenges and realizations.

Data Analysis

Data analysis, a continuous process, is about making sense of the data and deriving valid meanings. Analysis involves discovering patterns in the data, looking for general orientations, trying to sort out what the data are about, and understanding what one might say about them and why (Hitchcock & Hughes, 1995; Wolcott, 1994). In this study, data analysis involved a "triangulation" (Denzin, 1970; Merriam, 1985) of the five data sources: interviews, observations, post-observation reflective discussions, teachers' reflections, and document analysis.

Transcription and coding of the data. The interviews with the research participants took place in Urdu, and the information for all data sources was recorded in Urdu; only important chunks of data to be used in the writing were translated into English. I transcribed all taped interviews in full, verbatim. While transcribing taped interviews, I left reasonably wide blank margins on the right and left sides of the paper. I wrote brief notes on emerging themes, questions, confusions, reflections, and new lines of thinking as reminders to be developed at a later stage of interpretation.

To begin with the data analysis, I developed a coding or reference system. First, I tried out color-coding but it did not work, because the diversity in the emerging themes exceeded the number of colors available. Finally, through trial and error, I came up with my own coding system and procedure of data analysis. I numbered the lines on individual pages of the interview transcripts and field notes. The interview number, date and pseudonym of the respondent were put on the top of the transcripts. In combination, the interview date, respondent's pseudonym, page number and number of the line containing the relevant information served as the code reference. After having a viable reference system in place, I proceeded to the formal data analysis, which consisted of three consecutive stages.

Stage I: Content analysis, identification and categorization of micro-themes. In order to carry out data analysis, I applied a content analysis (Stake, 1995; Yin, 1994) procedure to all interview transcripts, classroom observations, teachers' reflections, field notes, and documents. The content analysis process involved reading and re-reading the data thoroughly (Hitchcock & Hughes, 1995) to recognize various emerging micro-themes or key ideas. Carefully reading and re-reading through each interview transcript, I circled the numbers of the initial and final lines of each passage of information pertaining to a particular micro-theme or a key concept. I looked for micro-themes or key ideas in a given paragraph or even in a single line; I briefly noted them in the margins. To refine and improve the micro-themes, I engaged in a continual process of reflection and revisiting the raw data, double-checking the wording.

Categorization involved a kind of thematic analysis. I grouped the numerous micro-themes from preliminary analysis around the three realms (classroom, school and

community) of teachers' work that form the organizational framework. The categorization process continued until I was satisfied that all the micro-themes were clustered appropriately under the relevant major themes.

Stage II: Identifying patterns and recognizing key themes. The second stage of analysis involved grouping numerous micro-themes, expressions, and concepts within the three realms of classroom, school, and community. This stage of analysis concerned data reduction and synthesis (Miles & Huberman, 1994). The underlying purpose was to identify patterns or search for key cross-cutting themes within each broader category. In doing so, I used color-coding and repeated regrouping. I identified a number of key themes or phrases that described or reflected a central idea shared by a set of related micro-themes.

Stage III: Cross-case analysis. Having completed the identification of key themes in each of participant's cases, I carried out a cross-case analysis in order to see what commonalities and differences exist across the four cases. In the cross-case analysis, I found striking uniformity and commonalities in the four teachers' conceptions of improvement (what to improve, how to improve, and why to improve), their dispositions (beliefs, rationale behind advocacy for change), and their improvement initiatives in the three realms of their work. However, there remained recognizable differences among the teachers' biographies and school working conditions.

Challenges and realizations. I found all of the above data collection tools useful in generating rich data about the research problem. By the end of the data collection, I had been able to elicit a great deal of data, but the temptation and the desire to gather more and more information persisted up to the end of data collection. One challenge I confronted during the data collection period was the incompatibility between my work plan and the school dynamics, such as variations in schools' timetables; frequent interruptions like term exams, tests and school functions; teachers' unpredictable absenteeism due to sickness or personal circumstances, such as weddings and other incidents in the family; and the unavailability of suitable places for interviews. My good relationship with the participants, characterized by mutual respect, trust and understanding, and the flexibility of my work plan allowed me to accommodate these changes and emerging situations.

I found data transcription, coding and translation quite challenging. I had to transcribe a total of 45 audio-cassettes, of 60 minutes, each with both sides filled. I accomplished all the transcription work by myself; I found it time-consuming and laborious, yet rewarding. The translation of selected chunks of data was also quite difficult. The interview conversations with the research participants took place in Urdu or in other local dialects. I chose to translate into English only the texts used in subsequent writing. Creating an appropriate translation from Urdu to English was a difficult task, yet careful attention to the text's core meanings and constant double-checking helped me to improve the process.

Findings

In this study, I employed "methodological triangulation" (Denzin, 1970) to enhance the trustworthiness of the results. For example, when I triangulated the data from the teachers' reflections with the data from the interviews and post-observation discussions, I gained greater understanding into the practices and issues inside the classroom, and into how they related to what the teachers did in the context of the school and the community. To ensure rigor in the study, in addition to using multiple data collection tools, I increased the number of in-depth interviews with the participants and observations of their classroom practices I had originally planned.

In this study, I explored the participants' experiences with changes in the realms of classroom, school and community. In this paper, I synthesize my findings pertaining to the three research questions by weaving together the discussions on the trends in teacher initiated changes and the various roles (e.g., mobilizing resources, communicating with stakeholders, or mentoring their junior colleagues, etc.) the teachers play in bring about these changes. The IOTs frame their images as agent for pedagogical, institutional and social change. Accordingly, I group the findings related to classroom-, school- and community-based changes under the three broad categories of *pedagogical change*, *institutional change,* and *social change.*

Pedagogical Change

The pedagogical changes which the teachers pursue on their own choosing are motivated by teachers' expectations of students, their perceptions about students and their learning and developmental needs. The teachers attempt to move away from merely transmitting textbook knowledge and facts; instead, they focus on the learner's active engagement in the learning process. One of the participants of this study, for example, emphasizes the importance of students learning concepts in the area of science:

> The knowledge in the syllabus [textbook] is static; concepts are not reinforced with 'reasoning'. But I want children to raise questions. For example, children learn about electrostatic force or static charge. But do they know how the flash of a photo camera works? Merely knowing about static charge, or having a limited knowledge about the function of the flash system so that students can describe that it [flash system] produces light because of the dry cell inside the photo camera, does not provide sufficient evidence to presume that they have understood how a photo camera works as a system. Children need to learn the concept to the depth that they understand how the charge is stored in the capacitor [a component used in electric and electronic devises] inside the flash and how it gets released to produce light. If students describe the capacitor, its structure, and its function, then it would imply that they actually understand the function of the flash system of a camera and the application of static charge. (Excerpt from teacher's interview)

In fact, the teacher emphasizes that to understand a topic the learner needs to have a deep comprehension of all the primary ideas or sub-concepts involved in the formation of a concept. The teacher's perception of in-depth learning of subject matter implies that the learner can offer reasons and explanations, make connections, focus on core scientific ideas or knowledge, and relate subject matter to the actual physical environment. Another teacher concurs with this when he, says, "In science, when children get exposed to a definition first, learning becomes difficult. It limits their thinking and narrows their vision, akin to a buggy-horse with eye blinkers" (Excerpt from teacher's interview). He emphasizes learners' self-construction of scientific definitions; he believes that memorizing ready-made definitions from textbooks or a teacher's notes may deprive students of productive mental engagement with the concept. Reflecting on a specific lesson, he further explains that the problem he faced was children's relying on the book definition, rather than paying adequate attention to the ideas, reasons, situations, and facts underlying the phenomenon. He explains:

> Children believe that memorization of a definition is the only way to learn a concept; they have no idea of alternate ways to learn scientific definitions. When they memorize, they forget easily. I do not offer ready-made definitions; rather, my first priority is to take students through examples and processes to derive meaning from given information. Students work through simple examples and construct their own definitions. In this way my students easily understand the material and actively participate in the lesson. (Excerpt from teacher's interview)

Here the teacher points out that in traditional classrooms students do not learn definitions and concepts deductively, but through rote memorization. As a result, these students lack the ability to commit the information to long-term memory. Short retention is the inherent disadvantage of learning concepts through memorization. As an alternative, he helps his students to deductively construct scientific definitions themselves by working through multiple examples. Yet another teacher argued:

> Our education system is based in cramming and memorization, and on reading and writing without regard to thinking. Activity –based methods or discovery and inquiry approaches to teaching and learning are not being practiced. I try to educate my students in a way that includes an element of discovery in learning, which, in my view, is an important element of progressive education system. (Excerpt from teacher's interview)

According to the above reflections, formation or reorientation of teachers' identity in the classroom is embedded in both how teachers perceive their roles in the dynamics of the academic dimension of the classroom and how they organize teaching in response to these dynamics and in accordance with the vision they hold about student learning.

The learning activities the IOTs organize, the instructional strategies they adopt, and the pedagogical decisions they make during lessons and the remedial actions they take to help students cope with conceptual learning together frame their role as facilitator of learning. This subsumes an array of different roles, such as innovator, enabler, helper,

problem solver, counselor, advisor, guide, observer, decision-maker, instructor, resource manager, and purveyor of information. These various images integrated into their change practice reflect elements of both progressive and traditional pedagogy. The non-traditional and traditional roles can be subsumed into two major role types: "facilitator" and "information broker" respectively. Acting in line with these roles, they make changes in everyday lessons. Sometimes they try out new pedagogical ideas, techniques and strategies to promote interactive learning (innovators). Sometimes they reorient existing practices by making changes in how students interact with the material (decision-makers). Sometimes they make necessary adjustments in the lesson to balance interactive learning activities with traditional modes of teaching (purveyor of information, transmitter of knowledge) by providing additional information and relating subject matter to local environment or students' real life experiences (mediators or information organizers). Their more subtle pedagogical changes include scaffolding or instantaneous assistance to remedy the students' difficulties in gaining deeper understanding of subject matter.

Institutional Change

Many people including head teachers, students, and parents contribute to creating and nurturing an institutional environment that presents children with rich opportunities for learning and growth. However, as reflected in the teachers' narratives, they are the primary *architects* of the institutional environment conducive to initiating and sustaining improvements. As one of the teacher argues:

> It is absolutely unfair to blame others for the prevalence of an environment in the school that does not inspire and support innovation, enthusiasm, hard work, creativity, cooperation, and continued change. It is the teachers who should take the blame for the perpetuation of a mediocre work ethos in the school. As a primary architect, teachers are responsible for creating and sustaining a positive or negative institutional environment (Excerpt from teacher's interview).

The teachers' also suggest that they individually experience the school environment; it affects their perceptions and behaviours, and, in turn, is influenced by the individual and collective perceptions and behaviours of the school community. A school environment thus links the qualities of the individual members of the school community to the functioning of the school as an institution.

> The school environment is a big hurdle. When the environment overall undergoes positive changes, then revamping other practices will be a bit easier. Therefore, we need to focus squarely on changing a school ethos as we continue with our efforts to reshaping the ethos of our own classroom. (Excerpt from a teacher's interview)

Moreover, characterizing a supportive institution, the teachers tend to emphasize the degree and the manner in which attention is given to students' academic learning and

social and moral development. The teachers believe that most changes in a school have little significance if they do not get translated into improvements in students' learning and development. One of the teachers, for example, opines, "We need to improve those things inside the school that have an effect on our students' lives and their learning. For example, how teachers treat students or their ways of organizing teaching and learning could be one of them" (Excerpt from teacher's interview). Another teacher concurs when she says: "Students are affected by conditions inside the classroom and also by the experiences they undergo outside the classroom. We are responsible for creating conditions in the school that positively influence our students' experiences" (Excerpt from teacher's interview). The third teacher extends the argument saying, "Human resources, and by that I mean teachers, are the most central aspect of school improvement, especially when improvement is sought in children's learning and development" (Excerpt from teacher's interview). He maintains that, despite the teacher's pivotal role in improving classroom practices, an individual teacher's efforts will have limited impact if the circumstances around the teacher remain unchanged. Underlying the importance of an inspiring environment that encourages collective action, another teacher says:

> When a healthy environment is created, then every individual working within that environment learns and tries to accomplish to the best of his or her abilities. Individual experience in working for change is one thing. But the creation of systems and processes inside school is something else. Systematic change in schools needs more processes and systems than individual experiences. (Excerpt from teacher's interview)

The teacher views real and durable change as an effect of the larger environment within schools instead of a result of isolated individual efforts. He discusses the circumstances and the personal experiences that have led him to understand that an individualist approach to change is less productive than an institutionalist approach that focuses on features of a school environment and classroom practices that draw on systems, support structures, processes, and procedures.

These reflections clearly show that, given their experiences and conceptions of school improvement and change, the teachers understand the need to shift the focus of school improvement initiatives towards improving the school as an institution with greater emphasis on the school environment instead of depending on individualistic, uncoordinated or isolated efforts. Change in the school environment, according to the teachers, mainly involves changing working relationships among teachers so that teachers engage in professional interaction, frequently communicating, sharing ideas and resources, mutual interaction to reduce isolation and learn from each other's experiences, supporting each other in pedagogical improvement, and cooperating in decisions and activities aimed at institutional development. Thus the teachers' reflections suggest that teachers working in the forefront of change are responsible for altering exiting conditions or creating new ones and translating these changes into positive effects on students' learning and development.

In sum, the teachers' approach to school improvement and their analysis of the fundamentals of change from the vantage point of institutional development underscores

the need to create an environment in school that not only inspires, encourages and supports teachers to initiate changes at their classroom level but also obliges them to collaborate in activities to improve the school practices aimed at students' learning and development.

Social Change

The participants report involvement in community activities as agents of social change. Their role as agents of social change mostly involves participation in small-scale social work and emancipatory activities in the community. At the core of their voluntary activities in the community lies their desire to help break the vicious circle of poverty—poor students, poor parents, poor families, and poor communities. The activities the teachers carry out in their communities are aimed at both educational and social change, two mutually supporting goals.

In the rural society of Gilgit-Baltistan, volunteer social work and participatory social activities play an important role in creating socio-cultural norms upon which the communities operate. Constrained by the space I cannot discuss the teachers' extensive involvement in social work as agents for social change. I just present glimpse of the teachers' contribution to societal development. The participants relate to their communities through social work in addition to the work they do in the school. Naturally the extent and the ways in which each of the four participants gets involved in social work differ. For example, one of the participants reports extensive involvement in social work in different capacities and volunteer positions: the *Mukhi* (religious leader in Ismaili tradition) in the *Jamat Khana* (community center), member of the Board of Directors of Shaheen Social Welfare and Educational Society and Manager of the Village Organization. In the capacity of *Mukhi*, the teacher gets involved in numerous religious and social activities. For example, he leads and guides his community in matters related to religious practices, socio-cultural development, and creating educational awareness among the community in general and promoting women's education in particular. He is the main person who communicates with outside institutions on behalf of the community and passes on information to the community from the institutions. He also has the mandate to interpret the information and guide the community in both religious and social domains in accordance with the directions provided its Imam (spiritual leader).

Another participant also actively participates in volunteer social activities in the community. She is an active member of the town's Girl Guide group, where she is a senior Guide and responsible for the training of new members. Additionally, she plays a leading role in organizing events, such as public celebrations, at local and regional levels. She is also an active member of the Aga Khan Social Welfare Board, a subsidiary institution of the Aga Khan Development Network that provides social support (e.g., health, education, living, and skills trainings) to poor and lower-income families.

As a volunteer educator, she helps the teachers who impart religious education to the community children in evening schools. She helps them learn about and implement child-centered, interactive teaching methods for religious education. The third teacher too has been involved in social work, but as an outsider he has a different relationship with the local community. His social work, more educational or intellectual in nature, is intended to generate social awareness. For example, acting as a public intellectual, he

contributes through writings and discussion to spread social awareness among the community. “Nothing is dearer to my heart than promoting social awareness among people”, he says (Excerpt from teacher’s interview).

He discusses a number of areas where he has made efforts to create awareness among the community. For instance, he notes that Gilgit-Baltistan is rich in natural herbs; some of them are precious for their medicinal effects, but the local people do not benefit from them. He claims, “I have worked to bring about awareness in the people about the commercial use of herbs and other natural resources” (Excerpt from teacher’s interview). He further discusses how he tries to educate his co-workers and other people about social change. For example, he shares ideas or techniques about enhancing the capacity of agricultural land, dealing with cattle and dealing with fruit trees to protect them from diseases and increase their yield. He says:

> These are a few ways and areas in which I try to educate people towards development and social change. These are genuine issues around which a common man in the community needs to be educated. I also discuss these ideas with students in the classroom, because ideas are for change and education is for living. (Excerpt from teacher’s interview)

Likewise, the fourth participant has contributed notably to educational awareness in the community. For example, he played a catalytic role in creating unity among the community members, particularly motivating the educated members in the community to work towards mobilizing the community’s resources to address two goals, the establishment of a coaching centre for girls and a reading center for the youth of the community.

There was no middle or high school for girls in the village. A coaching centre was set up in the building of the existing boys’ high school; it operated as a second shift, in order to enable the girls to continue their education beyond primary and middle grades. The teacher raised money from local sources, made his own contribution and assisted the administrator of the centre in management. He also taught coaching classes after school hours.

The teacher was instrumental in setting up a study centre in order to encourage his fellow villagers, particularly the youth to productively utilize their time by getting involved in healthy activities, such as spending time in the reading centre to read the newspaper and other materials to enhance their knowledge.

Summed up briefly, the instances related by the teachers show that they are committed to and appreciate the importance of providing volunteer services to their communities. The nature of their involvement in social work varies in response to the needs and the unique circumstances that surround their respective communities; there are multiple ways, venues, opportunities, and possibilities for these teachers to play constructive roles in their society through contributing their resources, time, energy, ideas, knowledge, and intellect in various roles, including leader, catalyst, social reformer, agents of social change and, above all, a source of inspiration.

Discussion and Implications

The study described in this paper examined the individual contexts of teaching, namely, classroom, school, and community, and how the factors from these contexts interact to influence the teachers' practices and ultimately opportunities for student learning in the classroom. The following discussion of the findings of the study draws on the theory that teachers are the most central aspect of school improvement, especially when improvement is sought in children's learning and development. However, despite the teacher's pivotal role in improving classroom practices, an individual teacher's efforts will have limited impact if the circumstances around the teachers remain unchanged. This theory of change thus suggests that teachers working in the forefront of change are responsible for altering existing conditions or creating new ones inside and outside the school and translating these changes into positive effects on students' learning and development. In the ongoing struggle to foster institutional change, the dialectic of restructuring and re-culturing continues to affect students' learning and development, the bottom line of educational change (e.g. Anderson, 2002; Lieberman & Miller, 1994; Morrison, 2005). Thus, classroom, school, and community become three distinct contexts that interact to shape teachers' professional roles and dispositions and, in turn, students' educational experiences and development (e.g. Fullan, 1993; Reezigt & Creemers, 2005; Thiessen & Barrett, 2002; Thiessen, 1993).

Inquiry into teachers' experiences as active agents of change provides insights into how they pursue change in the multiple contexts of their work, illuminates what tensions and challenges they face, and reveals which strategies they use to cope with those challenges. The kind of changes teachers pursue in the multiples contexts explain that teachers' roles and functions are not fixed; they evolve as teachers construct new identities for themselves, in response to emerging situations in the world of their work.

Agent for Pedagogical Change

Fundamentally, the pedagogical changes are concerned with the IOTs' efforts intended at bringing about improvement in what they do in the classroom towards improved student learning. In fact, the IOTs' change efforts in the classroom are motivated by their conception of their roles as teachers, their sense of commitment to their students, their willingness to try something new, and their interests in doing things differently. They take risks in attempting pedagogical changes and challenging questionable educational practices such as transmissive teaching methods, hierarchical teacher-student relationships.

The other dimension of pedagogical change relates to cultural alterations in the classroom. Here, "cultural alteration" refers to a change in the classroom psychosocial environment. The IOTs are inspired to alter the existing norms and create non-hierarchical teacher-student relationships based on the principles of a democratic classroom, in which individual students and their views are valued, students get involved in classroom decisions, and a sense of individual responsibility is fostered, which are crucially important to increase students' motivation, foster positive self-concepts, enhanced self-esteem, and self-confidence and high morale—all important to help

students meaningfully engage in active learning and personality development (e.g., Fraser, 1994; Martin, 2006; Zembylas, 2005).

Agent for Institutional Change

The IOTs' experiences of change in the classroom make it evident that a shift from transmissive teaching methods to interactive learning and less authoritarian teacher-student relationships is a difficult task. These teachers and their students come across a wide variety of interconnected challenges that arise not only from situations in the classroom but also from the circumstances in the school and community. As Thiessen and Pike (1992) observe, "Classroom walls are not impermeable. Things that happen outside of schools ultimately affect what happens inside….The perplexities, paradoxes and perturbations experienced by teachers are often the result, or at least exacerbated by, external events" (p. 33). This creates a context for the IOTs' engagement in the change practices in school and community realm, thereby enacting their role as agent for institutional and social change.

Thus the institutional changes involve efforts aiming at bringing about improvement in school-wide practices, processes, cultural and structural aspect of the school. The IOTs' approach to institutional change in the school encompasses both structural (i. e., physical facilities, instructional resources, extra-curricular activities for students, and remedial teaching, etc.) and cultural changes (i. e., focus on the school's work' ethos, especially working relationships among teachers). In the cultural dimension, they use an approach similar to that they adopt in making change or dealing with challenges in the classroom. Change in the cultural aspect of school mainly involves changing working relationships among teachers so that teachers engage in professional interaction, frequently communicating, sharing ideas and resources, mutual interaction to reduce isolation and learn from each other's experiences, supporting each other in pedagogical improvement, and cooperating in decisions and activities aimed at institutional development.

Agent for Social Changes

The IOTs' engagement in changes practices in community realm appears to be multi-dimensional. They get involved in various efforts towards establishing and promoting connections between the school and its external social world. The other dimensions are illuminated by the activities the IOTs are engaged in and the contributions they make to the various features of social changes in the society of which they are a part. As far as the first dimension is concerned, the IOTs strongly believe in good school-home-community relationships, for two reasons: First, they hold the view that students' home and school experiences can be complemented, enriched and extended when parents and teachers share information about students' specific needs (i.e., physical, educational and emotional), interests, abilities, goals, and difficulties at home and school. Second, the differences in students' experiences in their two different worlds (school and outside school) sometimes pose challenges to the teachers, which can be overcome through the collective efforts of teachers, parents, families, and community members. The literature strongly supports the view that home-school contact enhances children's learning and

development as well as increases the accountability of schools to parents and vice versa (e.g., Mortimore, 1991; Tomlinson, 2002).

The IOTs recognize their social responsibilities as important members of the community and become active participants in community affairs. They play diversified roles in social and emancipatory activities intended to promote general social awareness, support women's welfare and create educational opportunities for girls. They contribute with resources, ideas, and service to community development. Their services to the community as agents for social change are inspired by their sense of social consciousness. Their deep involvement in community affairs and strong association with community organizations help them to become acquainted with the social problems and challenges facing their communities as well as to become thoroughly familiar with the communities' resources, conventions, outlook, and the attitudes. Once they comprehend the socio-cultural dynamics of their communities and achieve familiarity with the opportunities and limitations for community development, they are better prepared to mediate between the school and the community. Moreover, this firsthand knowledge of communities' socio-cultural environment allows them to enrich the curriculum by discussing in their day-to-day teaching a wide variety of socio-cultural concepts such deep-rooted and widespread customs and practices, which case expenditures, such as festivals, religious and cultural rituals (i. e., births, marriages, funerals) and other socio-political functions (e.g., family system, political setup, economic and labor conditions, women's and children status) which normally are not included in the curriculum.

To conclude, the deliberations, reflections, and arguments presented in this paper portray the improvement-oriented teachers as progressive practitioners who are determined to promote academic competence among their students and social enlightenment among their communities. They appear to be committed to pedagogical, institutional, and social change. They appreciate the multilayered nature of challenges to improvement in classroom practices, which requires them to engage with changes at multiple fronts. The different, yet interconnected changes, places student learning at the centre of any improvement the IOTs pursue in the classroom, school, and community.

The changes the IOTs purse inside and outside the classroom have important features in common. Their pedagogical changes in the classroom and their development of a supportive environment in the school through teacher collaboration and their interaction with parents and the wider community all seek to improve students' learning, understanding, and development. These features of change are fundamental in creating and enabling interactive and learner-centered climate in the classroom and also in building a supportive school environment in which teachers individually and collaboratively become involved in continuous improvement.

Thus the kinds of changes the IOTs want in classroom, school, and community realm, especially in the ways in which teacher-students, schools, and key stakeholders (i. e., parents, community members, educational officials) interact, also emphasize the principles of meaningful interaction, mutual support, cooperation, shared understanding of opportunities and issues, and the development of mutual respect and trust. Thus, the IOTs' approaches to changes in classroom, school, and community are all premised on the principles of exchanging ideas, seeking and embracing new ideas and innovation, encouraging and supporting each other, engaging in increased communication,

integrating efforts and resources and fostering a spirit of teamwork among all key stakeholders.

In fact, pedagogical, institutional, and social changes the IOTs pursue in classroom, school, and community context respectively are intricately interconnected. It is because of the fact that the IOTs' schools are located in and serve different communities. The demographics of a school community, the students' family backgrounds and characteristics, the community's norms and culture, the characteristics of the educational systems that control finance and policies all influence the teachers' work in the classroom and the school's achievements. Teachers working in schools located in disadvantaged communities face an uphill struggle in helping their students learn and develop regardless of their disadvantaged backgrounds. To be successful in this situation, the IOTs cannot focus their change efforts only on the classroom; their struggles expand to the school and community contexts. They therefore need to become active in efforts to promote institutional and social change.

These conclusions accord with the widely held perspective that teachers are centrally located to influence all these change. Teachers can shape their environment and vice versa. As Giddens (1981) says, "Indeed all human action is carried on by knowledgeable agents who both construct the social world through their action, but yet whose action is also conditioned and constrained by the very world of their creation" (p. 81). This suggests that teachers, through their activities in their social worlds of classroom, school and society, can create or reproduce cultural, structural, and institutional and societal practices and conditions. At the heart of these changes is a changing image of teachers as the "key reformers in education" (Thiessen & Kilcher, 1993, p. 69). As reformers, teachers engage in both restructuring and re-culturing of the classroom, school, and society (Fullan, 1991; Thiessen & Kilcher, 1993). Hence the inclusive image of IOTs is a reformer. This image integrates all other roles the IOTs play in their effort to reform or improve classroom, institutional, and social practices. The recognition of the multilayered nature of teacher initiated changes, the interconnectedness of the classroom, school and community context, and integration of teachers varied roles into their image as reformer has important implication for diversifying teachers work, teacher education and professional development.

This study supports the literature's general view that that professional development for teachers as change agents needs to focus not just on technical teaching skills but also on aspects specific to their change agent roles, which require them to flexibly respond to changes and challenges through innovation, creation, experimentation, inquiry, reflection, adoption, adaptation, and modification to suit both changes and strategies to the situation at hand (e.g., Fullan, 1993; Muijs & Harris, 2003; Senge, 1990; Stoll, 1999). To function as change agents in a complicated world of pedagogical, institutional and social change, teachers need skill, knowledge, and values that apply to all three realms and the challenges that lie within and across them.

The lessons learnt in this study contain a number of immediate implications for school improvement practices, the process of educational change and for a number of educational stakeholders in Gilgit-Baltistan and elsewhere. The important lessons learnt suggest that educational change in the unique socio-cultural context of Gilgit-Baltistan is complex and full of interrelated and layered challenges. Hence, educational stakeholders need to better appreciate the complex interplay of multi-layered challenges that confound

the fundamental change teachers attempt in the classroom. Each stakeholder group, such as parents, community members, educators, supervisors, and policy makers confronts a different set of challenges and needs to provide support to schools and teachers either directly (e.g., providing needed resources, removing hurdles) or indirectly (e.g., creating conditions or providing other support to help teachers deal with the challenges). Thus, the insights of this study contributes to the understanding of the change process that can significantly inform decisions and practices in facilitating educational change in high schools in Gilgit-Baltistan and elsewhere in the country.

The growing recognition that treating teachers as lifelong learners is positively related to improvements in student learning underscore the importance for supporting IOTs in Gilgit-Baltistan and elsewhere through various professional development opportunities inside and outside their schools. No matter how professionally competent, teachers always need to expand the horizon of their professionalism by renewing their commitment, deepening their understanding of the change process, learning about new ways, exploring innovative strategies, and enhancing their capacity to effectively deal with the complex and multi-layered challenges facing them in their efforts to improve what they do in the classroom, school, and community. In particular, my two participants from Government schools considered the lack of in-service professional development opportunities as a great disadvantage. It is thus incumbent upon the education systems in Gilgit-Baltistan (especially the Government school system) to create more opportunities for teachers to energize and reorient themselves in response to the demands of continuous improvement, to become familiar with new developments in pedagogical knowledge, to update their knowledge and skills to develop a reflective mind so as to handle changes and respond to emerging challenges effectively.

This study underscores that need for the policy-makers, educational managers, and donors to do more to listen to teachers. It calls for a better representation of teachers' voices—inclusion of representative teachers who are committed to, interested in, and knowledgeable about change process in high schools. These IOTs can be mediators between education systems and their schools, and are the best-placed stakeholders to provide the authorities with well-informed views on the efficacy of new policies, programmes and projects. Their input will not only facilitate designing programmes and innovations relevant to school change but also help to reduce the gap between teachers and educational managers, thereby enhancing the school's capacity to engage in continuous improvement. Specifically, the expertise and change knowledge of IOTs can be brought to bear upon policy decisions, educational innovations, and professional development programmes. Educators, planners or programme developers can seek IOTs' input into: development or improvisation of pre-service and in-service teacher development syllabi; providing teacher training in pedagogy, content area, school management and school change; designing specific innovations in schools in respect of teaching-learning, curriculum, assessment or other structures and conditions under which teachers live and work; and designing programmes or interventions for school-community partnerships.

These suggestions are made in line with the literature's emphasis on the strategy of specifying directions for educational innovations, formulating new standards of practice and designing school improvement programmes by drawing on the existing valuable practices and knowledge embedded in the of teachers' day-to-day work (e.g.,

Fullan, 2001; Sarason, 1996). The education systems in Gilgit-Baltistan and elsewhere can certainly benefit from the inclusion of their IOTs' voices in deliberation, decisions, active planning, and implementation of change. Also, according recognition to their perspectives on change and improvement, which are embedded in their experiences, should legitimize IOTs' involvement in policy dialogue. Traditionally, teachers in Gilgit-Baltistan have been treated as a tool to implement change at the behest of administrators instead of as active partners in the development and implementation of school improvement plans. To my knowledge, teachers' advice has been never sought in planning improvement programmes in the area. The problems that could occur in implementation have never been discussed with teachers; nor have teachers been given the opportunity to express professional and personal problems and questions they might have in their school.

Last but not the least; the participants reported that participation in research was a professional development experience for them because it provided them with an opportunity to review their own core beliefs and practices. In other words, involving teachers in the change process, to provide advice, review current practices, and suggest new practices also supports the development of those same teachers who ultimately must implement the new policies or programmes.

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