Regional Diversity, School Leadership and Quality of Education in North-Eastern States

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1 School Leadership and Regional Diversity Influencing Student Learning

School leadership is the second most important factor after teacher quality (Leithwood et al. 2004). It constitutes 25% of the total effects on student learning (Robinson et al. 2008, 2009) as it has 'compositional effect' (Martimore 1998) with 'social mix' of right attitudes (Thrupp 1999). Such attribute allows the leader to ask right questions, instead of providing answers to followers, to consider issues on how to ensure staff, school structures, external links and resources for effective learning (Tie 2011) by creating conditions for teachers to teach effectively (Dinham 2008). School principals build teams, translate vision for successful learning of all students, cultivate leadership in others, help teachers upgrade their skills and use data to foster school improvement (Mendels and Mitgang 2013). They focus on knowing what is happening with teaching and learning and even find ways to release creative energy of teachers and students (Sackney and Mitchell 2008, p. 126). They mediate in student learning by effecting improvements in school climate, academic capacity of teachers and their professional learning, school culture, besides managing instructional programmes, staff participation in decision-making and data-informed decision-making on school processes (Hallinger and Heck 1996; Leithwood et al. 2006; Shen et al. 2016). Therefore, leading a school is a specialist occupation requiring specific preparation and development (Bush 2008). Indeed, many teachers perceive that their leadership practices and teaching skills have improved after they have undergone well-structured university courses on school leadership even though such a course is not a prerequisite for leadership purposes (Strevig et al. 2013).

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Transformational leadership practices make a small but practically important contribution to overall student achievement (Leithwood and Jantzi 1999; Marks and Printy 2003) including the internal state of individual teachers (Leithwood and Sun 2012; Ross and Gray 2006). Pedagogical leadership is nearly four times more effective than transformational leadership for student learning outcomes (Robinson et al. 2008, 2009). Collaborative leadership builds capacity for academic improvement of teachers (Hallinger and Heck 2010, 2011), whereas distributive leadership contributes to overall school improvement (Gronn 2000; Spillane 2006).

Notwithstanding these merits, core leadership practices must be commensurate with school's immediate context to lead change (Klar and Brewer 2013) because these practices are influenced by culture (Safran et al. 2014). For example, a study by Hallinger and Murphy (1985) shows that school heads, working in poor urban areas, nurture strong personal vision of education for creating positive learning environment to support teachers and students. In another study, Louis et al. (2010) found that the role of the school head is crucial for schools to come off their low base under challenging circumstances. These two studies confirm the observation made by Leithwood et al. (2006) that it is not the leadership practices, by themselves, but the manner in which leaders apply the same in concert with their unique environment determines the degree to which they influence student learning.

Stevenson and Stigler (1992) concluded that cultural variations in beliefs ultimately explain differences in the organisation of schooling and in the practice of learning in East Asian cultures. Chinese and Japanese societies allow no excuses for lack of progress in school, regardless of one's current level of performance since opportunities for advancement are always believed to be available through more effort. High scores in a test are interpreted as a sign of diligence (Cheng 1998). This is due to surface-level differences, reflecting visible dissimilarities, and deep-level dissimilarities, reflecting basic values (van Vianen et al. 2004). These influence social integration of individuals into new settings (Harrison et al. 1998). Differences in ethnic identity, historical background, geographical characteristics (e.g. seaside or mountain regions) may cause significant cultural differences between the regions (Kaasa et al. 2014). Most important cultural differences can be characterised by four dimensions: power distance, uncertainty avoidance, individualism–collectivism and masculinity–femininity (Hofstede 1980). Hence, it is important to study how school leadership paths differ from region to region to address regional diversities of contexts and why they differ?

In India, until recently, the role of school head was not considered distinct from that of teachers. Only in senior secondary schools, principals spend more time on management, administration, staff management, finances, etc. Raising concerns about the quality of school leadership in India, Govinda (2006) and NUEPA (2010) emphasised the need for improving working conditions of school heads, with several systemic constraints inhibiting them from performing effectively. The school head, in particular, is removed from his/her primary responsibility of academic activities such as teaching–learning process, development of teachers professionally, ensuring student learning, etc. Most of the responsibilities are shifted to new academic structures such as cluster resource centres and block resource centres, created under Sarva

Shiksha Abhiyan (SSA), leaving the school head with record maintenance, civil works and so on. Sujatha (2011) found that only self-motivated school heads could ensure school success. Therefore, there is a shift in the roles of the school heads from leading schools to day-to-day management of activities. It is coupled with the government's policy of reducing their participation in the academic activities. In spite of reduced academic responsibility, principals emphasise on teacher development to connect with other leadership practices such as shared vision, school climate and child focus (Mythili 2017), especially when state- and district-level leadership leads education through network governance and good governance to improve school quality (ibid, 2019d). Mythili also traces the path by which women leaders traverse to succeed and legitimise their leadership roles. Women's ladder for school leadership consists of five steps—'aspire' to become leaders, 'acquire' the leadership position as school heads, 'achieve' by gaining acceptance as leaders from teachers, community and staff, 'ascend' through their hard work to excel and 'transcend' the limitations of the system to serve the cause of children's education (Mythili 2019b). They emphasise on academic leadership to excel besides being relationship oriented, people centred and building trust, yet exercise restrained neutrality to navigate gendered notions (Mythili 2019c). So, legitimacy of women's leadership varies due to the interaction between the perception of power differentials, status attribution and negotiation to get different degrees of acceptance (ibid, 2019a).

Despite a series of systemic reforms since 1990s, lower levels of learning among students persist since 1990s (first study was reported by Agarwal 1995) in India. The recent report by World Bank (2017) observes that there is a crisis in learning among students in developing countries such as India. Recent reports of National Assessment Survey (NAS) by National Council for Educational Research and Training (NCERT) in 2017 also reveal that there is a cumulative learning deficit among students as they progress from lower to higher standards, i.e. from Standard 3 to Standard 8 and, thereafter, to Standard 10 in Indian schools. These lower learning levels get accentuated as regional variations further add to the already existing challenges. The responsibility ultimately falls on the school leadership to improve student learning. If the influence of school leadership is neglected, then the significance of all other important factors influencing student learning would be adversely affected. The 12th Five Year Plan aptly recognised the role of school leadership as one of the four pillars for improving school quality (Government of India-Planning Commission 2013, p. 54). Since then, school leadership development has begun under the Flagship programmes, Sarva Shiksha Abhiyan (SSA) and Madhyamik Shiksha Abhiyan (RMSA) and now continued under Samagra Shiksha. Just as other important variables such as teachers, community, education policies, educational interventions, and school physical environment have been examined since long, exclusive attention to school leadership influencing student learning is required at least now in Indian context especially considering the impact of regional diversity on ways of leading by school heads in different states.

The research proceeds to develop a conceptual framework for school leadership in the Indian context, based on studies across the globe and, apply it for studying school leadership in two States. Hitherto, we do not have a broad conceptualisation of

school leadership in the Indian context. Based on the conceptual framework, tools for studying the leadership practices have been developed and data collected in the two States. Subsequently, analysis of school leadership processes and practices has been carried out. Based on the results obtained, different paths of school leadership have been derived for the two States from the north-eastern region of India. Conclusions have been drawn along with policy suggestions.

2 Building a Conceptual Framework for School Leadership in Indian Context

The conceptual framework for school leadership has been developed by reviewing the studies in the global context consisting of three major steps. Step1 one refers to recognising the broad dimensions of school leadership. Step 2 engages in identifying the major leadership factors that are found common as well as relevant to the Indian context. In Step 3, other minor factors are positioned within the matrix of broad dimensions of leadership and major factors.

2.1 Step 1: Identifying the Broad Dimensions of School Leadership Practice

School leadership, essentially, involves influencing other people to perform at levels which generate organisational improvement, effectiveness and efficiency (Leithwood and Riehl 2003). Most discussions also carry the assumption that leading involves a social influence process whereby intentional control is exerted by one person (or group) over other people (or groups) to structure activities and relationships (Bush 2008). This influence is admixed with intentional control through legally sanctioned authority and positional leadership in educational bureaucracy that perpetuates in the hierarchical system in India. But a social influence is present when there is a common purpose that gives direction for people to engage willingly and subject themselves to influence. Thus, it is important for the leader not only to veil influence but to supplement it by directing them along the accepted common lines defined by purpose. This would provide legitimacy to his leadership rather than mere authority. As such, the first dimension of school leadership is 'influencing others'.

Leadership, necessarily, engages with others and through others for achieving goals of the organisation (Spilliane 2005). It means that leadership can be spread to others for working together and refers to distributed leadership (Spillane et al. 2007). Distributed leadership compels creating a vision for the organisation towards which others can work in tandem with each other (Bush et al. 2011), seeking a reasonable level of agreement in the collective action about aims, mission, vision or goals. It is provided through direction in the form of understanding, asserting and/or aligning

with the vision, mission, goals of the organisation (Drath et al. 2008). Leithwood and Jantzi (2008) refer to it as direction setting, based on goals and motivation. Thus, the second dimension is 'directing others'.

Leading functions can also be accompanied by the charisma of the school leader. But charisma does not sustain if the leadership is not driven by vision and professional competency. As such, instilling enthusiasm, triggering curiosity and encouraging innovations are different manifestations of leadership for learning, among others, things which are meant to move beyond routine day-to-day works to transform schools into learning organisations. It requires the school leadership to engage with teachers and students, on the one hand, and community and parents, on the other. Leadership is expected to provide them with new directions, avenues for thinking out-of-the box, reflect and metacognise the nature of working to move beyond the normative framework. Thus, leadership involves empowering others to work towards the commonly accepted organisational goals and achieve them too (Leithwood et al. 2006). So, the third dimension is 'empowering others'.

Leader's actions, per se, do not mean much to colleagues and stakeholders, when compared to meaningful interaction in a relational framework, which can transform the quality of actions with a sense of commitment as well as for people's empowerment. Nonetheless, school improvement depends on a large number of people because innovations, teachers' capacity building, student-centred learning and knowledge creation are concurrently promoted (Harris 2003). Therefore, any empowerment initiative necessarily involves demonstration, role modelling and bringing about change through actions. Hence, it is imminent that working with others constitutes a necessary dimension, the fourth dimension for school leadership perspective.

Four types of people closely interact with the school leadership across these four leadership dimensions. They are: teachers, students, parents/community and education officials in the department of education from different leadership positions starting from school, cluster, block, district and State levels. Four dimensions of leadership, together with four types of people positioned at different leadership levels with whom school leadership engages, constitute the core of conceptual framework for school leadership in the Indian context (see Fig. 1).

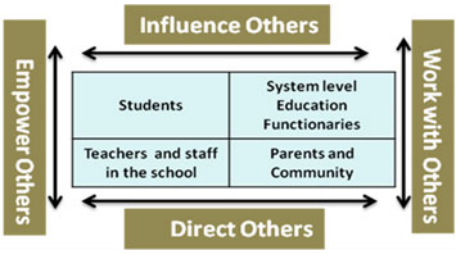

Fig. 1 Major dimensions of school leadership practice stakeholders

2.2 Step 2: Identifying the Most Relevant School Leadership Practices for Indian Context

Second step refers to identifying critical and major leadership practices by reviewing research studies. Edmonds's study (1979) proved that effective schools almost always have leaders focussed on instruction. It is a major landmark study in school leadership that took the shape of instructional leadership in later years. Collins (2011) proposed five qualities of a leader whose school is at level five in the diagnostic framework called 'good to great' schools, viz. rely on high standards as primary vehicle for attaining goals, choose right people to work with, create a culture of discipline, honestly look at facts and entertain difficult questions.

Cotton (2003) identified 25 leadership behaviours that positively affect outcomes, attitudes, behaviours of teachers and students. Some of them are: safe and orderly environment; vision and goal focussed on high level of student learning; high expectations for student learning; self-confidence; responsibility and perseverance; visibility and accessibility; positive and supportive climate; communication and interaction; emotional and inter-personal support; parent and community outreach and involvement; rituals, ceremonies and other symbolic actions. Other leadership behaviour traits include shared leadership, decision-making and staff empowerment; collaboration, instructional leadership; ongoing pursuit of high levels of student learning; norms of continuous improvement; discussion of instructional issues; classroom observations and feedback to teachers; professional development opportunities and resources and so on.

Leithwood et al. (2004) identifies four leadership practices by reviewing studies, viz. setting direction, directing people, redesigning the organisation and improving instructional programme. Marzano et al. (2005) identified 21 leadership behaviours which they termed as responsibilities. Some of them are: affirmation, change agent, contingent rewards, culture, communication, flexibility, focus, ideas and beliefs, intellectual stimulation, involvement, knowledge, outreach, monitoring and evaluation, etc. Shannon and Bergeson's (2007) nine characteristics of high-performing schools provided the basis for school improvement in USA which are embedded in three broad categories such as decide what is important; establish processes and implement what is important; monitor and support implementation plans. They are: clear and shared focus; high standards and expectations for all students; effective school leadership; high levels of collaboration and communication; curriculum, instruction and assessments aligned with State standards; frequent monitoring of learning and teaching; focussed professional development; a supportive learning environment; high levels of family and community involvement.

Leithwood et al. (2006) made seven strong claims about school leadership. These claims include school leadership which is the second most important factor influencing student learning; the way in which leaders apply basic practices, found commonly among all leaders, matters rather than practices, by themselves; school leadership demonstrates responsiveness rather than dictation; leadership considers the context in which they work; it improves teaching–learning indirectly through

staff motivation, commitment and working conditions; practice distributed leadership; and practice handful of personal traits that significantly influence leadership effectiveness.

Robinson et al. (2008, 2009) found that five leadership practices influence student learning. They are: establish goals and expectations; resource strategically; plan, coordinate and evaluate teaching and learning; promote and participate in teacher learning and development; and ensure an orderly and supportive environment. Organisation for Economic Cooperation and Development (OECD) observed that, among the conditions that support teacher learning, school leadership stands first. Others are: shared vision, relationships that build school culture and a positive climate which are fundamental to staff development, logistical and social support (OECD 2010). It also asserted that school principals can shape teacher professional development, define school's goals, ensure that instructional practices are directed towards achieving goals, improve teaching–learning process, solve problems and so on.

Leadership also features in the hierarchy of factors, specifically focussing on teaching, that are strongly related to school improvement and successful schools: mission and goals, safe and orderly environment, climate of high expectations, strong instructional leadership, time-on-task, frequent and learning-directed assessment, and home–school relationship (Townsend 2011). Maringe and Molestone (2015) identified six other factors that drive success and resilient schools against all odds under conditions of multiple deprivations to be those of leadership, especially teams. They include commitment to teaching and learning, a safe and orderly environment, a culture of concern and a desire to improve the life chances of learners, working with communities and parents to improve conditions of learning, and creating strong ties with local and national education departments.

Recently, school standards and evaluation framework developed in India (NUEPA 2015) considered school leadership as an important domain in self-evaluation of schools. It considers school's vision and mission statements, school development plan, management of day-to-day functioning of the school by school head, identification of developmental needs of the school, management of change for continuous improvement, utilisation of financial, human and material resources by the school head, leading improvement in teaching–learning process by the school head, and relationship with staff members in the school. Adopting a self-effacing approach to meet the needs of people consists of promoting positive values, fostering citizenship, personal, economic and social outcomes as important capabilities like student academic outcomes (Day et al. 2016).

In short, school head is the central source of leadership even though there may be many other sources of leadership in the school. It is, especially, true for creating a learning environment in the school and ensuring student learning. For, Leithwood and Sun (2012) preferred to include internal states of organisational members that are critical to their performance and classroom instruction. Maringe and Molestone (2015) emphasised that leaders also need to understand what drives the human actions rather than focus on actions themselves, and to look for underlying causes. Besides these, teacher leadership (Harris 2003), distributed leadership (Gronn 2000), instructional leadership (Hallinger and Heck 1996), transformational leadership (Bass 1990) and

servant leadership (Maringe and Molestone 2015) styles are considered to be having an impact on schooling processes.

2.2.1 Insights from Metareviews and Independent Studies

While the review was highly informative, it was also confusing because it highlighted a vast number of styles, processes, factors, practices and perspectives as relevant without arriving at a convergence. Many studies also were of the nature of prescriptive rather than evidence-based practices. Many independent studies were largely pertaining to micro-analyses of minute actions or micro processes.

Though the studies reviewed above have widely used the four dimensions that are discussed in Step 1, they are not explicitly referred, either directly or indirectly. As a result, factors identified in nine metareviews and several other independent studies were seen dispersed widely ranging from four to 25 factors. Though significant factors were brought forth by these studies, including some claims, they fail to provide a comprehensive and a coherent perspective to understand and apply in schools. It has resulted in discrete statements with factors dispersed and overlaps between different factors, creating confusion while studying different reviews. All these have rendered school leadership as lacking a systems view for conceptual understanding and meaningful practice. In counting the factors, a broad-based conceptual understanding of school leadership is lost. Therefore, there is a need to align four aspects in a comprehensive manner that is identified in step one and within which certain pertinent factors can be made relevant. It enables us to arrive at a perspective for school leadership for the Indian context.

See Table 1 for comprehensive presentation of the review of literature on school leadership discussed so far. While the descriptive review has been carried out using a chronological sequence, the summary given in Table 1 is presented according to a number of factors identified.

The process adopted to arrive at a comprehensive perspective for school leadership is going to be described, now. Firstly, seven important factors emerge as common and most relevant for school leadership in schools across the globe from the review of the studies discussed in Step 2. They are: vision building including shared vision, goal-setting, school improvement, improving school conditions, commitment to teaching–learning processes, achieving goals and student learning. These seven leadership practices, when adapted to the Indian context, got reduced to five important areas of school leadership practice. They are: vision building and creating a shared vision (VB), goal-setting (GS), commitment to teaching–learning process (TLP), improving school conditions for creating a favourable school climate (SC) and achieving goals for student learning (AG). Other minor factors, found to be similar and/or common across these studies, were also positioned suitably within the matrix or rubric of five factors chosen for Indian context, spread across four major dimensions of school leadership, that is discussed earlier. This matrix constitutes Step 3 which is described forthwith.

2.3 Step 3: Positioning Other Minor Factors in the Dimension-Factor Matrix on School Leadership

The four dimensions of the school leadership vary in their subtlety. Influencing others can be subtler than the other three dimensions. Directing others may be more direct,

Table 1 A summary of the review of related literature

Metastudies	Factors identified	No. of factors
Leithwood et al. (2004)	Setting direction, directing people, redesigning the organisation, improve instructional programme	4 factors
Robinson et al. (2009)	Establish goals and expectations, resource strategically, plan coordinate and evaluate teaching–learning process, promote and participate in teacher learning and development, ensure supportive and orderly environment	5 factors
Collins (2011)	Rely on high standards for attaining goals, choose right people to work with, create a culture of discipline, honestly look at facts, entertain difficult questions	5 factors
Townsend (2011)	Mission and goals, safe and orderly environment, climate of high expectations, strong instructional leadership, time-on-task, frequent and learning directed assessment, home–school partnership	6 factors
Maringe and Molestone (2015)	Leadership of teams, commitment to teaching and learning, safe and orderly environment, culture of concern, improve life chances of learners, working with community and parents, create strong ties with local and national departments	6 factors
Leithwood et al. (2006)	School leadership is the second most important factor influencing student learning; the way in which leaders apply basic practices matters rather than practices by themselves; school leadership demonstrates responsiveness rather than dictation; leadership considers the context in which they work; it improves teaching–learning indirectly through staff motivation, commitment and working conditions; practices distributed leadership; and practices handful of personal traits that significantly influence leadership effectiveness	7 strong claims

(continued)

Table 1 (continued)

Metastudies	Factors identified	No. of factors
Shannon and Bergeson (2007)	Clear and shared focus, high standards and expectations for all students, effective school leadership, high levels of collaboration and communication, curriculum, instruction, assessment aligned with State standards, frequent monitoring of learning, and teaching, focussed professional development, supportive learning environment, high levels of family and community involvement	9 factors
Marzano et al. (2005)	Affirmation, contingent rewards, involvement, knowledge, outreach, intellectual stimulation, monitoring and evaluation, change agent, culture, communication, discipline, flexibility, focus, ideas and beliefs, input, optimiser, order, relationships, resources, situational awareness, visibility	21 factors
Cottons (2003)	Safe and orderly environment, vision and goal focussed, high expectations for student learning, self-confidence, positive and supportive climate, communication and interaction, emotional and inter-personal support, parent and community outreach and involvement, rituals, ceremonies and other symbolic actions, shared leadership decision-making and staff empowerment, collaboration, instructional leadership, ongoing pursuit of high levels of student learning, norms of continuous improvement, discussion of instructional issues, classroom observation and feedback to teachers, support of teacher's autonomy, support for risk-taking, professional development opportunities and resources, protecting instructional time, monitoring student progress and sharing findings, use of student progress for programme improvement, recognition of achievement of students and staff, role modelling	25 factors

yet it calls for using influence subtly to get expected response from others, especially subordinates. Similarly, empowering others is accomplished through interaction, understanding and practicing empathy with others. Empowering others remains rhetoric unless it is associated with influencing others through intellectual conviction and role modelling. Working with others uses all the other three dimensions as well as an internal conviction in the leader to create a people-centred approach to leadership forming a social glue, with a 'we-we' connect and 'I-we' connect. The intellectual stimulation, driven by leadership knowledge and practices, embeds working with others in a more meaningful manner.

As a leader, he/she influences, directs, empowers and works with all four types of people–students, teachers and staff, parents and community, and system-level functionaries. In turn, the school leadership is influenced, directed and empowered by the four types of people. Hence, these four dimensions are not serial in nature but interact organically as an open system in a relational framework between the influencer-influenced, director-directed, empower-empowered and work-worker. They correspond to four critical aspects on leadership knowledge, namely knowledge for understanding, knowledge for reflection, knowledge for action and knowledge for practice (Bolam 1999). All these are dynamic in nature. Building a conceptual model for Indian context, therefore, acknowledges the evolving nature of understanding school leadership, especially because it is in the nascent stage of development. The various other factors, which interact across four dimensions and major five factors, are mapped suitably. All three steps, together, complete the exercise of conceptual framework for understanding school leadership in the Indian context (see Table 2).

3 Methodology

3.1 Sampling and Sample

Purposive sampling was used as it was felt essential to understand as to what works well in the system besides discussing the challenges and issues. The intent is to recognise the best efforts of school leadership, that have worked well, and utilise the same in improving student learning and overall school quality. Sikkim and Manipur States, situated in the north-eastern region of India, were the sites of study. Even though anthropological and sociological studies are conducted considering these regions, research in school education is yet to get the attention of scholars and academic discourse.

The process and path traversed by school heads as leaders were investigated during the time of implementation of school leadership development programme (SLDP) by administering the tool developed for the study. School heads who proved successful making a difference to school quality were nominated by the education department to be participants and also as members of state resource group to undergo 10 days' training on SLDP. SLDP provided appropriate space, giving adequate time

Table 2 Conceptual framework of school leadership for Indian context

Core school leadership practices	School leadership dimensions			
	Influence others (I)	Direct others (D)	Empower others (E)	Work with others (W)
Vision-building (including shared vision) (VB)	Model organisational values Personal values of school head Professional values of school head	School culture—A climate of high expectation Leading learning process	Need to understand what drives human actions rather than a focus on the actions themselves	Establish strong partnership with communities and parents Self-effacing approach to meet the needs of people Create strong network and ties with education departments
Goal-setting (Setgols)	Demonstrate high-performance expectation	Facilitate teachers in setting individual goals	Challenge performance standards of teachers and students	Involve SMC/parents and teachers in goal-setting for the school
Improving school conditions for creating a favourable school climate (Schl improve)	Transformational leadership	Look for underlying causes for Teacher behaviour	Develop structures to foster participation in school's decisions Create teams for collaborative working environment Development of community/parents	Safe and orderly environment A culture of concern Home–school relationship Offer individual support Create a productive school culture Distributed leadership
Commitment to teaching–learning process (TLP)	Provide intellectual stimulation	Principal's instructional leadership	Facilitate teacher professional development	
Achieving goals (achvgols)	Student motivation Promote positive values	Learning-directed student assessment	Desire to improve the life chances of learners Foster citizenship Personal, economic and social capabilities	Ensure student engagement in learning

to these participants to self-reflect on their leadership practices as well as think critically about the underlying meaning of core leadership practices during different sessions. Hence, collection of data on school leadership practices was carried out more meaningfully.

3.2 Construction of Tool

A four-point rating scale was constructed, based on the conceptual framework developed for the study. Neutral statements of action on all five core leadership practices were constructed across all four dimensions into which the roles of teachers, students, parents, community and system-level functionaries were juxtaposed. School heads self-reflected on their leadership practices and ticked one of the four options for each action statement. These four options were: never practiced, sometimes practiced, mostly practiced and always practised which carried 1, 2, 3 and 4 scores, respectively. Likert's five-point scale was not used to avoid the effect of averaging.

Descriptors of leadership practices, considered for item construction under the four dimensions of school leadership practice in the Indian context, are briefly mentioned. These descriptors have been comprehensively presented in Tables 3, 4, 5 and 6 and are self-explanatory. Since the rating scale is treated as a self-reflective exercise, a broad description of the minor factors is more relevant instead of adopting the operational definition. Statements of action provide flexibility for the respondent to interpret the action and reflect upon one's own leadership practices for self-rating.

Basic features and presentation about broad dimension, major factors and minor factors are already detailed in the conceptual framework. In the first major dimension 'influencing others', critical but essential factors were chosen that ranged from *practicing personal values to promoting positive values among teachers* for which school heads established trust and provided intellectual stimulation. Extent to which these were practised is captured by constructing 12 action statements. Table 3 presents the descriptors on the first dimension of school leadership practice 'influencing others'.

On the second major dimension 'directing others', critical and essential factors chosen ranged from *creating a culture for teaching* to *encouraging innovations in teaching–learning processes*. These included school head's support for teachers to set their goals, lead teaching–learning processes and create a climate of high expectations. These were captured through 16 statements of actions.

The third dimension on *empowering others* begins with practical orientation for vision-building and ends with improving chances for student learning. Empowering others is carried out by means of teacher professional development, creating collaborative environment for teaching–learning processes and creating systems and structures for decision-making as necessary tools to traverse between orienting for vision-building and improving chances for student learning. Altogether, 23 statements of action were constructed to study this dimension.

Table 3 Descriptors of the dimension 'Influencing others' in school leadership practices

Major factor	Minor factors selected for constructing the Rating scale	Description of the minor factors
Vision-building including shared vision	Practicing personal values of school leadership (I-VB)	This variable seeks to know whether a vision is conceived for the school; school head's vision aligns with the teachers' vision for school development; the extent to which the school head reflects about his/her own performance and sharing with teachers in the school and, at the same time, encourage self and group reflections among teachers about their performance (four statements)
Goal-setting		Goal-setting is a hands-on exercise in which school head must involve personally. The perspective, influencing others, is subtle and does not engage with hands-on exercise. Rather influence to set the goals happens indirectly through empowering, working and being directed by the superiors. 'Influencing' for goal-setting does not, necessarily, involve explicit statement of actions. Hence, no items were included in this dimension (0 statements)
Improving school conditions for creating favourable school climate	Trust-building (I-schlimprov)	Building trust is an important aspect in creating favourable school climate and cultivating an environment of mutual interaction to understand each other with teaching and non-teaching staff. It means as a leader one is sensitive to people, effectively managing them using minimal formal rules and regulations to ensure that everyone performs (two statements)
Commitment to teaching–learning processes	Provide intellectual stimulation (I-TLP)	School head adopts different/unique methods so that teachers openly share their insights and reflection about their work and achievements with others. He/she personally designs suitable plans, holds workshops, conducts various sessions to address the needs of teachers, ascertains that new initiatives have produced noticeable changes in teacher quality, develops a vision statement for the school along with teachers, and performance of students in the previous year is studied before setting the goals for the next year. In the changing times, school head takes special efforts to see that all teachers use computers, ICT and new technology in their teaching and other academic works. (four statements)
Achieve goals	Promote positive values among teachers (I-achvgols)	School head ensures that morning assembly is well-attended and participated in actively by teachers as it sets the tone for the day's work. She/he insists that teachers encourage innovations among students so that children participate actively for learning (two statements)

Table 4 Descriptors of the dimension 'Direct others' in school leadership practices

Major factor	Minor factors selected for constructing rating scale	Description of the minor factors
Vision-building including shared vision	Creating a culture for teaching (D-VB)	It is equally essential to build capacity of teachers in school administration as they are being engaged to support the school head in many administrative tasks. This brings synchronisation between the academic and administrative functions of the school. School head ensures that there is a balance between time spent on academic and administrative works by teachers along with effective coordination between the two. In this way, teachers' teaching time is not lost out to administration duties in the school. The same is applicable for school heads as well (two statements)
Goal-setting	Facilitating teachers for goal-setting (D-setgols)	In the light of the previous year's performance of students, goals are set for the current year, and discussions are held with teaching staff about the common objectives to be achieved every year in the school (two statements)
Improving school conditions for creating favourable school climate	Setting a climate of high expectations (D-schlimprov)	A climate of high expectations is set when there is timely intervention to solve problems, initiate discussions to understand teacher's complaints, emphasise on quality of classroom processes and look for amicable solutions to improve quality of schooling processes. He/she is ready to take classes when some teachers are on leave or no substitute teachers are available. But, as a head of the school, he/she would also consider the disruptive behaviour of teachers seriously. School head supervises administrative staff to ensure efficiency in school administration (5 statements)
Commitment to teaching–learning processes	Leading teaching–learning processes (D-TLP)	It refers to providing opportunities and spaces for teachers related to academic discussion on various topics and pedagogy in different subjects, to reflect on how innovatively one can use/apply the knowledge received from different training programmes and also professionally support each other as colleagues in teaching practices, exercise openness in the staff meetings and conducting other school activities. Nonetheless, school head also receives feedback from students and observes the relationship between teachers and students (five statements)

(continued)

Table 4 (continued)

Major factor	Minor factors selected for constructing rating scale	Description of the minor factors
Achieve goals	Encourage innovations for learning and its assessment (D-achvgols)	Leading innovations is one of the important leadership practices of school head. He/she ensures that suitable environment for students to experiment, generate new ideas and innovate, and insist teachers to identify talented students and encourage them to innovate and share on various platforms. Learning-directed assessment provides more opportunity for directing the trajectory of learning as moving beyond marks and pass percentage of students (two statements)

Table 5 Descriptors of the dimension 'Empower others' in school leadership practices

Major factor	Minor factors selected for constructing Rating scale	Description of the minor factors
Vision-building including shared vision	Practical orientation to vision building (E-VB)	A school head reflects on his/her own performance and shares with all teachers. Both of them come together to develop common goals for the school every year during summer vacation (two statements)
Goal-setting		As empowerment comes through hand-holding, teachers can be directed to set the goals. School heads empower teachers to set the school's goals by engaging with them. Hence, the two dimensions, such as empowering and working with others, overlap in setting the goals by teachers. In the present study, therefore, goal-setting is not considered under empowering others and influencing others, but it is considered under working with others and directing with others (0 statements)
Improving school conditions for creating favourable school climate	Creating a collaborative environment for teaching (E-schlimprov1)	A collaborative environment moves beyond the school to engage with community and parents to participate in schooling and classroom teaching. Important matters related to students are discussed to find solutions that has group's consensus. Teachers are free to suggest alternative solutions and strengthen the ideas already suggested by others. They brainstorm in the meetings about possible array of solutions, ideas, processes to improve teaching and learning (three statements)
	Structures and systems for decision-making (E-schlimprov2)	Structures and systems refer to providing opportunity for teachers to share and participate with school head freely on matters related to school that is critical for school transformation. There is a need for building a high level of mutual respect, cooperation between school head and teaching staff, freedom for all to express their opinion openly without fear or hesitation, disagree with other's views and own their views related to professional matters in a cordial manner. Teachers carry out the work in the same way with or without principal or when there is a change of principal in the school. Community and parents actively participate in schooling processes. All these require conscious efforts to put certain commonly agreed upon systems and structures in the right places (seven statements)

(continued)

Table 5 (continued)

Major factor	Minor factors selected for constructing Rating scale	Description of the minor factors
Commitment to teaching–learning processes	Teacher professional development (E-TLP)	School head tries to understand teacher's professional needs on an annual basis to improve teaching–learning process and student learning. He/she examines the initiatives taken up earlier for suitable changes facilitating teacher quality, observes classroom teaching–learning processes, creates opportunities for teachers to work together in teams, provides spaces for teachers to plan and organise school events by exchanging and sharing ideas as well, and encourages teachers to exchange knowledge and practices. A climate is created for students to freely and easily approach any teacher to discuss and express their doubts, ideas and share their new learning. As a school leader, he/she strongly encourages innovative teaching practices by teachers (six statements)
Achieve goals	Improve chances for student learning (E-achvgols)	A facilitative environment is created where students feel free to talk to their teachers; parents to meet school head, whenever they want, to discuss about their child; opportunity for children to participate; showcase their achievements and demonstrate success; and win competitions in the school. School head also talks to adolescent students regularly to address their emotional, social, physical and intellectual needs. School leader creates opportunities for students to learn and use ICT for learning various curricular subjects on their own/as additional efforts beyond what is taught in the classroom (five statements)

Table 6 Descriptors of the dimension 'Working with others' in school leadership practices

Major factor	Minor factors selected for constructing Rating scale	Description of the minor factors
Vision-building including shared vision	Participation in goal-setting (W-VB)	Before developing annual goals, school head tries to understand the aspirations, challenges and issues of students, involves non-teaching staff to understand the hind-sight issues in developing goals and vision for the school and also tries to know the home background of vulnerable children in the school (three statements)
Goal-setting	Effective school administration (W-setgols1)	It is highly favourable for the school head if he/she clearly knows the rules, regulations, acts and their applicability. It boosts confidence as a leader to carry out school administration as well as ensure good relationship with department and SMCs. School head can nurture teachers in learning the basics of school administration. It is also important that school head consults respective class teachers to cater to the needs of adolescent students while carrying out school administration (five sentences)
	Mutual interaction to understand each other (W-setgols2)	School head tries to know and ensures that teachers are comfortable with his/her style of working and to get continued support from teachers in most of the school matters. Mutual interaction to understand each other implies teachers participate and express freely and openly in staff meetings on all matters, including their disagreements related to school. Also, school head seriously considers the disruptive behaviour of students in the classroom (six statements)
Improving school conditions for creating favourable school climate	Building collaboration for teaching–learning process (W-schlimprov)	School head initiates to bring experts from outside to specially address the professional needs of teachers. She/he also seeks support from block and district-level officers in the matters of teacher professional development (two statements)
Commitment to teaching–learning processes		None. It is important to influence, direct and empower teachers and leave them to themselves to work in their classrooms and among other teachers (0 statements)
Achieve goals	Ensure student engagement in learning (W-schgols)	An important aspect of ensuring student engagement in learning is to begin from morning assembly. A good planning and execution sets the tone for rest of the day in the school for learning. More emphasis on academic matters disregarding cocurricular activities and sports and games is not a good sign for children's learning and development. Morning assembly addresses these aspects (three statements)

The fourth and the last dimension 'working with others' begins with participating in goal-setting and ends with ensuring student engagement in learning. In order to ensure the smooth traverse between these two ends, school head works with others to bring about effective administration, building collaboration for teaching–learning processes, and provide opportunities in the school for mutual interactions to understand each other. In all, there are 19 statements of actions which capture the dimension on working with others, covering various areas.

3.3 Method of Data Collection

In all, 78 school heads from Manipur and 80 school heads from Sikkim took up the self-reflective exercise on their leadership practices in the year 2017. The reflective exercise was administered in two batches of school heads in Manipur and three batches in Sikkim within a gap of 10 days and one month, respectively, in both the States.

Rating scales were distributed to participants giving necessary instructions. As school heads are mostly directed to follow orders and circulars from block, district and State-level administration, SLDP implementation space provided adequate opportunity to guide them to engage in self-reflective exercise. Sufficient time of about five days was also given to them to ensure that they self-reflected appropriately before rating themselves. Profiles of school heads such as age, caste, educational qualification and experience as teachers and school heads were also collected.

3.4 Method of Analysis and Interpretation of Results

The data was analysed using Pearson's Product–Moment Correlation. Many other factors were related having significance levels at 0.01 or 0.05 but their 'r' coefficients were lesser than 0.5. Such factors were not considered in the interpretation of results. In other words, not only significance levels but also higher correlation coefficients were considered to trace the path and identify the critical practices for successful school leadership.

The connections between various school leadership processes were established diagrammatically using the correlation results for both the States, separately. From the diagrammatic representation, the path traversed and critical leadership practices were derived. The two States were compared, based on commonalities and differences in the approaches adopted. Impact of regional diversity between the two States, variations in the paths, critical leadership practices and the reasons, thereof, have been discussed along with results and policy implications.

4 Analysis and Discussion of Results

4.1 Relationship Between School Leadership Practices and Student Learning

Results of the correlation tests, conducted for both the States, show that some variables are significantly related to each other whereas others are not related. Most importantly, students' pass percentage is not significantly related to any other school leadership practice concurring with the well-known fact that school leadership does not directly impact student learning but through various other processes at school and classroom levels (Robinson 2008).

Correlation coefficients between different factors arrange themselves into a kind of a pattern to reveal the leadership process in the State. A description of the same is attempted here with the help of mapping those relationships in a diagram to uncover the pattern and nature of school leadership process (refer to Figs. 2 to 5 for details), using correlation coefficients (see Appendices 1 and 2). Unless otherwise mentioned, in the rest of the discussion and interpretation of results, correlation coefficient between two variables is significant at 0.001.

A small description about the method designed to draw the figure is described before discussing the results for both the States. A leadership practice, to which a few other practices are correlated, is referred to as 'Node' in this study. Each Node represents a critical leadership practice influencing several other leadership practices and processes in general. Sometimes, it may influence only one practice but may be significant enough to influence an outcome or many other practices. For example, trust building and providing intellectual stimulation is one such Node in case of Manipur. Similarly, I-VB is considered as the Node instead of E-VB since influencing others through personal leadership values is rather vital for any successful school leadership and achieving goals.

4.2 School Leadership Practices in Manipur

4.2.1 The Context of School Education

Manipur borders Nagaland in the north, Assam in the west, Mizoram in the south and Myanmar in the east. The State is rich with invaluable herbal and medicinal plants. It has the biggest freshwater lake called Loktak which has floating vegetation and the only floating national park in the world. Its geographical feature is characterised by hills and valleys. The districts are also categorised into hill districts and valley districts. People inhabit both hills and valleys. Earlier, there were nine districts. Recently in 2017, the State has created seven more districts to these nine for the ease of administration, especially in the hills. These 16 districts cover 22,327 km^2 of area. Its population is 2,721,756. It has a literacy rate of 68.87%.

According to Census, 2011, ethnically Manipur has a heterogeneous population. Different tribes and other sects are present in the State. These are Meiteis, Nagas and Kukis tribes, and other Hindus. In all, there are 29 types of tribes inhabited in the State of which Nagas and Kukis are the dominant tribes in the State. Most of the tribal population is converted to Christianity. Tribals mostly live in the hills and constitute 28% of the population. There are also converted Hindus and Sanmahi who are Meiteis. They are inhabited mostly in the valleys constituting nearly 60% of the population. Pangan is the local name given to Muslims who have settled long ago in Manipur and have acculturated Manipuri's customs, traditions and culture.

Manipuri women enjoy higher freedom and participate actively in combating social evils such as drugs, substance abuse, alcoholism, protests to protect their rights and dignity as well as protection of their menfolk from harassment by security forces. They are, thus, an important unified political force in the State especially demanding human rights that is due for all citizens of the State (Devi 1998).

Prakash (2007) discusses severe issues related to insurgency, identity politics and governance which have been hit adversely, leading to deterioration of human rights, democracy, and rule of law. The infighting between Nagas and Kukis, and insurgency have severely crippled the State politics as well as economic and social development of the State. Cultural heritage has been affected adversely significantly due to deadly drug addiction and dreaded AIDS disease. World Health Organisation (WHO) identified the State as an AIDS-prone State in Southeast Asia. The State has been a victim of international drug trafficking via Myanmar and narcotic money influences the politics and social life of people in the State. AFSPA, 1958 (Armed Forces Special Powers Act, 1958), has also affected the life of people in the valley and hills in a big way (Singh 2017). Insecurity in the lives of the general public, arising from it, has caused damage to the peaceful fabric of life in the State. The fight against it is continued even to this day by the people of Manipur, and the tribal population has taken to underground activities.

In short, the social life in the State is a complex unholy mix of insurgency, AFSPA, drugs and narcotics and AIDS. Lack of social and economic development has severely affected the peace and security in the State. There was an increased the sense of alienation creating a threat perception among the general public in the State due to insurgency till recently. Manipur is also marked by high levels of political instability despite Indian National Congress ruling the State since its merger into the Indian Union in 1949. It is one of the strong reasons for some of the major failures in the State as it could not assert its position and right effectively with the central government in Delhi.

4.2.2 Education System in Manipur

Administration of School Education is handled by the Directorate of Education (Schools) Govt. of Manipur from Primary to Higher Secondary stage (from Class I to

XII). In the hill districts, Autonomous Hill District Council also runs primary education (from Class I to V). However, these councils are perceived as weak to ensure good education. There are also schools under CBSE and Tribal Welfare Department.

There are 4865 elementary schools and 1042 secondary schools. According to UDISE 2016-17 (NIEPA-MHRD 2018), school education in Manipur has 58.44 primary schools (Standards I–V), 17.9 elementary schools (Standards I–VIII), 2.11 higher secondary schools (Standards I–XII) and 14.34 secondary schools (Standards I–X). The percentage distribution of enrolment of students in these schools is 16.40%, 14.75%, 16.15% and 40.62%, respectively. In all, there are 4978 schools in the State out of which 2335 schools are run by Department of Education (DoE), 956 by Tribal and Social Welfare Department (TWDS), 607 are government-aided (GA), 2274 are run by private-unaided (Pvt U) and remaining by various other departments.

There are 10,994 regular teachers out of the total 19,063 in government schools who are professionally qualified. Similarly, 761 out of 1725 teachers in Government-aided schools and 2127 out of 6305 teachers in private-unaided schools are professionally qualified in Manipur. Percentage distribution of Head Masters/Head Mistress in primary schools (I–V standards), elementary schools (I–VIII standards), higher secondary schools (I–XII standards) and secondary schools (I–X standards) are 52.85%, 56.83%, 83.53% and 68.81%, respectively.

The gross enrolment ratio (GER) of students in primary schools (I–V standards) is 120.57, GER in I–VIII standards is 120.16, and GER in IX–X standard is 86.52%. Manipur follows its own State syllabus. According to the announcement made on the official website of Manipur State,[1] 73.18% of total students passed the X standard examination, conducted by the State's high school board in the year 2018.

National Achievement Survey (NAS), conducted in 2017, shows that Manipur performed above the national average in Classes 3 and 5 in all subjects. Even in Class 8, it nearly equalled the national average in all subjects except in the regional language. Even in class X, it scored higher than the national average in all subjects except modern Indian languages (see Table 7).

4.2.3 Profile of School Heads Who Participated in Self-reflective Exercise on Leadership Practice

Out of the school heads in Manipur participating in the study, 60.6% were men and 39.4% were women in Manipur. The average age of school heads in Manipur is 52.3 years. Sixty percent of them were secondary HMs, and 40% were principals at senior secondary schools. Their average teaching experience is 23.1 years, while the experience as school heads is 4.1 years. Seventy-five percent of school heads are graduates having basic university degree with B.Ed. The remaining 25% school heads have post-graduation degree with B.Ed.

[1] http://manresults.nic.in/.

Table 7 National Achievement Survey-Mean score for Manipur State: 2017–18

	Class 3		Class 5		Class 8		Class 10 (Cycle 2)**	
Subject	Manipur	All India	Manipur	All India	Manipur	All India	Manipur	All India
Modern Indian Language	71	68	59	58	58	57	33	49
Mathematics	68	64	56	53	42	42	31	34
EVS	70	65	61	57	–	–	–	–
Science	–	–	–	–	43	44	35	34
Social Science	–	–	–	–	42	44	40	39
English	–	–	–	–	–	–	48	36

Source NCERT-UNICEF (2017a)
** http://www.ncert.nic.in/programmes/NAS/pdf/SRCX/14_Manipur.pdf. Accessed on 17th May 2020

4.2.4 Relationship Between Different School Leadership Practices

There are six Nodes in the school leadership practices in Manipur. Boxes with gray shade in Fig. 2 are the Nodes. The first Node refers to influencing others for vision-building (IVBMN) indicates leadership values practised by the school head. The second Node is about working with others to set the goals (WSGOLSMN2), referring to mutual interaction to understand each other. The third Node is empowering

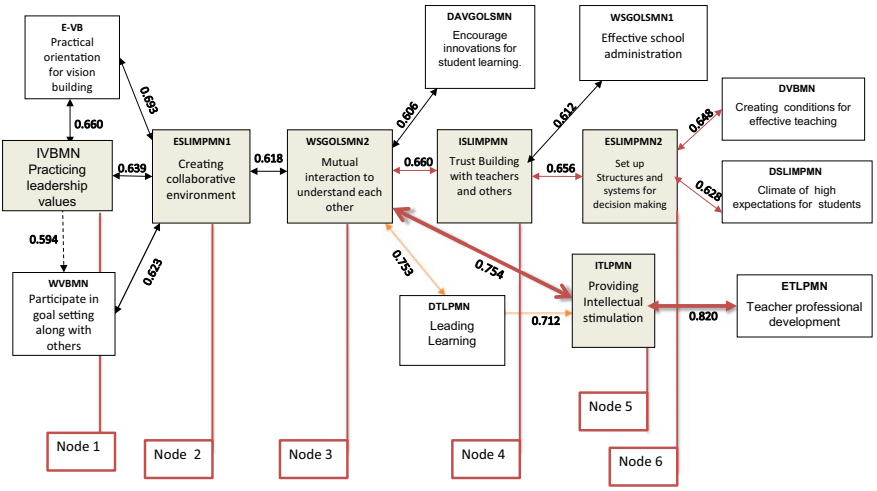

Fig. 2 Relationship between different school leadership practices in Manipur

others for school improvement (ESLIMPMN1), referring to creation of a collaborative environment by school heads. Fourth Node is influencing school improvement (I-schlimprov), indicating trust-building. Fifth Node deals with empowering others for school improvement (ESLIMPMN2) which implies setting up systems and structures for decision-making. Sixth Node is influencing teaching–learning process (ITLPMN), referring to providing intellectual stimulation for teachers. The manner in which other leadership practices are related to these Nodes is discussed hereafter with the help of correlation coefficients '*r*' obtained from the analysis. From these relationships, thereafter, school leadership paths are derived.

Node 1: Relationship between leadership values, vision-building and creating collaborative environment

Personal leadership values (IVBMN) of school heads in Manipur are closely related to practical orientation to vision-building (E-VB), with '*r*' = 0.660. Leadership values (IVBMN) are related to creating collaborative environment (ESLIMPMN1), with '*r*' = 0.639. Practical orientation to vision-building (E-VB) is related to creating a collaborative environment (ESLIMPMN1), with '*r*' = 0.693. Correlation between participating in goal-setting (WVBMN) and creating collaborative environment (ESLIMPMN1) is 0.623. In this way, practising personal leadership values of school heads, creating collaborative environment, practical orientation to vision-building and participating in goal-setting are related to each other. WVBMN is indirectly related to personal values of the school leader (IVBMN), mediated through ESLIMPMN1 as '*r*' between WVBMN and IVBMN is 0.594, which is less than the cut-off point of '*r*' = 0.6 (indicated through dotted lines). Thus, practising leadership values constitutes Node 1 as it is connected to all other factors.

Practicing personal leadership values is a critical factor that influences rest of the schooling processes and leadership practices (Hallinger 2011). In Manipur, it is positively correlated with practical orientation to vision-building (E-VB) as well as creating a collaborative environment (ESLIMPMN1). It means that values of school leadership have a potential to create shared vision through collaboration and practical orientation to vision-building. Even though vision-building is something to dream about as a long-term perspective, it needs to be nurtured in the school among all members, requiring an element of practical orientation too.

Node 2: Relationship between creating collaborative environment and mutual interaction to understand each other

Creating a collaborative environment (ESLIMPMN1) is Node 2, which is an important node to which Node 1 and Node 3 are connected. In other words, creating a collaborative environment is associated with values of school head, practical orientation to vision-building and participating in goal-setting, along with others, on one side; and mutual interaction to understand each other (WSGOLSMN2), on the other. Results of correlation analysis show that creating a collaborative environment (ESLIMPMN1) is directly related to mutual interaction to understand each other (WSGOLSMN2), with '*r*' = 0.618. It implies that school leaders not only empower teachers, staff, parents and students to create a collaborative environment, but also engage directly

by working with them, *i.e.,* providing opportunities for mutual interaction to understand each other. It aptly indicates that creating a collaborative environment brings people together, based on a common purpose, which is an opportunity for mutual interaction without losing the leadership focus, vision for the school and goals to be achieved by individuals.

Node 3: Relationship between Mutual interaction to understand each other, trust-building and other practices

Mutual interaction to understand each other (WSGOLSMN2) refers to school leadership dimension related to working with others for goal-setting. It is an important node (Node 3) that is connected with a maximum number of school leadership practices in Manipur. These leadership practices are: encourage innovations for student learning (DAVGOLSMN), trust-building (I-schlimprov), leading learning (DTLPMN) and providing intellectual stimulation (ITLPMN). Among these practices connected, trust-building is Node 4. Thus, Node 3, referring to mutual interaction to understand, is deeply significant within the school and is also difficult to achieve. It noteworthy to observe that Manipur is able to achieve this step.

A collaborative environment, driven by personal vision leading to mutual interaction for understanding each other, is an apt space that is readily available for encouraging innovations. Correlation is between mutual interaction to understand each other (WSGOLSMN2) and encouraging innovations for learning among students (DAVGOLSMN), and r is 0.606. It is about building a culture of innovations in the school, characterised by informality in dealing with people, to move beyond the normative framework, to think creatively, to question the traditional and existing practices freely, to experiment, accept failures positively as lending scope for deeper thinking and creativity, and celebrate success with all, and so on.

Mutual interaction to understand each other (WSGOLSMN2) is directly correlated with three other leadership practices, referring to building trust with teachers and others (I-schlimprov), with 'r' = 0.660; leading learning (DTLPMN), with 'r' = 0.753; and providing intellectual stimulation (ITLPMN), with 'r' = 0.754.

Node 4: Relationship between trust-building, structures and systems for decision-making, and other practices

A series of leadership practices, beginning with personal leadership values, collaborative environment and mutual interaction to understand each other, which are the first three nodes, is supported by feeder factors, such as practical orientation to vision-building, participating in goal-setting with teachers and others, creating a culture of innovation. These set of practices, when consistently practiced for a length of time, lead to building trust among teacher, parents, community and students.

Building trust with teachers and others (I-schlimprov) is directly correlated with mutual interaction to understand each other on one side with 'r' = 0.660, the Node 3 (WSGOLSMN2). It is directly related to effective school administration (W-setgols), with 'r' = 0.612, and structures and systems for decision-making (ESLIMPMN2), with 'r' = 0.656 on the other side. It is, indeed, a robust relationship between these

two subtle factors that are difficult to realise in the school. It is important to notice that school heads in Manipur practice these two components of leadership effectively.

Building trust is also indirectly related to encouraging innovations among students mediated through mutual interaction for understanding others (Node 3). Similarly, it is also indirectly related to leading learning and providing intellectual stimulation mediated through Node 3.

Node 5: Providing intellectual stimulation and outcomes

Providing intellectual stimulation (ITLPMN) is an important Node as it paves the way for an important outcome of preceding leadership practices called teacher professional development (ETLPMN). It is a teacher-focussed outcome. Providing intellectual stimulation (ITLPMN) is related to mutual interaction with each other, the Node 3, as 'r' = 0.754. It is also related directly to leading learning (DTLPMN), with 'r' = 0.712. It is a crucial Node that provides the required professional competence for the school head in teaching–learning processes. Correlation coefficients are also high for this Node 5 when compared to any other node, which indicate the emphasis that school heads give to teaching–learning processes in Manipur.

Node 6: Relationship between structures and systems for decision-making and outcomes

Building trust among teachers and others (I-schlimprov) is a gradual process that lays the foundation for a significant shift to create systems and structures for decision-making in the school (ESLIMPMN2), which is Node 6. It is positively correlated with two leadership processes, which are also outcomes for Manipur State. These are: creating a culture for learning in schools (DVBMN) and setting a climate of high expectation for students (S-schlimprov). Correlation coefficient between ESLIMPMN2 and DVBMN is 0.648; and between ESLIMPMN2 and DSLIMPMN is 0.628. These two outcomes of preceding school leadership practices are student-focussed.

4.2.5 Leadership Path Traversed in Manipur

Figure 3 indicating the relationships between different leadership practices also provides scope to trace the leadership path/s traversed by school heads. These paths are discussed herewith.

Path1—School leadership for teaching and learning

The first path starts from practising personal leadership values, moves on to creating a collaborative environment, encouraging mutual interaction to understand each other, trust-building with teachers and others, setting up systems and structures for decision-making to result in creating a) conditions for effective teaching and b) climate of high expectations for students (see Fig. 3, path 1). This leadership path is meant for both teachers and students for learning. Hence, it is called school leadership path for creating conditions for teaching and learning.

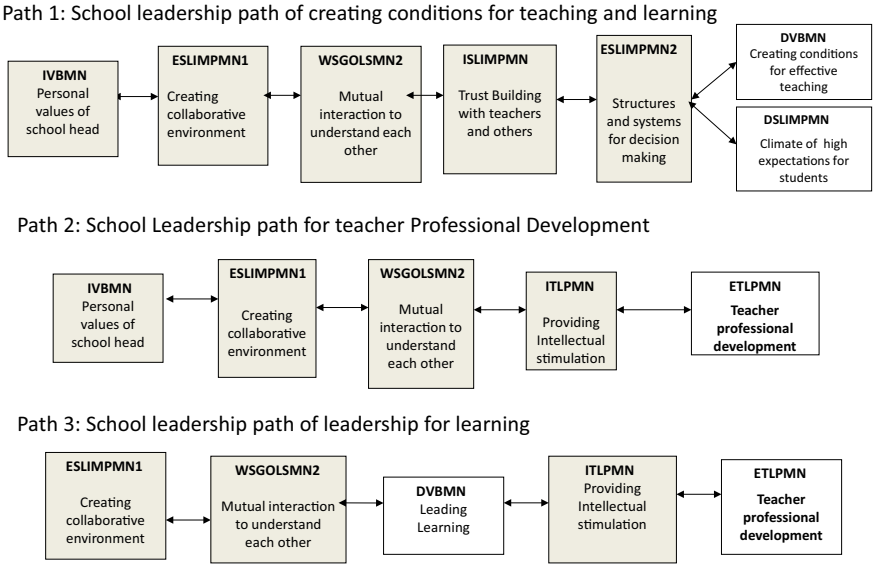

Fig. 3 School leadership paths in Manipur

Path 2—School leadership path for teacher professional development

The second path once again starts from practicing personal values of leadership (IVBMN), creating a collaborative environment (ESLIMPMN1), mutual interaction to understand each other (WSGOLSMN2) and, then, deviates to take the route of providing intellectual stimulation for teachers (ITLPMN) to result in teacher professional development (ETLPMN) (see Fig. 3, Path 2). Hence, the second path is called school leadership path for teacher professional development.

Path 3—Path of leadership for learning

The third path is formed from creating a collaborative environment (ESLIMPMN1), mutual interaction with each other (WSGOLSMN2) and, then, moves on to leading learning (DTLPMN) and providing intellectual stimulation (ITLPMN), to result in teacher professional development (ETLPMN). The correlation coefficient between providing intellectual stimulation (ITLPMN) and teacher professional development (ETLPMN) is the highest among all relationships, with 'r' = 0.820 (see Fig. 3, path 3). Since this path emphasises on a combination of leading learning, intellectual stimulation and professional development of teachers, it is called the path of leadership for learning.

There is a twofold approach to teacher professional development by school heads in Manipur. These are firstly, providing intellectual stimulation directly for teacher professional development and, secondly, providing intellectual stimulation as well as leading the teaching–learning process for teacher professional development. Thus, teacher professional development (ETLPMN) is the most important outcome of

school leadership practice in Manipur. This is at the heart of school leadership practices as a host of research literature also emphasises on role of school head in teachers' professional development in different ways, *namely* instructional leadership (e.g. Hallinger 2011; Hallinger and Heck 1996), lead learner (Fullan 2008), learning organisation (Senge et al. 2001) and so on.

The three paths indicate that mutual environment to understand each other is meaningful when intellectual stimulation is given adequately to lead learning for accomplishing teacher professional development as well as creating conditions for effective teaching. The high correlation coefficient of 0.820, significant at 0.01 level, clearly indicates that providing intellectual stimulation for professional development of teachers is critical leadership practice in the school, as practised by school heads in Manipur. Similarly, there are two other outcomes of school leadership practices which are student-focussed and teacher-focussed, *namely*, creating school culture for teaching (DVBMN) and setting high expectations for student learning (DSLIMPMN). These two sets of outcomes arise as a consequence of interrelationships between different Nodes to which various other factors are connected. It is interesting to observe that these Nodes are mainly aimed at readying a favourable socio-emotional climate for effective teaching and learning in the schools of Manipur State.

4.3 School Leadership Practice in Sikkim

4.3.1 The Context of Schooling

Sikkim is situated in the inner ranges of Himalayas. It has a population of 610,577. It has a literacy rate of 82.2%, well above the national average of 74.4% (Census of India 2011). The State underwent a transition from erstwhile Lamaist theocratic polity, ruled by Bhutias for 333 years, to the liberal democratic society of today (Sinha 2017). Its social structure was based on ascribed social status or inherited through tribal affiliations (Sinha 1975). However, the socio-political movement has abolished the feudal privileges, landlordism and private courts. Competitive party system and bureaucracy has emerged, reflecting the emergence of a new power structure in Sikkim's society. Accordingly, new political institutions, social foundations have emerged, having a bearing on Sikkim's transition from theocracy to democracy through a process of integration of tribalism, the Lamaist traditionalism and liberal democracy. The anti-feudal and anti-colonial movements, unleashed in the Indian plains, were influenced by Indian National Congress (INC). The administration was dominated by Buddhist Lamas and aristocratic Kazis. The traditional elite are identified with ethnic, religious and feudal forces, whereas the modern emergent elite derives their legitimacy from positions of bureaucracy, political parties, professions or voluntary organisations. In addition, the merger of Sikkim with the Indian Union

in 1972 is an important event that has further led to restructuring the entire socio-political complexities in Sikkim. Majority of its population is Nepalese caste and tribal social complexity (Sinha 2017).

Sikkim's education system revolved around the tradition of Literati of Tibetan pattern under the guidance of monks in which students were taught paper-making, printing, and other related arts to prepare the future monks. For the common man, education facilities were scarce. A private secondary school, started in early twentieth century, marked the beginning of the modern education system (Sinha 1975).

Bhutias and Lepchas are the major tribal groups in the State. Other backward classes in Sikkim are Magar, Gurung, Rai and Limbu. Chattris, Sharmas are the upper caste Nepali community found predominantly in Sikkim. Sikkim is also in the same context of ethnic revivalism as Nepal beset with conflicting relationships between castes and tribes within the wider distinction between Mongol population and Indo-Aryan population (B. Steinmann, as quoted by Sinha 2017). Almost half of Sikkim's territory is snow-bound in North and north-west Sikkim. North Sikkim is a reserved district for Lepchas community, and settlement by outsiders is not allowed by law.

There is a marked social distance between the elite Aristocrats such as Khazis, ministers in the Sikkim erstwhile monarchy rule, who, later, took up various positions in the bureaucracy, landlords including estates owned by five major monasteries (p. 48). Since 1994, previous chief minister, Mr. Pawan Kumar Chamling, has scaled new political heights in the State by ruling Sikkim as chief minister for 25 years. This provided near perfect political stability in the State and facilitating its economic, educational and social progress. It made Sikkim as one of the top-ranking States in the country, today, with high levels of prosperity and progress, and also being known as a peaceful State. It has also been declared as the first organic State in India, has near 100% electrification, toilet facilities for all, adequate water and sanitation, while being powered by many innovations, with 48% of women in the State being employed, the highest in India (Human Development Report-Sikkim 2014). Though the State is circumscribed by three international borders with China, Nepal and Bhutan, its relationship with them has been considered fairly well maintained.

4.3.2 Education System in Sikkim

According to UDISE 2016-17 (NIEPA-MHRD 2018), school education in Sikkim comprises 55.96% primary schools (I–V standards), 26.58% elementary schools (I–VIII standards), 6.07% higher secondary schools (I–XII standards) and 10.48% secondary schools (I–X standards). The percentage distribution of enrolment of students is 13.33%, 22.65%, and 23.53% for primary, elementary and secondary schools, respectively (percentage not available for higher secondary schools). In all, there are 1274 schools in the State out of which 766 schools are run by Department of Education (DoE), 79 by Tribal and Social Welfare Department (TWDS), four are government-aided (GA), 439 are run by private-unaided (Pvt U) and remaining by various other departments. Percentage distribution of Head

Table 8 National Assessment Survey mean scores for Sikkim State, 2017

Subjects	Class 3		Class 5		Class 8		Class 10 (Cycle 2)**	
	Sikkim	All-India	Sikkim	All-India	Sikkim	All-India	Sikkim	All-India
Modern Indian language	60	68	50	58	51	57	38	49
Mathematics	55	64	42	53	30	42	28	34
EVS	55	65	45	57	–	–	–	–
Science	–	–	–	–	38	44	35	34
Social Science	–	–	–	–	38	44	40	39
English	–	–	–	–	–	–	48	36

Source NCERT-UNICEF (2017b),
** http://www.ncert.nic.in/programmes/NAS/pdf/SRCX/11_Sikkim.pdf. Accessed on 17th May 2020

Masters/Head Mistress in primary schools (I–V standards), elementary schools (I–VIII standards), higher secondary schools (I–XII standards) and secondary schools (I–X standards), respectively, are 71.90, 72.32, 60.70 and 69.29%.

There are 4914 regular teachers out of the total 7496 in government schools who are professionally qualified. Similarly, 71 out of 153 in Government-aided schools, 823 out of 2917 teachers in private-unaided schools are professionally qualified in the State. There are no single-teacher schools in Sikkim, unlike in other States. All schools have designated HMs. Hence, overall condition for practicing effective school leadership is favourable in the State.

The gross enrolment ratio (GER) of students in primary schools (I–V standards) is 91.98, GER in I–VIII standards is 106.91, GER in IX-X standard is 111.96%. Sikkim follows CBSE's central syllabus. Pass percentage of students at 10th standard board examination was 80.88 in 2014–15. However, data was not available for the year 2015–16. However, the State had low scores in National Assessment Survey at elementary as well as secondary levels, compared to the national mean scores (see Table 8).

4.3.3 Profile of School Heads Who Participated in Self-rating on Their Leadership Practices

In Sikkim, 56.4% of males and 43.6% women participated in self-reflective exercise of school needs. Out of the total respondents, 48.2% of school heads were secondary school heads and 51.8% were principals in senior secondary schools. The average age of school heads, who participated in the exercise, was 45.58 years. Among them, 55.4 percent of school heads were graduates with B.Ed. qualification, while the remaining school heads were post-graduates with education degree/s. The average teaching

experience for school heads was 20.26 years, and 5.5 years as heads of school. In general, there were younger principals, with higher average years of experience as school heads in Sikkim, as compared to Manipur.

4.3.4 Relationship Between Different School Leadership Practices in Sikkim

There are three Nodes for school leadership practice in Sikkim, *namely*, teacher professional development (ETLPSK), mutual interaction to understand each other (WSGOLSSK2) and setting up systems and structures for decision-making (ESLIMPSK2). The diagrammatic representation of the relationships is presented in Fig. 4. Nodes and their relationships with other leadership practices are explained with the help of Fig. 4.

Node 1: Relationship between teacher professional development and other leadership practices

Teacher professional development (ETLPSK) is connected to leading learning (DTLPSK), providing intellectual stimulation (ITLPSK) and building academic collaboration for TLP (W-schlimprov). The coefficients of correlation 'r' between these three factors and Teacher professional development (ETLPSK) are 0.746, 0.668, and 0.635 respectively. It is also connected with practising leadership values in a moderate manner with 'r' = 0.497. Further, teacher professional development (ETLPSK) is associated with Node 3 which refers to mutual interaction to understand each other (WSGOLSSK2) having coefficient of correlation 'r' = 0.626. Node 2,

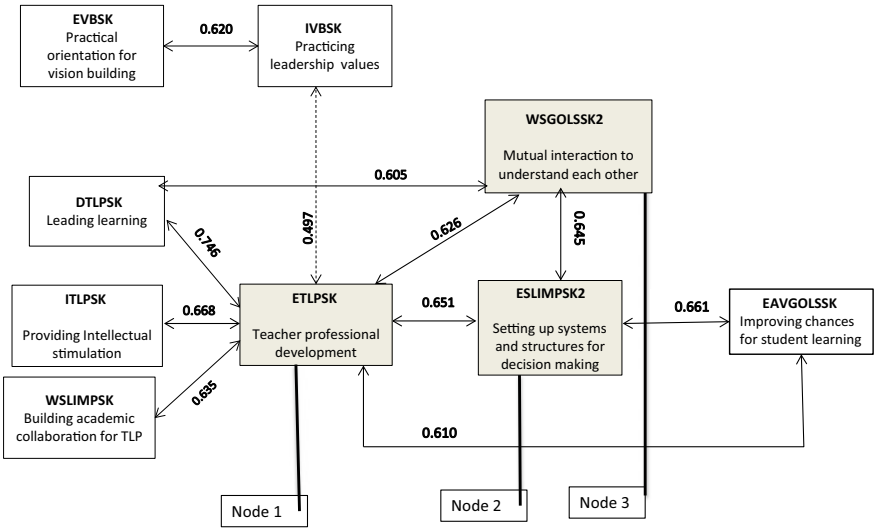

Fig. 4 Relationship between different school leadership practices in Sikkim

referring to setting up systems and processes for decision-making (ESLIMPSK2), is again correlated with teacher professional development, ETLPSK with 'r' = 0.651. In short, teacher professional development is a critical Node which is connected to all other leadership practices in Sikkim.

Node 2: Relationship between setting up of systems and structures for decision-making and other variables

Setting up of systems and structures for decision-making (ESLIMPSK2), i.e. Node 2, is related to Node 3, which refers to mutual interaction to understand each other (WSGOLSSK2) whose 'r' = 0.645 on one side and teacher professional development, i.e. Node 1 on the other side. As such, all three Nodes are directly connected with each other in Sikkim. In other words, the three critical leadership practices pertaining to teacher professional development, systems and structures for decision-making and mutual interaction to understand each other are directly related to each other. This alignment between critical leadership practices is the most important strength of school leadership practice in Sikkim. Hence, we can see that there is only one outcome which is student-focussed, referring to improving the chances of student learning.

Relationship between nodes and outcome of leadership practices

The correlation in Node 2 between setting up of systems and structures for decision-making (ESLIMPSK2), and the outcome relating to improving the chances of students learning (EAVGOLSSK) is 0.661. Correlation between teacher professional development (ETLPSK), Node 1, is also directly correlated with improving chances for student learning (EAVGOLSSK), with 'r' value 0.610. It shows that critical leadership practices in Sikkim can directly improve chances of student learning through influencing and empowering teachers as well as setting up of systems and structures for decision making.

Relationships between other leadership practices

On the overarching perspective, practical orientation for vision-building (EVBSK) and practicing leadership values (IVBSK) are related significantly to each other having 'r' = 0.620 (see Fig. 2). Correlation between practicing leadership values (IVBSK) and teacher professional development (ETLPSK) is 0.497 significant at 0.000 levels (dotted lines).

Influence vision-building, referring to school leadership values (IVBSK), and empower vision building, referring to practical orientation to vision-building (EVBSK), though connected with each other, are not connected strongly with the rest of the leadership practices. Nonetheless, it can be considered that IVBSK definitely builds into it mediated through ETLPSK, i.e. teacher professional development, with 'r' coefficient of correlation being 0.489 that is significant at 0.001 level.

In this way, School leadership values indirectly influence rest of the school's leadership processes through teacher professional development (ETLPSK). ETLPSK is the primary node to which all other leadership practices are connected, with the exception of practical orientation to vision-building (EVBSK), in Sikkim. Leading learning

(DTLPSK), providing intellectual stimulation (ITLPSK), and building academic collaboration for TLP (W-schlimprov) constitute one set of practices related to teacher professional development (ETLPSK), which is the primary node. The second set of practices, correlated with teacher professional development (ETLPSK), is setting up of systems and structures for decision-making (ESLIMPSK2) and mutual interaction to understand each other (WSGOLSSK2).

4.3.5 School Leadership Paths Traversed in Sikkim

Three main school leadership paths emerge from the relationships between different leadership practices which are explained with the help of Fig. 5.

Path 1: Balancing academic and administrative leadership practices

The outcome of leadership paths in Sikkim is improving the chances of student learning. There are three ways in which other leadership practices lead to this end-in-view. The first path begins by providing intellectual stimulation (ITLPSK) for teacher professional development (ETLPSK) and also engages in setting up of systems and structures for decision-making (ESLIMPSK2) for improving chances for student learning (EAVGOLSSK) (see Fig. 5, path 1). It implies that setting up of systems and structures for decision-making also facilitates different teaching–learning processes to improve chances for student learning. This is unique to Sikkim State.

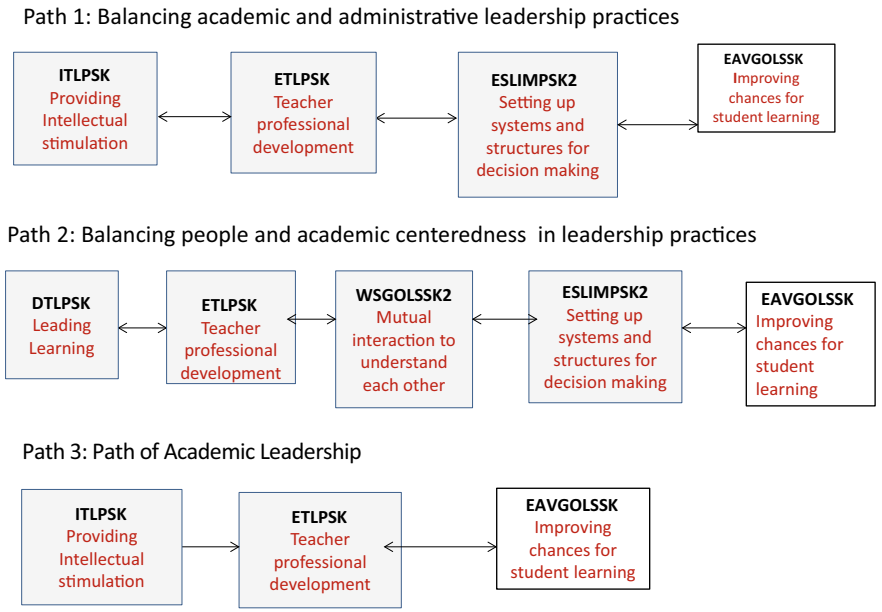

Fig. 5 School leadership paths in Sikkim

Path 2: Balancing people and academic centered leadership practices

The second path begins with leading learning (DTLPSK) instead of intellectual stimulation (ITLPSK), teacher professional development (ETLPSK), then moves through mutual interaction to understand each other (WSGOLSSK2) and reaches setting up of systems and structures for decision-making (ESLIMPSK2) to improve chances for student learning (EAVGOLSSK) as outcome (see Fig. 5, path 2). In the second path, all the three Nodes are connected to each other to reach the end-in-view of the leadership processes. Therefore, this path may be considered as a robust path as almost all leadership practices converge to this path for improving chances of student learning.

Path 3: Path of Academic leadership

The third path begins from intellectual stimulation (ITLPSK) and traverses through teacher professional development (ETLPSK) to improve chances for student learning (EAVGOLSSK). This path is the shortest and most direct. It means that providing intellectual stimulation leads to teacher professional development for improving chances of student learning (see Fig. 5, path 3).

To sum up, school leadership practices ensure that proper systems and structures are set up for decision-making along with mutual interactions to understand each other so that there is teacher professional development propelled by intellectual stimulation and leading learning. For this, building academic collaboration and practicing leadership values provide the required support. All these would improve the chances of student learning in Sikkim.

4.4 Comparison Between School Leadership Processes in Manipur and Sikkim

In Manipur, critical leadership practices, as revealed from the Nodes, are personal values of school head, creating collaborative environment, mutual interaction to understand each other, trust-building with teachers and others, structures and systems for decision-making, and providing intellectual stimulation. In Sikkim, the critical leadership practices are only three, viz. teacher professional development, setting up of systems and structures for decision-making, and mutual interaction to understand each other. So, while six school leadership practices are critical to Manipur, only three are critical to Sikkim.

Among these critical leadership practices, the ones common to both Manipur and Sikkim are: mutual interaction to understand each other, structures and systems for decision-making and providing intellectual stimulation. Critical leadership practices are distinct for both States. Leadership practices distinct to Manipur are: personal values of school head; creating a collaborating environment; and trust building with teachers and others while the distinct leadership practice in Sikkim is teacher professional development.

Outcomes indicate the convergence of all leadership practices and processes. While teacher professional development is treated as outcome of several school leadership practices working in tandem with each other in Manipur, the same is considered as a critical input for improving chances for student learning in Sikkim. As a result, the outcomes of leadership practices are different for both States. In Sikkim, leadership practices converge to enhance only one outcome, referring to improving chances for student learning. In contrast, Manipur seeks to achieve three outcomes, two of which are related to teacher and one for student, viz. creating conditions for effective teaching, teacher professional development and setting a climate of high expectations for students.

In both Manipur and Sikkim, school heads traverse three school leadership paths each. These paths have been named on the basis of leadership practices that are associated with each other. In Manipur, these paths are named as paths for teaching and learning, teacher professional development and leadership for learning. The first path, referring to teaching and learning, intends to reach two outcomes, namely creating conditions for teaching and setting up a climate of high expectations for students. The other two paths aim to reach the outcome of teacher professional development. In Sikkim, the three paths traversed are called: balancing academic and administrative leadership practices, balancing people and academic centered leadership practices and path of academic leadership. All these paths focus on improving chances for student learning.

There is a significant qualitative difference in the leading school processes between the States of Manipur and Sikkim. In Manipur, school heads engage in setting a stage for teaching, learning and developing teachers for the profession. Leadership practices in Manipur, therefore, focus on ensuring conditions for teaching and learning to take place and developing teachers' capacities as the outcomes. In contrast, in Sikkim, school heads seek to address the challenges of balancing between academic functions, on the one hand, and administrative roles and people centeredness, on the other.

Both States begin with personal values of leadership for school heads. They emphasise on practical orientation for vision-building. These two, together, constitute the first layer of school leadership for both the States. The point of departure comes from the second node. The second node for Manipur is creating a collaborative environment for teaching, whereas for Sikkim, it is teacher professional development. Sikkim directly and immediately aims to tap teacher professional development to improve quality. Teacher professional development constitutes a critical node in Sikkim for which all other factors are connected. The third node for both the States is the same, i.e. mutual interaction to understand each other (W-setgols2). Manipur leads from here to trust building and then, to provide intellectual stimulation for teachers, before reaching the end-in-view on teacher professional development (E-TLP). The phenomenon is reverse in Sikkim in which setting up of systems and structures precedes teacher professional development.

The reasons for variation in leadership processes and paths can be attributed to social, political, educational and cultural factors in the two States. Sikkim is a small State with one-fourth of the population of Manipur. The number of schools is also

much lesser in Sikkim than in Manipur. Historically, Sikkim has enjoyed cultural and social foundations of education in the Lamaist traditions, especially in literati such as making papers, studying Buddhist scriptures, having established monasteries as educational hubs, etc. Manipur also has rich social and cultural foundations of education since very long, especially among the Nagas, Meitheis and Kukis. Kings encouraged education, especially to propagate the wisdom of religious texts. Thus, intellectual capital formation in both the societies is highly evident. However, in recent times, since about 100 years, during the pre- and post-Independence era, socio-political developments differed significantly in both the States after they merged with the Indian Union.

Sikkim is comparatively peaceful and schools function for most of the year without many untoward incidents. As observed by HRDD Sikkim (RMSA, 2015–16), all facilities, including teachers, are provided to all schools. There are no single-teacher schools. Now schools are poised for a take-off to higher levels of quality (Mythili 2019d). In contrast, Manipur has to work towards ensuring essential facilities for all schools, including adequate teachers and a safe socio-political environment (as it suffers from civil strife and underground activities) and reach the threshold point for taking off to higher levels of school quality. On any given day, a general strike may be called, without any particular reason by underground activists and schools closed immediately. The last strike in 2016 lasted for four months. It is imperative to create conditions for collaboration and trust-building so that a culture of teaching is built/rebuilt for fostering high expectation for student learning. Consequently, teacher professional development is the end focus, progressively formed by building a climate of collaboration, mutual understanding, trust-building, with structures and systems for decision-making, before embarking on teacher development, creating a culture of learning and setting higher expectations for students. Incidentally, the profiles of respondents show that there are more school heads with post-graduation and B.Ed. degrees in Sikkim than in Manipur. Two principals in Sikkim and one in Manipur have Ph.D. degree.

Notwithstanding higher levels of preparedness of Sikkim for a take-off for enhancing student learning, NAS results indicate that its students perform below the national average at elementary stage whereas slightly better in 10th class examination. In contrast, students have performed above the national average at the elementary level in Manipur. Manipur did not participate in NAS for the secondary stage in 2015, whereas Sikkim did. This was, incidentally, the period when civil strife was severe in the State and schools struggled to function. However, class 10 results of Manipur in 2017 when it participated show similar trend like that of Sikkim with lower levels in modern Indian languages and mathematics.

The student learning levels signify the importance of robustness of the preparatory stage besides teacher professional development, intellectual stimulation and leading learning. These preparatory stages, practiced in Manipur, are: ensuring mutual interaction to understand each other, emphasis on leadership values influencing schooling processes, structures and systems for decision-making processes, creating a collaborative environment, and trust-building. The presence of the preparatory stage also explains the reasons for differing paths between Sikkim and Manipur and the manner

in which regional challenges and contexts were navigated by school heads in both the States. Sikkim's efficiency on the supply side at the system level is high, with no vacancies of school heads left unfilled, absence of single-teacher schools, appropriate teacher–pupil ratio (Mythili 2019d). It is also manifest from the single focus in the leadership paths. However, it needs to be complemented with suitable schooling processes as well. The relationship between different leadership practices and paths indicate that high emphasis was laid on academic strengthening without balancing it with adequate preparation for involving people with school's processes. It, therefore, signifies that leadership practices have to be culturally relevant and contextually flexible, beyond the standard practices.

5 Conclusions and Policy Implications

Attention to school leadership development is a recent phenomenon in Indian context. Fewer studies are found in this area. The present study attempts to begin the discourse in Indian context on leadership process and perspectives of school heads especially to improve student learning. For this purpose, conceptual framework and tools for collecting leadership practices and analyzing empirical data were carried out to start the discourse in Indian context. Five important conclusions can be drawn from the study. First, school heads adopt several paths which come together to interact in diverse ways, involving a few critical leadership practices, in achieving the set goals in a layered approach. Second, school leadership is responsible for the creation of favourable climate to improve overall school quality apart from student learning. Third, school leadership influences student learning by creating necessary conditions for teaching and learning. Fourth, for leadership practices to yield results, they must be contextually flexible and culturally relevant to address the needs of the students, teachers and school. Fifth, school heads continue to focus their attention on teachers' development and improve student learning even though SSA and RMSA have taken over their role of instructional leadership in the form of teacher training. It clearly shows that teacher professional development lies within the ambit of the school and that school heads actually lead the learning. School heads have adopted various paths to improve teacher quality and student learning. It means that the even though the school head was virtually forgotten by SSA and RMSA programmes for two decades, school heads did not lose the school, teachers or students. They continued to focus on improving essential conditions, traversing diverse and multiple paths, to improve the teaching–learning process for enhancing chances for student learning as before.

The present study has the potential to change the narrative that exaggerates low student learning and, therefore, advocates conducting more teacher training by agencies external to the school. Policy implication is that if school quality and student learning has to be improved, teacher professional development must lie within the school and led by school heads as leaders. Other structures in the education system, from cluster resource centres to national institutions, may provide need-based and school-specific onsite support, whenever required. These structures ought to connect

with the context of the school to understand regional diversity before supporting teachers and school heads. It is a more plausible alternate approach to the centralised and cascade model that has failed to improve teacher quality. For this, schools have to be considered as the basic unit of teacher professional development.

Appendix 1

Relationship between different leadership practices in Manipur using Pearson's Correlations										
	IVBMN	ISLIMPMN	ITLPMN	IAGOLSMN	DVBMN	DSGOLSMN	DSLIMPMN	DTLPMN	DAGOLSMN	EVBMN
IVBMN	1	0.474**	0.535**	0.520**	0.415**	0.504**	0.443**	0.531**	0.427**	0.660**
		0	0	0	0	0	0	0	0	0
ISLIMPMN	0.474**	1	0.576**	0.360**	0.511**	0.246*	0.539**	0.493**	0.312**	0.360**
	0		0	0.002	0	0.037	0	0	0.008	0.002
ITLPMN	0.535**	0.576**	1	0.509**	0.269*	0.391**	0.486**	0.712**	0.619**	0.289*
	0	0		0	0.022	0.001	0	0	0	0.014
IAGOLSMN	0.520**	0.360**	0.509**	1	0.282*	0.09	0.414**	0.389**	0.570**	0.332**
	0	0.002	0		0.016	0.451	0	0.001	0	0.004
DVBMN	0.415**	0.511**	0.269*	0.282*	1	0.266*	0.590**	0.431**	0.078	0.306**
	0	0	0.022	0.016		0.024	0	0	0.514	0.009
DSGOLSMN	0.504**	0.246*	0.391**	0.09	0.266*	1	0.191	0.551**	0.203	.497**
	0	0.037	0.001	0.451	0.024		0.109	0	0.087	0
DSLIMPMN	0.443**	0.539**	0.486**	0.414**	0.590**	0.191	1	0.436**	0.300*	0.218
	0	0	0	0	0	0.109		0	0.011	0.066
DTLPMN	0.531**	0.493**	0.712**	0.389**	0.431**	0.551**	0.436**	1	0.486**	0.300*
	0	0	0	0.001	0	0	0		0	0.01
DAGOLSMN	0.427**	0.312**	0.619**	0.570**	0.078	0.203	0.300*	0.486**	1	0.14
	0	0.008	0	0	0.514	0.087	0.011	0		0.242
EVBMN	0.660**	0.360**	0.289*	0.332**	0.306**	0.497**	0.218	0.300*	0.14	1
	0	0.002	0.014	0.004	0.009	0	0.066	0.01	0.242	
ESLIMPMN1	0.639**	0.561**	0.609**	0.453**	0.330**	0.572**	0.408**	0.591**	0.459**	0.693**
	0	0	0	0	0.005	0	0	0	0	0
ESCLIMPMN2	0.435**	0.656**	0.465**	0.411**	0.648**	0.188	0.628**	0.522**	0.333**	0.309**
	0	0	0	0	0	0.114	0	0	0.004	0.008

(continued)

(continued)

Relationship between different leadership practices in Manipur using Pearson's Correlations

	IVBMN	ISLIMPMN	ITLPMN	IAGOLSMN	DVBMN	DSGOLSMN	DSLIMPMN	DTLPMN	DAGOLSMN	EVBMN
ETLPMN	0.548**	0.493**	0.820**	0.446**	0.321**	0.470**	0.488**	0.799**	0.525**	0.313**
	0	0	0	0	0.006	0	0	0	0	0.008
EAGOLSMN	0.309**	0.413**	0.555**	0.595**	0.275*	0.148	0.406**	0.507**	0.585**	0.05
	0.008	0	0	0	0.02	0.215	0	0	0	0.677
WVBMN	0.594**	0.404**	0.586**	0.411**	0.383**	0.498**	0.371**	0.604**	0.387**	0.503**
	0	0	0	0	0.001	0	0.001	0	0.001	0
WSGOLSMN1	0.331**	0.612**	0.484**	0.418**	0.561**	0.253*	0.558**	0.492**	0.347**	0.354**
	0.004	0	0	0	0	0.032	0	0	0.003	0.002
WSGOLSMN2	0.557**	0.660**	0.754**	0.473**	0.365**	0.429**	0.533**	0.753**	0.606**	0.294*
	0	0	0	0	0.002	0	0	0	0	0.012
WSCLIMPMN	0.104	0.249*	0.494**	0.204	0.136	0.13	0.303**	0.255*	0.328**	0.019
	0.385	0.035	0	0.085	0.255	0.278	0.01	0.031	0.005	0.875
WACOLSMN	0.228	0.449**	0.281*	0.527**	0.265*	0.119	0.359**	0.291*	0.394**	0.282*
	0.054	0	0.017	0	0.025	0.318	0.002	0.013	0.001	0.016
SSPASSMN	−0.14	−0.285*	−0.111	−0.069	−0.157	0.028	−0.117	−0.086	−0.095	−0.161
	0.254	0.015	0.351	0.565	0.188	0.814	0.329	0.474	0.427	0.177

Relationship between different leadership practices in Manipur using Pearson's Correlations

	ESLIMPMN1	ESCLIMPMN2	ETLPMN	EAGOLSMN	WVBMN	WSGOLSMN1	WSGOLSMN2	WSCLIMPMN	WAGOLSMN	SSPASSMN
IVBMN	0.639	0.435**	0.548**	0.309**	0.594**	0.331**	0.557**	0.104**	0.228**	−0.136
	0	0	0	0.008	0	0.004	0	0.385	0.054	0.254
ISLIMPMN	0.561**	0.656	0.493**	0.413**	0.404**	0.612*	0.660**	0.249**	0.449**	−0.285**
	0	0	0	0	0	0	0	0.035	0	0.015
ITLPMN	0.609**	0.465**	0.82	0.555**	0.586*	0.484**	0.754**	0.494**	0.281**	−0.111**

(continued)

(continued)

Relationship between different leadership practices in Manipur using Pearson's Correlations

	ESLIMPMN1	ESCLIMPMN2	ETLPMN	EAGOLSMN	WVBMN	WSGOLSMN1	WSGOLSMN2	WSCLIMPMN	WAGOLSMN	SSPASSMN
	0	0	0	0	0	0	0	0	0.017	0.351
IAGOLSMN	0.453**	0.411**	0.446**	0.595	0.411*	0.418	0.473**	0.204**	0.527**	−0.069**
	0	0	0	0	0	0	0	0.085	0	0.565
DVBMN	0.330**	0.648**	0.321*	0.275*	0.383	0.561*	0.365**	0.136**	0.265	−0.157**
	0.005	0	0.006	0.02	0.001	0	0.002	0.255	0.025	0.188
DSGOLSMN	0.572**	0.188*	0.470**	0.148	0.498*	0.253	0.429	0.130**	0.119	0.028**
	0	0.114	0	0.215	0	0.032	0	0.278	0.318	0.814
DSLIMPMN	0.408**	0.628**	0.488**	0.406**	0.371**	0.558	0.533	0.303**	0.359*	−0.117**
	0	0	0	0	0.001	0	0	0.01	0.002	0.329
DTLPMN	0.591**	0.522**	0.799**	0.507**	0.604**	0.492**	0.753**	0.255	0.291**	−0.086**
	0	0	0	0	0	0	0	0.031	0.013	0.474
DAGOLSMN	0.459**	0.333**	0.525**	0.585**	0.387	0.347	0.606*	0.328**	0.394	−0.095**
	0	0.004	0	0	0.001	0.003	0	0.005	0.001	0.427
EVBMN	0.693**	0.309**	0.313*	0.050**	0.503**	0.354**	0.294	0.019*	0.282	−0.161**
	0	0.008	0.008	0.677	0	0.002	0.012	0.875	0.016	0.177
ESLIMPMN1	1**	0.586**	0.606**	0.336**	0.623**	0.462**	0.618**	0.303**	0.386**	−0.151**
		0	0	0.004	0	0	0	0.01	0.001	0.205
ESCLIMPMN2	0.586**	1**	0.475**	0.455**	0.384**	0.544	.582**	0.187**	0.295**	−0.290**
	0		0	0	0.001	0	0	0.115	0.012	0.014
ETLPMN	0.606**	0.475**	1**	0.523**	0.587**	0.501**	0.728**	0.322**	0.341**	−0.084**
	0	0		0	0	0	0	0.006	0.003	0.485
EAGOLSMN	0.336**	0.455**	0.523**	1**	0.300*	0.499	0.572**	0.311**	0.496**	−0.134**
	0.004	0	0		0.01	0	0	0.008	0	0.261

(continued)

(continued)

Relationship between different leadership practices in Manipur using Pearson's Correlations										
	ESLIMPMN1	ESCLIMPMN2	ETLPMN	EAGOLSMN	WVBMN	WSGOLSMN1	WSGOLSMN2	WSCLIMPMN	WAGOLSMN	SSPASSMN
WVBMN	0.623**	0.384**	0.587**	0.300**	1**	0.497**	0.616**	0.336**	0.270**	−0.007**
	0	0.001	0	0.01		0	0	0.004	0.022	0.952
WSGOLSMN1	0.462**	0.544**	0.501**	0.499**	0.497**	1*	0.584**	0.296**	0.529**	−0.109**
	0	0	0	0	0		0	0.012	0	0.363
WSGOLSMN2	0.618**	0.582**	0.728**	0.572**	0.616**	0.584**	1**	0.374**	0.423**	−0.170**
	0	0	0	0	0	0		0.001	0	0.153
WSCLIMPMN	0.303	0.187*	0.322**	0.311	0.336	0.296	0.374**	1*	0.234**	0.168
	0.01	0.115	0.006	0.008	0.004	0.012	0.001		0.048	0.158
WAGOLSMN	0.386	0.295**	0.341*	0.496**	0.270*	0.529	0.423**	0.234*	1**	−0.156
	0.001	0.012	0.003	0	0.022	0	0	0.048		0.192
SSPASSMN	−0.151	−0.290*	−0.084	−0.134	−0.007	−0.109	−0.17	0.168	−0.156	1
	0.205	0.014	0.485	0.261	0.952	0.363	0.153	0.158	0.192	

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Appendix 2

Relationship between different leadership practices in Sikkim using Pearson's Correlations

	IVBSK	ISLIMPSK	ITLPSK	IAGOLSSK	DVBSK	DSGOLSSK	DSLIMPSK	DTLPSK	DAGOLSSK	EVBSK
IVBSK	1	0.223*	0.512**	0.404**	0.511**	0.562**	0.497**	0.547**	0.328**	0.620**
		0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000
ISLIMPSK	0.223*	1	0.174	0.295**	0.284*	0.320**	0.300**	0.285*	0.278*	0.194
	0.047		0.122	0.008	0.011	0.004	0.007	0.011	0.012	0.085
ITLPSK	0.512**	0.174	1	0.328**	0.406**	0.475**	0.412**	0.622**	0.447**	0.509**
	0.000	0.122		0.003	0.000	0.000	0.000	0.000	0.000	0.000
IAGOLSSK	0.404**	0.295**	0.328**	1	0.211	0.340**	0.379**	0.503**	0.560**	0.269*
	0.000	0.008	0.003		0.061	0.002	0.001	0.000	0.000	0.016
DVBSK	0.511**	0.284*	0.406**	0.211	1	0.429**	0.491**	0.395**	0.311**	0.446**
	0.000	0.011	0.000	0.061		0.000	0.000	0.000	0.005	0.000
DSGOLSSK	0.562**	0.320**	0.475**	0.340**	0.429**	1	0.420**	0.493**	0.312**	0.390**
	0.000	0.004	0.000	0.002	0.000		0.000	0.000	0.005	0.000
DSLIMPSK	0.497**	0.300**	0.412**	0.379**	0.491**	0.420**	1	0.512**	0.459**	0.309**
	0.000	0.007	0.000	0.001	0.000	0.000		0.000	0.000	0.005
DTLPSK	0.547**	0.285*	0.622**	0.503**	0.395**	0.493**	0.512**	1	0.466**	0.471**
	0.000	0.011	0.000	0.000	0.000	0.000	0.000		0.000	0.000
DAGOLSSK	0.328**	0.278*	0.447**	0.560**	0.311**	0.312**	0.459**	0.466**	1	0.186
	0.003	0.012	0.000	0.000	0.005	0.005	0.000	0.000		0.099
EVBSK	0.620**	0.194	0.509**	0.269*	0.446**	0.390**	0.309**	0.471**	0.186	1
	0.000	0.085	0.000	0.016	0.000	0.000	0.005	0.000	0.099	
ESLIMPSK1	0.353**	0.144	0.299**	0.261*	0.162	0.231*	0.389**	0.377**	0.346**	0.298**
	0.001	0.202	0.007	0.019	0.152	0.039	0.000	0.001	0.002	0.007
ESIMPSK2	0.489**	0.269*	0.531**	0.353**	0.581**	0.300**	0.546**	0.602**	0.513**	0.478**

(continued)

(continued)

Relationship between different leadership practices in Sikkim using Pearson's Correlations

	IVBSK	ISLIMPSK	ITLPSK	IAGOLSSK	DVBSK	DSGOLSSK	DSLIMPSK	DTLPSK	DAGOLSSK	EVBSK
	0.000	0.016	0.000	0.001	0.000	0.007	0.000	0.000	0.000	0.000
ETLPSK	0.497**	0.289**	0.668**	0.406**	0.511**	0.491**	0.527**	0.746**	0.565**	0.395**
	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EAVGOLSSK	0.342**	0.415**	0.422**	0.409**	0.427**	0.158	0.406**	0.436**	0.426**	0.297**
	0.002	0.000	0.000	0.000	0.000	0.162	0.000	0.000	0.000	0.007
WVBSK	0.516**	0.180	0.499**	0.460**	0.197	0.478**	0.336**	0.477**	0.474**	0.324**
	0.000	0.110	0.000	0.000	0.079	0.000	0.002	0.000	0.000	0.003
WSGOLSSK1	0.436**	0.200	0.442**	0.353**	0.362**	0.247*	0.423**	0.387**	0.492**	0.423**
	0.000	0.075	0.000	0.001	0.001	0.027	0.000	0.000	0.000	0.000
WSGOLSSK2	0.434**	0.540**	0.418**	0.467**	0.400**	0.416**	0.510**	0.605**	0.556**	0.446**
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSLIMSK	0.377**	0.301**	0.516**	0.336**	0.343**	0.371**	0.397**	0.536**	0.411**	0.378**
	0.001	0.007	0.000	0.002	0.002	0.001	0.000	0.000	0.000	0.001
WAGOLSSK	0.260*	0.353**	0.292**	0.341**	0.341**	0.321**	0.307**	0.268*	0.262*	0.230*
	0.020	0.001	0.009	0.002	0.002	0.004	0.006	0.016	0.019	0.041
SSPASSSK	0.029	−0.003	0.058	0.096	0.061	0.047	0.066	0.225*	0.013	0.090
	0.799	0.979	0.611	0.397	0.591	0.680	0.561	0.044	0.909	0.427

Relationship between different leadership practices in Sikkim using Pearson's Correlations

	ESLIMPSK1	ESLIMPSK2	ETLPSK	EAVGOLSSK	WVBSK	WSGOLSSK1	WSGOLSSK2
IVBSK	0.353**	0.489**	0.497**	0.342**	0.516**	0.436**	0.434**
	0.001	0.000	0.000	0.002	0.000	0.000	0.000
ISLIMPSK	0.144	0.269*	0.289**	0.415**	0.180	0.200	0.540**

(continued)

(continued)

Relationship between different leadership practices in Sikkim using Pearson's Correlations

	ESLIMPSK1	ESLIMPSK2	ETLPSK	EAVGOLSSK	WVBSK	WSGOLSSK1	WSGOLSSK2
	0.202	0.016	0.009	0.000	0.110	0.075	0.000
ITLPSK	0.299**	0.531**	0.668**	0.422**	0.499**	0.442**	0.418**
	0.007	0.000	0.000	0.000	0.000	0.000	0.000
IAGOLSSK	0.261*	0.353**	0.406**	0.409**	0.460**	0.353**	0.467**
	0.019	0.001	0.000	0.000	0.000	0.001	0.000
DVBSK	0.162	0.581**	0.511**	0.427**	0.197	0.362**	0.400**
	0.152	0.000	0.000	0.000	0.079	0.001	0.000
DSGOLSSK	0.231*	0.300**	0.491**	0.158	0.478**	0.247*	0.416**
	0.039	0.007	0.000	0.162	0.000	0.027	0.000
DSLIMPSK	0.389**	0.546**	0.527**	0.406**	0.336**	0.423**	0.510**
	0.000	0.000	0.000	0.000	0.002	0.000	0.000
DTLPSK	0.377**	0.602**	0.746**	0.436**	0.477**	0.387**	0.605**
	0.001	0.000	0.000	0.000	0.000	0.000	0.000
DAGOLSSK	0.346**	0.513**	0.565**	0.426**	0.474**	0.492**	0.556**
	0.002	0.000	0.000	0.000	0.000	0.000	0.000
EVBSK	0.298**	0.478**	0.395**	0.297**	0.324**	0.423**	0.446**
	0.007	0.000	0.000	0.007	0.003	0.000	0.000
ESLIMPSK1	1	0.682**	0.510**	0.429**	0.267*	0.245*	0.473**
		0.000	0.000	0.000	0.017	0.028	0.000
ESIMPSK2	0.682**	1	0.651**	0.661**	0.288**	0.443**	0.645**
	0.000		0.000	0.000	0.010	0.000	0.000
ETLPSK	0.510**	0.651**	1	0.610**	0.457**	0.460**	0.626**

(continued)

(continued)

Relationship between different leadership practices in Sikkim using Pearson's Correlations

	ESLIMPSK1	ESLIMPSK2	ETLPSK	EAVGOLSSK	WVBSK	WSGOLSSK1	WSGOLSSK2
	0.000	0.000		0.000	0.000	0.000	0.000
EAVGOLSSK	0.429**	0.661**	0.610**	1	0.170	0.478**	0.488**
	0.000	0.000	0.000		0.131	0.000	0.000
WVBSK	0.267*	0.288**	0.457**	0.170	1	0.222*	0.488**
	0.017	0.010	0.000	0.131		0.048	0.000
WSGOLSSK1	0.245*	0.443**	0.460**	0.478**	0.222*	1	0.372**
	0.028	0.000	0.000	0.000	0.048		0.001
WSGOLSSK2	0.473**	0.645**	0.626**	0.488**	0.488**	0.372**	1
	0.000	0.000	0.000	0.000	0.000	0.001	
WSLIMSK	0.512**	0.543**	0.635**	0.431**	0.208	0.506**	0.531**
	0.000	0.000	0.000	0.000	0.064	0.000	0.000
WAGOLSSK	0.144	0.272*	0.339**	0.427**	0.256*	0.411**	0.355**
	0.203	0.015	0.002	0.000	0.022	0.000	0.001
SSPASSSK	−0.023	0.139	−0.016	−0.041	0.006	−0.035	0.089
	0.841	0.218	0.889	0.716	0.956	0.760	0.432

Relationship between different leadership practices in Sikkim using Pearson's Correlations

	WSLIMSK	WAGOLSSK	SSPASSSK
IVBSK	0.377**	0.260*	0.029
	0.001	0.020	0.799
ISLIMPSK	0.301**	0.353**	−0.003
	0.007	0.001	0.979
ITLPSK	0.516**	0.292**	0.058

(continued)

(continued)

Relationship between different leadership practices in Sikkim using Pearson's Correlations			
	WSLIMSK	WAGOLSSK	SSPASSSK
	0.000	0.009	0.611
IAGOLSSK	0.336**	0.341**	0.096
	0.002	0.002	0.397
DVBSK	0.343**	0.341**	0.061
	0.002	0.002	0.591
DSGOLSSK	0.371**	0.321**	0.047
	0.001	0.004	0.680
DSLIMPSK	0.397**	0.307**	0.066
	0.000	0.006	0.561
DTLPSK	0.536**	0.268*	0.225*
	0.000	0.016	0.044
DAGOLSSK	0.411**	0.262*	0.013
	0.000	0.019	0.909
EVBSK	0.378**	0.230*	0.090
	0.001	0.041	0.427
	80	80	80
ESLIMPSK1	0.512**	0.144	−0.023
	0.000	0.203	0.841
ESIMPSK2	0.543**	0.272*	0.139
	0.000	0.015	0.218
ETLPSK	0.635**	0.339**	−0.016
	0.000	0.002	0.889

(continued)

(continued)

Relationship between different leadership practices in Sikkim using Pearson's Correlations			
	WSLIMSK	WAGOLSSK	SSPASSSK
	80	80	80
EAVGOLSSK	0.431**	0.427**	−0.041
	0.000	0.000	0.716
WVBSK	0.208	0.256*	0.006
	0.064	0.022	0.956
WSGOLSSK1	0.506**	0.411**	−0.035
	0.000	0.000	0.760
WSGOLSSK2	0.531**	0.355**	0.089
	0.000	0.001	0.432
WSLIMSK	1	0.261*	−0.069
		0.019	0.544
WAGOLSSK	0.261*	1	0.124
	0.019		0.273
SSPASSSK	−0.069	0.124	1
	0.544	0.273	

*Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

References

Agarwal, Y. (1995). *Base line assessment survey: A study of learner achievement in Karnataka.* A paper presented in NIEPA-IIM seminar on Educational Planning and Management in Karnataka, Bangalore, May 17–18.

Bass, M. B. (1990). *Stogdill's handbook of leadership: Theory, research and managerial applications.* New York: Free Press.

Bolam, R. (1999). Educational administration, leadership and management: Towards a research agenda. In T. Bush, L. Bell, R. Bolam, R. Glatter, & P. Ribbins (Eds.), *Educational management: Redefining theory, policy and practice* (Chap. 15, pp. 193–205). London: Paul Chapman.

Bush, T. (2008). *Leadership and management development in education.* New Delhi: Sage.

Bush, T., Kiggundu, E., & Mooros, P. (2011). Preparing new principals in South Africa: The ACE: School Leadership programme 1. *South African Journal, 31,* 31–43.

Census of India. (2011). *Census of India Report*. New Delhi: Government of India.

Cheng, K.-m. (1998). Can education values be borrowed? Looking into cultural differences. *Peabody Journal of Education, 73*(2), 11–30.

Collins, J. (2011). *Good to great and the social sector*. USA: Harper Collins.

Cotton, K. (2003). *Principals and student achievement: What the research says.* Alexandria, VA: Association for Supervision and Curriculum Development.

Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Education Administration Quarterly, 52*(2), 221–258.

Devi, B. (1998). In M. N. Karna (Ed.), *Social movements in North-East India* (pp. 71–81). New Delhi: Indus Publishing Company.

Dinham, S. (2008). *How to get your school moving and improving: An evidence based approach.* Melbourne: ACER Press.

Drath, W. H., McCauley, C. D., Palus, C. J., Van Velsor, E., O'Connor, P. M., & McGuire, J. B. (2008). Direction, alignment, commitment: Toward a more integrative ontology of leadership. *The Leadership Quarterly, 19,* 635–653. https://doi.org/10.1016/j.leaqua.2008.09.003.

Edmonds, R. R. (1979). Effective schools for urban poor. *Educational Leadership, 37*(1), 15–34.

Fullan, M. (2008). *The six secrets of change.* San Francisco, CA: Jossey Bass—A Wiley Imprint.

Government of India-Planning Commission. (2013). *Twelfth five year plan (2012–2017): Social sectors* (Vol. 3). New Delhi: Sage India.

Govinda, R. (2006). *Role of head teachers in school management: Case study of six states.* Asian Network of Training and Research Institutions in Educational Planning (ANTRIEP) in collaboration with European Union. New Delhi: National University of Educational Planning and Administration (NUEPA).

Gronn, P. (2000). Distributed properties: A new architecture for leadership. *Educational Management Administration and Leadership, 28,* 317–338.

Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration, 49*(2), 125–142.

Hallinger, P., & Heck, R. H. (1996). Reassessing the principal's role in school effectiveness: A critical review of empirical research 1980–1995. *Educational Administration Quarterly, 32*(1), 5–44.

Hallinger, P., & Heck, R. H. (2010). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. *School Leadership and Management, 30*(2), 95–110.

Hallinger, P., & Heck, R. H. (2011). Conceptual and methodological issues in studying school leadership effects as a reciprocal process. *School Effectiveness and School Improvement, 22*(2), 149–173.

Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behaviour of principals. *Elementary School Journal, 86*(2), 217–247.

Harris, A. (Ed.). (2003). *Effective leadership for school improvement*. UK: Routledge Falmer.

Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and effects of surface and deep-level diversity on work group cohesion. *Academy of Management Journal, 41,* 96–107.
Hofstede, G. (1980). *Cultural consequences: International differences in the work related values.* Beverly Hills, CA: Sage Publications.
Human Development Report-Sikkim. (2014). *Expanding opportunities and promoting sustainability*. New Delhi: Routledge.
Kaasa, A., Vadi, M., & Varblane, U. (2014). Regional cultural differences within European countries: Evidence from multi-country surveys. *Management International Review, 54*(6), 825–852.
Klar, W. H., & Brewer, C. A. (2013). Successful leadership in high-needs schools: An examination of core leadership practices enacted in challenging contexts. *Educational Administration Quarterly, 49*(5), 768–808.
Leithwood, K., Anderson, L. K., & Wahlstrom, S. (2004). *Review of research—How leadership influences student learning*. New York: Wallace Foundation.
Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). *Successful School leadership: What it is and how it influences pupil learning.* Research report No. 800. University of Nottingham: National College for School Leadership.
Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership and Management, 28*(1), 27–42.
Leithwood, K., & Jantzi, D. (1999). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educational Administration Quarterly, 35*(5), 679–706.
Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contributions of leader Efficacy. *Educational Administration Quarterly, 44*(4), 496–528.
Leithwood, K., & Riehl, C. (2003). Successful school leadership: A report by a division of AERA. *National College of School Leadership*: Nottingham. http://dcbsimpson.com/randd-leithwood-successful-leadership.pdf. Accessed March 15, 2015.
Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Education Administrative Quarterly, 48*(3), 387–423.
Louis, K. S., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). *Learning from leadership: Investigating the links to improved student learning.* Seattle: Centre for Applied Research and Educational Improvement, University of Minnesota and Toronto: Ontario Institute for Studies in Education, University of Toronto.
Maringe, F., & Molestone, R. (2015). Leading schools in circumstances of multiple deprivations in South Africa. *Educational management, administration and leadership, 43*(3), 347–362.
Marks, H., & Printy, S. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly, 39*(3), 370–397.
Martimore, P. (1998). *Reflections on school effectiveness: The road to improvement.* Lisse: Swets & Zeitlinger.
Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works.* Alexandria, VA: Association of Supervision and Curriculum Development.
Mendels, P., & Mitgang, L. D. (2013). Creating strong principals. *Journal of Educational Leadership, 70*(7), 22–29.
Mythili, N. (2017). Does school leadership matter for student learning in India? A case study of Sikkim. *Indian Educational Review, 56*(2), 34–63.
Mythili, N. (2019a). Legitimisation of women school leaders in India. *Contemporary Education Dialogue, 16*(1), 54–83.
Mythili, N. (2019b). Quest for success: Ladder of school leadership of women in India. *Social Change, 49*(1), 114–131.
Mythili, N. (2019c). *Women in School Leadership.* India, New Delhi: Sage Publishers Pvt. ltd.
Mythili, N. (2019d). Governance and leadership for achieving higher quality in school education: A Study of Sikkim. *Indian Journal of Public Administration, 65*(2), 298–324.

NCERT-UNICEF. (2017a). *National achievement survey for classes 3, 5, and 8: Manipur state learning report*. New Delhi: NCERT-Education Survey Division.

NCERT-UNICEF. (2017b). *National achievement survey for classes 3, 5, and 8: Sikkim State learning report.* New Delhi: NCERT-Education Survey Division.

NUEPA [National University of Educational Planning and Administration] (2015). *Shaala Siddhi: School standards and evaluation framework*. New Delhi: NUEPA. (NUEPA is now renamed as NIEPA).

NIEPA-MHRD. (2018). *UDISE-Flash Statistics, 2016–17*. New Delhi: NIEPA.

NUEPA [National University of Educational Planning and Administration]. (2010). *Report of the committee on school leadership development (Unpublished).* New Delhi: NUEPA. (NUEPA is now renamed as NIEPA).

OECD. (2010). *PISA 2009 results: What makes a school successful: Resources, policies and practices.* Paris. https://www.oecd.org/pisa/pisaproducts/48852721.pdf.

Prakash, V. (2007). Manipur: A Troubled State. In: *Encyclopaedia of North East India* (Vol. 4, pp. 1573–1598, Chap. 39). Atlantic Publishers.

Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why? Summary of the Best Evidence Synthesis (BES).* www.educationcounts.govt.nz/publications/series/2515. Accessed on March 16, 2015.

Robinson, V., Lloyd, C., & Rowe, K. J. (2008). The Impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly, 44*(5), 635–674.

Ross, A. J., & Gray, P. (2006). School leadership and school achievement: The mediating effects of teacher beliefs. *Canadian Journal of Education, 29*(3), 798–822.

Sackney, L., & Mitchell, C. (2008). *Leadership for learning: A Canadian perspective*. Rotterdam: Sense.

Safran, E., Brown, D., & Wiseman, A. (2014). The effect of principal's leadership style on school environment and outcome. *Research in Higher Education Journal, 22*(1), 1–19.

Senge, P. M., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2001). *Schools that learn: A fifth discipline field book for educators, parents, and everyone who cares about education.* New York: Doubleday.

Shannon, G. S., & Bergeson, T. (2007). *Nine characteristics of high performing schools: A research based resource for schools and districts to assist with improving student learning*. Olympia, WA: Office of Superintendent of Public Instruction.

Shen, J., Ma, X., Cooley, V. E., & Burt, W. L. (2016). Mediating effects of school process on the relationship between principals' data-informed decision-making and student achievement. *International Journal of Leadership in Education, 19*(4), 373–401.

Singh, M. A. (2017). Politics in Manipur: A Congress Bastion. In H. Roy, M. P. Singh, A. P. S. Chouhan (Eds.) *State politics in India* (Chap. 16, pp. 498–525). New Delhi: Primus Books.

Sinha, A. C. (1975). *Politics of Sikkim: A sociological study*. Haryana: Thomson Press (India) Ltd.

Sinha, A. C. (2017). *State politics and political participation in Sikkim.* In H. Roy, M. P. Singh, & A. P. S. Chouhan (Eds.), *State politics in India* (Chap. 24, pp. 703–726). New Delhi: Primus Books.

Spillane, J. (2006). *Distributed leadership.* San Francisco, CA: Jossey-Bass.

Spillane, J., Halverson, R., & Dimond, J. B. (2007). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies, 36*(1), 3–34.

Spilliane, J. P. (2005). Primary school leadership: How the subject matters. *School Leadership and Management, 25*(4), 383–397.

Stevenson, H., & Stigler, J. W. (1992). *The learning gap.* New York: Summit Books.

Strevig, A. L., Leech, D. W., Raiford, S., Pate, J. L., & Graves, J. B. (2013). Impact of an educational leadership degree on quality of teaching as measured by student performance. *International Journal of Humanities and Social Science, 3*(17), 19–27. http://www.ijhssnet.com/journals/Vol_3_No_17_September_2013/3.pdf. Accessed March 16, 2015.

Sujatha, K. (2011). *Improving school management-learning from successful schools.* New Delhi: Asian Network of Training and Research Institutions in Educational Planning (ANTRIEP)-NUEPA.

Thrupp, M. (1999). *Schools making a difference: Let's be realistic.* Buckingham Palace: Open University Press.

Tie, F. H. (2011). Leadership for learning in Malaysian schools. In T. Townsend & J. MacBeath (Eds.), *International handbook of leadership for learning* (Vol. 25, Chap. 24, pp. 419–429). New York: Springer International Handbooks of Education.

Townsend, T. (Ed.). (2011). *International handbook of school effectiveness and improvement* (Vol. 17). Springer: International Handbooks of Education.

Van Vianen, A. E. M., De Pater, I. E., Kristof-Brown, A., & Johnson, E. (2004). Fitting in: Surface and deep level cultural differences and expatriates' adjustment. *Academy of Management Journal, 47*(5), 697–709.

World Bank. (2017). *World development report on learning*. Washington DC: World Bank.