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GOVERNMENT OF INDIA
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
DEPARTMENT OF SCHOOL EDUCATION & LITERACY
SHASTRI BHAVAN
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D.O. No. 43-27/2012-EE.9

Dated 18th December, 2013

Dear

Sh. Raju,

I am enclosing herewith the report of the Joint Review Mission, led by Ms. Indu Prasad, which visited Uttarakhand from 10th – 17th November, 2013. The team had discussed the report with you and your other team members.

2. I would request you to prepare a comprehensive position with regard to the status of teacher education in your State, along with steps taken by the State Government in the last one year for making qualitative and quantitative improvements in the Teacher Education scenario. Further, the action, which the State Government proposes to take, along with time lines, with regard to the recommendations of the Joint Review Mission, may also be indicated.

3. In this regard, I also refer to the SLP (C) No. 4247-4248/2009 before the Hon'ble Supreme Court in which the Hon'ble Court is hearing the matter relating to implementation of the various recommendations contained in the Report of Justice J.S. Verma, former Chief Justice of India on Teacher Education. The Supreme Court has also taken note of the JRMs and has desired that Action Taken Report should be obtained from the concerned States and placed before the Implementation Committee setup by the Court. In the light of the above Court order, I am to request you to indicate the action taken/proposed to be taken on the recommendations of the JRM by 31st January, 2014. In particular the following issues need to be concretized:

- i) Revision of Curriculum and Preparation the Teaching/Learning material for the same.
- ii) Filling of the vacancies of Teachers of Teacher Educators.
- iii) Strengthening of Infrastructure in the TEIs.
- iv) Usage of ICT in Teacher Education.
- v) Monitoring and Evaluation of Teacher Education in the States.
- vi) Status of Annual Work Plan 2014-15.

4. A copy of the report is also placed on our website www.teindia.nic.in. Please do let us know if we can facilitate this in any manner.

With regards,

Yours sincerely,

Amarjit Singh
(Amarjit Singh)

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Joint Review Mission on Teacher Education

Uttarakhand

December 2013

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Summary

This document outlines the observations and recommendations of the Joint Review Mission on Teacher Education to Uttarakhand.

Key Observations

1. There is positive energy in most teacher education institutions with many faculty members keen to learn and contribute.
2. Good infrastructure and physical environment is available.
3. School curriculum, teacher education curriculum (D.El.Ed.) and school textbooks have been re-designed based on NCF 2005 and NCFTE 2009.
4. Good linkages between institutions with regular communication between them
5. Changes in curriculum and understanding of classroom processes have not reached the schools – classroom processes in schools remain ‘typical’ and any change demands academic capabilities in teachers and institutional processes in schools that are significantly different from those that currently seem to exist.

Key Recommendations

1. Form a Teacher Education Core group to lead preparedness of institutions for their new role as per the 12th Plan and NCFTE – focus on vision and alignment across institutions
2. Re-activate subject-based Regional Resource Groups
3. Significantly strengthen connect with schools – through research, regular visits, using classroom observation for teacher professional development
4. Significantly strengthen libraries
5. Strengthen connect within institutions (e.g. through institutionalized faculty meetings and discussions)
6. Create strong processes for selection and professional development of heads of teacher education institutions
7. Integrate ICT in Teacher Education
8. Release funds on time (MHRD)

Part 1

Joint Review Mission

The Joint Review Mission constituted by the Ministry of Human Resource Development (MHRD) visited Uttarakhand from November 10 to November 17, 2013.

A. Objectives

The JRM provides an opportunity for the State to:

1. Develop an understanding of progress made against agreed indicators and processes
2. Review JRM observations that highlight strengths and areas of development - with a view to improve the impact of the teacher education system in the State
3. Consider issues related to program planning, implementation, monitoring and evaluation, of each component of the Teacher Education Scheme

B. Areas of interest to the JRM

1. AWP approvals and budget releases for 2012-13
2. Progress on process and performance indicators for 2012-13
3. Progress made on utilization of funds at institutional level
4. Quality of curriculum for pre-service and modules for in-service teacher education
5. Knowledge and understanding of NCFTE 2009 and implications for teacher education
6. Steps taken to re-align Teacher Education curriculum with NCFTE 2009
7. Development of library and resource materials (print and ICT)
8. Processes and pedagogical practices in delivery of programs
9. Linking Teacher Education programs with vision and expectations of RTE
10. Quality of resource materials used by student teachers and teacher educators
11. Qualification and experience of teacher educators
12. Contribution of institutions in content development, research and action research
13. Issues of governance, linkages across institutions, cadre management, vacant posts
14. Efforts take to integrate ICT with teacher education
15. Quality and adequacy of infrastructural and institutional facilities in institutions
16. Professional development of institutions
17. Identifying and drawing partners from higher education, NGOs, civil society
18. Developing strategies in teacher preparation for inclusive teaching-learning, multi-linguality, assistive technologies
19. Identifying centres of excellence

C. JRM Team

The Mission comprised six members from different parts of the country.

1. Lalita Pradeep, DIET Lucknow, Uttar Pradesh
2. Upender Reddy, SCERT, Andhra Pradesh
3. Naresh Salwan, Board of School Education, Haryana
4. Zochhuani, IASE Aizawl, Mizoram
5. Poonam Bhushan, IGNOU, Delhi
6. The team was led by Indu Prasad, Azim Premji Foundation, Bangalore

D. Methodology

Members of the Mission visited the State Council for Educational Research and Training (SCERT), DIETs, CTEs, block resource centres, cluster resource centres and schools. They toured each of these institutions, observed pre-service and in-service teacher education sessions, interacted with faculty members, other education functionaries, teachers and students.

The team also studied detailed documents on teacher education provided by the State.

The team was divided into three groups and travelled across the State covering Garhwal, Kumaon and the plains.

The **visit schedule** was as follows:

Date	Schedule
10.11.2013 Sunday	Arrival of JRM team Meeting of the JRM team Informal meeting with the State team
11.11.2013 Monday	Meetings with the state officials (Principal Secretary Education, Secretary Higher Education, Director General School Education, SCERT Director, SCERT officials and faculty, Representatives from SIEMAT, SSA, RMSA and partner organizations) Detailed Interactions with SCERT faculty

12.11.2013 Tuesday	SCERT Narendra Nagar DIETs Haridwar, New Tehri, Bhimtal Block and Cluster Resource Centres Primary Schools,
13.11.2013 Wednesday	DIETs Uddhamsinghnagar, Pauri Garhwal, Almora Block and Cluster Resource Centres Primary and Upper Primary Schools Private Teacher Education College, Rudrapur
14.11.2013 Thursday	DIETs Rudraprayag & Bageshwar Block & Cluster Resource Centres High Schools, Higher Primary Schools and Primary Schools
15.11.2013 Friday	DIET Dehra Dun CTE Haldwani
16.11.2013 Saturday	Presentation by JRM team with state officials & discussions
17.11.2013 Sunday	Departure

- **Block Resource Centres** – Agastyamuni, Ratura, Bhainsainsiyachana, Chamba, Malladhukra, Mehragaon, Dhoulchhena, Kashipur
- **Cluster Resource Centres** – Ratura, Kashipur, Srinagar, Garud Blocks
- **Schools** - 7 Primary, 5 Upper Primary, 2 High Schools

Part II

Uttarakhand - Context

Uttarakhand was formed on November 9, 2000, as the 27th State of India, when it was carved out of northern Uttar Pradesh. Located at the foothills of the Himalayan mountain ranges, it is largely a hilly State, having international boundaries with China (Tibet) in the north and Nepal in the east. On its north-west lies Himachal Pradesh, while on the south is Uttar Pradesh. It is rich in natural resources especially water and forests with many glaciers, rivers, dense forests and snow-clad mountain peaks. Char-dhams, the four most sacred and revered Hindu temples of Badrinath, Kedarnath, Gangotri and Yamunotri are nestled in the mighty mountains. Dehradun is the Capital of Uttarakhand. It is one of the most beautiful resorts in the sub-mountain tracts of India, known for its scenic surroundings. The town lies in the Dun Valley, on the watershed of the Ganga and Yamuna rivers.

It is blessed with a rare bio-diversity, inter-alia, 175 rare species of aromatic & medicinal plants are found in the State. It has almost all major climatic zones, making it amenable to a variety of commercial opportunities in horticulture, floriculture and agriculture. It has a vast tourism potential in adventure, leisure, and eco-tourism.

The State is rich in mineral deposits like limestone, marble, rock phosphate, dolomite, magnesite, copper, gypsum, etc. The number of small scale industries is 25,294 providing employment to 63,599 persons. As many as 1802 heavy and medium industries with an investment of Rs 20,000 crore employ 5 lakh persons. Most of the industries are forest-based. There is a total of 54,047 handicraft units in the state.

With levels of literacy higher than the national average, the State has abundant availability of quality human resources. Within a short span of its existence, Uttarakhand has emerged as a significant destination for investments in manufacturing industry, tourism and infrastructure. Emphasis is on stimulating all three sectors of its economy (agriculture, industry and services), to their fullest potential in tandem with the geographic profile of the state. The Government of Uttarakhand has undertaken several policy measures and incentives in order to encourage inflow of investment into the various sectors of its economy.

Uttarakhand (As per 2011 census)

Description	2011	2001
Approximate Population	1.01 Crores	84.89 Lakh
Actual Population	10,086,292	8,489,349
Male	5,137,773	4,325,924
Female	4,948,519	4,163,425
Population Growth	18.81%	19.20%
Percentage of total Population	0.83%	0.83%
Sex Ratio	963	964
Child Sex Ratio	890	967
Density/km2	189	159
Density/mi2	488	411
Area km2	53,483	53,483
Area mi2	20,650	20,650
Total Child Population (0-6 Age)	1,355,814	1,360,032
Male Population (0-6 Age)	717,199	712,949
Female Population (0-6 Age)	638,615	647,083
Literacy	78.82 %	71.62 %
Male Literacy	87.40 %	81.02 %
Female Literacy	67.06 %	63.36 %
Total Literate	6,880,953	5,105,782
Male Literate	3,863,708	3,008,875
Female Literate	3,017,245	2,096,907

Administrative Divisions

There are 13 districts in Uttarakhand which are grouped into two divisions, Kumaon and Garhwal. The Kumaon division includes Almora, Bageshwar, Champawat, Nainital, Pithoragarh and Uddham Singh Nagar. The Garhwal division includes Dehradun, Haridwar, Tehri Garhwal, Uttarkashi, Chamoli, Pauri Garhwal (commonly known as Garhwal) and Rudraprayag.

Divisions	2
Districts	13
Tehsils	49
Development Blocks	95
Municipal Areas	71
Nyay Panchayat	676
Gram Panchayat	6805
Villages	15669

District School Education Profile

S.no	District	PS	PS+U PS	S/H S	UPS	UPS+Sec +HS	Sec	SEC+ HSS	HSS	St at e	S O	R O	D O	BO	CO	DI ET	D RC	SLI	DLI
1	ALMORA	1484	44	14	158	242	7	5	0	0	0	1	3	24	123	1	0	0	3
2	BAGESHWAR	615	15	5	72	124	0	0	0	0	0	0	3	7	44	1	0	0	0
3	CHAMOLI	1041	0	0	227	185	0	0	0	0	0	0	5	24	111	1	0	0	1
4	CHAMPAWAT	538	42	12	74	39	7	11	2	0	0	0	3	8	40	1	1	0	0
5	DEHRADUN	960	13	0	245	154	1	5	2	0	9	0	6	14	90	2	0	0	1
6	HARIDWAR	706	6	0	153	51	10	1	2	0	0	0	3	10	57	0	0	0	1
7	NAINITAL	1000	1	8	238	92	9	26	20	0	1	1	4	17	79	1	0	0	1
8	PAURI GARHWAL	1720	5	20	313	233	9	11	1	0	0	1	6	42	138	1	0	0	1
9	PITHORAGARH	1192	6	11	296	122	2	5	17	0	0	0	9	17	106	2	0	0	0
10	RUDRAPRAYAG	662	2	0	159	107	6	1	1	0	0	0	3	5	47	1	0	0	1
11	TEHRI GARHWAL	1504	10	5	332	143	11	36	50	0	0	0	6	23	105	1	0	1	0
12	UDDHAM SINGH NAGAR	801	9	6	211	93	1	5	8	0	0	0	4	14	50	1	0	0	0
13	UTTARKASHI	789	25	9	249	53	5	6	16	0	0	0	5	7	48				

Part III

General Observations

A. What is going well

1. **Good infrastructure in place, well maintained, clean environment:** All the institutions we visited were well-maintained with fairly good infrastructure either in place or in the process of being set up. The surroundings were pleasant, buildings kept clean with well-ventilated and well-lit rooms.
2. **Positive energy in all institutions:** Many of the people we met, whether faculty members or students, were enthusiastic about what they were doing. At every institution, there were two or three young people who displayed a great deal of commitment to their work.
3. **Most people ‘speak the language’ and are academically oriented:** Most faculty members across institutions perceive their role as academic and not administrative – there also seems to be a fair amount of understanding about the nature of this academic role.
4. **Faculty open to contribute & learn:** Many faculty members appeared committed and displayed ‘ownership’ of their own work. Many were aware of their development needs, appeared eager to learn and were keen to explore opportunities for self-development.
5. **School, curriculum and teacher education curriculum, textbooks based on NCF/NCFTE:** The State has revised its teacher education curriculum, school curriculum and school textbooks based on NCF 2005 and NCFTE 2009.
6. **Active partnerships with a range of organizations in place:** The State seems to have a clear strategy for partnerships and works very closely with different organizations like Room to Read and Azim Premji Foundation
7. **Core academic group at SCERT:** SCERT has an excellent core academic group capable of contributing to a variety of curricular areas – this group has the ability to work on pre-service and in-service areas in teacher education along with material design and development.
8. **Most institutions seem to have most faculty numbers in place though not the full quota as required by each institution.**

- 9. Emphasis on processes:** Every activity seems to be designed by following a fairly well-articulated process: e.g. Training Needs Analysis always seems to precede training design
- 10. PACs in place:** All the DIETs that we visited had their Program Advisory Committees (PACs) in place and at least one meeting of the PAC had been conducted
- 11. Action Research:** Many DIETs had well-documented action research done by faculty members
- 12. Learning Material:** SCERT has developed a range of good curriculum and learning material for teachers (the AYUSH and financial literacy packages are interesting innovations).
- 13. Contextualized Learning Material:** Many DIETs have developed interesting material for teachers and children based on district-specific cultural, occupational or social practices.
- 14. School Leadership Program:** High quality curriculum and handbooks developed for the School Leadership program have been developed.
- 15. D.El.Ed. Curriculum and special D.El.Ed. Curriculum especially the school practice connect**
- 16. Illustrative examples of good practices:** We came across several good practices during our visits to institutions and would like to highlight some of them:
 - i.** Group work in Special D.El.Ed. classrooms
 - ii.** Co-ordination between DIETs, BRCs, BEOs, CRCs, SSA, RMSA
 - iii.** SCERT and DIET faculty 'adopt' two schools each (initiated)
 - iv.** DIETs have functioning lab area schools (initiated)
 - v.** Laboratories (mathematics etc.) in some DIETs (initiated)
 - vi.** Activity calendars available at all institutions
 - vii.** Focus on inclusive education in some institutions
 - viii.** Learning-level assessment tools available
 - ix.** 'Local' curriculum and material developed by DIETs (e.g. Story of Basmati, story of Tehri, Garhwali music)

17. Teacher educator cadre plan in place: The State has developed a detailed cadre plan – this is yet to be implemented.

18. Idea of each DIET having a special expertise: This is an interesting idea and has started in some DIETs and not in others – if it works out, it could prove to be an extremely useful innovative practice.

B. What needs more thought

1. Preparation of all institutions for their new role: All teacher education institutions have a certain purpose and direction as envisaged by national policy documents such as the RtE, NCF, NCFTE and the 12th Plan. Each institution must develop its own vision from this – structures and processes will follow – there does not appear to be enough understanding, at present, of the kind of role they have been set up to play.

2. Stability and dynamism in leadership of teacher education institution: Selection of the right people to lead teacher education institutions along with stability of tenure are critical. The average tenure of DIET principals appears to be less than two years – in some places there have been more than three changes within three years. This does not lend itself to institution building especially at this critical juncture.

3. Alignment & shared perspective of education and teacher education within/among institutions: Many senior faculty (especially senior lecturers in DIETs) and leaders of teacher education institutions do not share a similar perspective on issues in education and teacher education – many are unaware of the details and implications of current curriculum documents like NCF 2005 and NCFTE 2009 which are directly related to their areas of work.

4. Re-structuring of DIET units: The current structure seems to be more in line with what is suggested in the ‘pink book’ and not in alignment with the ideas in the 12th Plan Guidelines.

5. Availability and use of reliable, detailed district-wise data: Most institutions have basic data drawn from DISE indicators – this data now needs to be detailed, analyzed closely and used for institutional planning and for the design and delivery of teacher/teacher educator professional development programs.

6. Documentation of experiences and institutional processes: Very few institutions have documented some of their work or their processes (e.g. field visits, workshops, discussions, reflections) in a systematic and rigorous manner. This has an impact on

three areas - institutional memory (now dependent on a few individuals), loss of valuable material for research and understanding of the work of the state/district.

- 7. Revamping of libraries:** All institutions seem to be struggling with the quality of their libraries. This includes quality of books and journals, regular usage and digitized cataloguing. This also implies that the library is thought of as a place for storage of books and not really a place of learning – in fact, the library came across as the weakest and least vibrant part of almost every institution.
- 8. Pre-service (special D.El.Ed.) classroom processes:** Classroom processes should now begin to move closer to ideas based on NCF 2005 and NCFTE 2009 - activities are being conducted but the focus still seems to be on facts, memorization and recall – there is not enough space for analysis, reasoning, self-learning and reflection.
- 9. Approach to in-service programs:** There seems to be a single-minded training-focused approach to teacher professional development without much exploration of alternate modes that could be equally, if not more, effective. There also does not seem to be much focus on follow-up of training in the schools/classrooms – a concrete set of plans for this area needs to be explored. Building strong **academic capability of BRCs and CRCs** could become an important part of this follow-up process.
- 10. Strengthening of research:** This needs much deeper thought including building teacher educator capability in research thinking, research design and research methods. The focus could be on classroom-based research connected to teacher professional development programs so that change in school classrooms can be tracked.
- 11. Block Mentorship by DIETs:** While each Block as a designated mentor in the DIET, the idea of what this this mentorship entails and how it will be operationalized needs to be worked out in far greater detail.
- 12. Holistic Understanding of CCE:** There seem to be missing pieces in the understanding of CCE – a more holistic understanding needs to be thought through.
- 13. Delays in fund flow:** Almost all institutions spoke of delays in fund flow which had a serious impact on their work e.g. program budgets not released on time.

Part IV

State Council for Educational Research and Training (SCERT)

SCERT Uttarakhand was created under the umbrella of Director General, School Education, Uttarakhand, on January 17, 2002, at the Old Collectorate building, Narendra Nagar in Tehri District.

SCERT is envisaged to function as an apex academic body to provide resource support to school education and to navigate teacher-education in the State. Under section 29 Of RtE Act, SCERT has been officially declared as the Academic Authority of the State.

SCERT has been divided into the following departments:

1. Department of Elementary Education
2. Department of Secondary Education
3. Department of Science and Mathematics
4. Department of Languages
5. Department of Social Science
6. Department of Educational Technology and Information Technology
7. Department of Research and Evaluation
8. Department of Psychology, Guidance and Counselling, Entrepreneurship and Vocational Education
9. Department of Documentation, Publication, and Library
10. Department of Curriculum, Syllabus, and Textbooks
11. Department of Inter-department Co-ordination

In addition SCERT, Uttarakhand has created four cells:

1. Right to Information Cell
2. Legal Cell
3. Cell for Sports, Art, and Culture
4. Rashtriya Madhyamik Shiksha Abhiyaan (RMSA) cell

All the 13 DIETs are organically connected to SCERT for Academic and Administrative supervision. SCERT is now in the process of shifting from Narendra Nagar to Dehra Dun.

1. Curriculum and Pedagogical Practices (Pre-Service)

SCERT Uttarakhand has developed a two year D.El.Ed. (Pre-service elementary teacher education) curriculum based on the guidelines of NCF 2005 and NCFTE 2009. Adequate field-based practices have been included in the curriculum. Experts from national-level institutions like NCERT and NGOs like Azim Premji Foundation and Vidya Bhawan Society have been involved in the development of D.El.Ed. curriculum. Transaction seems to be focussed on activities like group discussions, assignments, seminars, school visits without any direct lecturing – the internet is used for developing projects and information collection.

The curriculum is focussed on foundational areas i.e. understanding childhood, understanding learning and contemporary issues in education followed by curriculum and pedagogic understanding of school subjects. Adequate focus has been given to school experience.

Regional Resource Groups (RRGs) were formulated for two divisions i.e. Garhwal and Kumaon to discuss and deliberate on the revised curriculum and support teacher educators through curriculum implementation.

Orientation programmes were organized for teacher educators by organizations like Azim Premji Foundation, Vidya Bhawan Society and Eklavya - according to faculty members, these programs helped them to develop perspective on education and learning. Teacher Educators have been trained on each course in the pre-service program where the participant developed their own material. Most faculty members in DIETs seem to have enjoyed this process and were motivated by it – they appreciated the efforts of SCERT for this kind of exposure. The orientation programs also focused on the development of the facilitation skills.

SCERT has also organized orientation programs for teacher educators on leadership of head teachers, subject specific training programmes, continuous and comprehensive evaluation (CCE) and action research.

The State is also conducting a two-year D.El.Ed. program through distance mode for *Shiksha Mithras* in collaboration with IGNOU in DIETs and DRCs. Further, the State has developed special in-service curriculum and training package for teachers who have a B.Ed. degree and have cleared the TET examination under the guidelines of NCTE.

2. Curriculum and Pedagogical Practices (In-Service)

The State has taken up curriculum reforms for school education based on NCF 2005. The State has not developed any State-specific curriculum framework and approach papers -

they have opted to adopt NCF 2005 in its original form. The State has developed its own syllabus and textbooks for elementary classes except Mathematics for which the NCERT books have been adopted for Classes 6, 7 & 8. The CBSE pattern (with NCERT textbooks) has been adopted by the State for secondary and senior secondary levels i.e. from Classes 9 to 12.

The revision of syllabus and textbooks at elementary level has been taken up involving experts from State and National levels including BRCs, CRCs and teachers. The SCERT in collaboration with DIETs have developed teacher handbooks, supplementary material, teaching-learning material and supplementary learning material for the effective transaction of new curriculum and textbooks. The SCERT constituted resource group at various levels starting from cluster to district i.e. formation of cluster, block and district resource groups with active teachers, NGOs and educationists. These groups will be used for material development and as well as trainers for conducting in-service training programs.

The JRM team observed an ongoing three-day training program at SCERT (Narendra Nagar) where teachers from higher secondary schools were participating. Interactions with the group revealed a serious concern on making physical development, sports and health part of the school time-table. Most teachers felt that it was left to the whims of the leadership of the school or the extra effort of the physical education teacher. Most physical education teachers end up being treated as the 'school disciplinarian' available to check 'problem students' and not as teachers of an important part of the curriculum. Most of them expressed the need for space and time to promote physical wellness and to encourage students who showed promise in sports.

Material/module development seems to be one of the most important functions being carried out by SCERT. Several packages/modules have been developed – for BRCs and CRCs; for Principals and Head Teachers; on subjects for secondary teachers, on guidance and counseling, AYUSH, CCE, English Language Proficiency, ICT at secondary level and Sanskrit; training calendars for Bhojan Mata – these were observed by the JRM team.

3. Continuous Professional Development of Teacher Educators and other officials

The SCERT seems to have an excellent core group which is well-versed with national policy documents and approaches based on the NCF 2005. The group has a good understanding of school/classroom processes and this was reflected during detailed discussions on each of the documents that they presented.

Orientation programs have been organized for teacher educators in the State (as mentioned in 1 above).

However, perspective building on classroom transaction based on the revised school curriculum and textbooks using child-centered participatory methods is essential. The major thrust seems to have been on conducting training programs under SSA. There is not much focus on follow up and observation of how the curriculum is being transacted in schools. With the beginning of RMSA, a similar approach seems to have emerged for secondary education.

The focus must now shift to follow-up of training programs and their impact on quality classroom processes and engagement of children in learning processes. The DIETs, BRCs and CRCs must provide on-site academic support to teachers by increasing the frequency of visits followed by reflection/review meetings at cluster and block level with head teachers/teachers.

Some collaborative studies of curriculum implementation i.e. how different subjects are being transacted with improved classroom management techniques, teacher preparation and value addition to the textbook contents, nature of children participation, teacher planning and assessment can be planned.

SCERT must also explore teacher educator professional development through methods other than training. SCERT could consider introducing internal processes – faculty seminars, reading sessions, sharing school/DIET visit observations and reflecting on pre-service classroom processes.

4. Infrastructural Facilities and Instructional Resources

SCERT is in the process of moving from its old premises in Narendra Nagar (Tehri District) to its new premises in Dehra Dun – some departments are still based out of Narendra Nagar. The departments that have been shifted to Dehra Dun are housed in Navodaya School hostel buildings.

The JRM team found inadequate infrastructure both at Narendra Nagar and at Dehra Dun. There are not enough rooms for specific departments to function properly with appropriate material and equipment. There is no separate space for laboratories, library, educational technology and computer centres. At present, the library and computer rooms are functional in small rooms at Narendra Nagar. Inadequate hostel facility for teachers undergoing residential trainings at SCERT creates challenges - one hall with about 20 beds is available at Narendra Nagar.

SCERT proposes to assess infrastructure requirement and prepare a comprehensive proposal for its strengthening and expansion based on State SORs and submit the same before the Teacher Education Approval Board. An appropriate site has been identified for the new SCERT campus.

The SCERT library requires a complete overhaul. There is no librarian or recurring library grants. SCERT must develop a vibrant library which is a space for learning and not a space for storage. The academic nature of SCERT's work and its excellence will be reflected the way the library is strengthened and used by teacher educators. Though Azim Premji Foundation has made available more than 150 good reference books on content, pedagogy and general subjects along with back copies of journals, the library remains a very neglected space.

SCERT has no regular magazine or newsletter on teacher education though SCERT faculty support SSA publications SCERT must have a regular publication in print and digital mediums to address educational issues in the State and to provide a platform for teachers/teacher-educators to showcase good practices.

5. Institutional Leadership and Management

One Additional Director from the Department of School Education is acting as Director, SCERT supported by three Joint Directors and eight Deputy Directors, 19 Assistant Directors followed by adequate number of research officers and lecturers. The total sanctioned strength of SCERT is 153 (GOI suggested model has 78 people).

Teamwork and inter-departmental coordination in conducting workshops, material development and designing training programs was observed.

There must be clear cut roles and responsibilities across each level - performance indicators could also be developed as criteria for accountability. SCERT could also work on a self-assessment process to track its own performance. SCERT's proposed re-structuring could be re-thought keeping the State's context in mind - at this point, it appears to be a copy of model structure.

6. Research and Innovation

SCERT and DIETs have taken up several action researches collaboratively with teachers on the day-to-day problems and issues. SCERT has also conducted baseline surveys, mid-term achievement surveys and terminal surveys with NCERT. The SIEMAT and State Project Office of SSA empanelled few NGOs, private research organizations for undertaking

researches for school education. However, there is not much coordination between university departments of education and SCERT in this regard.

The SCERT has conducted three studies during 2012-13 - effectiveness of teaching Science and Mathematics at upper primary schools in Haridwar district, study habits of students at secondary level and their educational achievement, study on career aspirations and career maturity of students at higher secondary level.

One of the most critical parts of SCERT's role is to develop curriculum and monitor effective implementation of the same.

In this regard, it is observed that there is not enough focus on conducting studies on curriculum implementation and classroom practices – both at the teacher educator level and the teacher level.

SCERT should focus a lot of its own research on teacher educators – follow-up of training programs, issues in pre-service classrooms, implementation of the pre-service curriculum etc.

It would be important for SCERT to build the capacity of the DIETs to undertake studies on teaching of Mathematics, Science, Social Science and Languages with particular reference to teacher preparation, classroom teaching-learning process, extent of children's participation, assessment for learning, developing and utilizing of teaching-learning material and optimum utilization of available resources.

Studies could also be designed on the effective functional aspects of BRCs and CRCs in providing effective academic monitoring and support to teachers.

Perspective building of DIETs, BRCs and CRCs is very important for the effective performance of their roles. Their knowledge and understanding of the nature of childhood, nature of learning, classroom management, professionalism and professional development practices is crucial for the effective support to teachers in schools. Research in this area could aid professional development programs and training design.

The curriculum includes the areas of Health and Physical Education, Value Education, Art Education and Work Experience. Studies on these aspects would also be very useful. The English medium school experiment should have a research component built into the design – research on this experience could be useful for the entire country.

Each department should take up research in its area – there should not be a separate research wing in that sense.

7. Leveraging ICT

This seems to be one of the weakest areas of work. The computer lab at SCERT has systems with low configuration which need to be replaced with high-end systems for effective utilization of multi-media packages. The lab has one receiving terminal (ROT) to receive the EDUSAT and IGNOU programs. Teacher educators and teachers are to the computer lab of SCERT to view these programs.

There seem to be no teleconference or video conference systems which could create a good communication network for SCERT and the Department of School Education with DIETs, BRCs, CRCs and schools. A state-specific system of satellite communication network is required. The State could consider a major communication infrastructure initiative to run television channels to provide distance learning so that schools and teacher education institutions could benefit by accessing the best resources. Uttarakhand's geographical and topographical realities do present a specific challenge in this area.

SCERT has developed CDs in the subjects of Science and Mathematics for Classes 9 and 10 in collaboration with S. Chand and Company and provided them to all secondary schools – this is a self-learning package. CDs which demonstrate classroom transaction in different subjects may be developed – they could be used during training programs with teachers.

Azim Premji Foundation has developed CDs on various curricular areas at elementary level and provided them to the schools with one or two sets to SCERT and DIETs. There is no real monitoring of usage or impact of these CDs.

SCERT and DIETs provide training programs in using the computers to teachers. Several modules of Microsoft computer basic learning were stacked on racks which could be distributed to teachers. Technology could also be used during various training programs to enable effective presentations and discussions.

8. Annual Work Plan and Fund Utilization

Overall, there have been huge delays in the release of funds by Government of India while the State has been very prompt in releasing more than its share of funds.

It is observed that the budget releases towards non-recurring items i.e. civil works is being utilized effectively when compared to non-recurring items such as trainings, professional development, contingencies etc.

The Government of India (GoI) and State Governments have released about Rs 46.42 lakhs during 2012-13 out of which Rs 10.32 lakhs has been spent leaving an unspent balance of Rs 36 lakhs and zero utilization in case of IASE. In the case of DIETs, Rs 21.1 crores has been released and Rs 20.75 crores has been utilized and in case of nonrecurring i.e. equipment 100% release has been utilized. GoI has yet to release the balance amount of Rs. 15 crores for the year towards nonrecurring items. This figure shows that about 97% utilization of released budget. An amount of Rs. 15.13 crores is due from GoI for the year 2012-13. The data also shows the prompt release of State share.

With regard to 2013-14, Rs. 64.10 lakhs has been approved by the TEAB out of which Rs 14.60 lakhs has been released by GoI and Rs 448 lakhs have been released by the State Government. The total expenditure made is Rs 253 lakhs. This budget is towards quality programs such as training and material development etc.

The Annual Work Plan Budget under TEI for 2013-14 as approved by the TEAB is Rs. 33.16 crores out of which GoI has released Rs. 8.69 crores towards the first installment as its share. The State share is Rs 8.30 crores and the State released about Rs 24.60 crores. The total expenditure is Rs. 10.87 crores and the State is awaiting GoI releases for the balance amount i.e. about Rs. 16.00 crores.

9. Inter-Institution Linkages

There is good coordination between SCERT and other state-level bodies like SIEMAT, SSA and RMSA. SCERT conceptualizes training programs for elementary education under SSA and for secondary education under RMSA. SCERT works with DIETs in conducting orientations and trainings for teachers working in elementary and secondary schools with support from SSA and RMSA. Subject-specific training programs for secondary teachers are being organized by SCERT with financial support from RMSA.

SIEMAT conducts training programs in collaboration with SCERT and DIETs for senior educational officers on leadership and school monitoring, training of Principals on financial management and training of DEOs and BEOs on school monitoring, training of master trainers on learning level assessment under RMSA, training of DIET Principals etc.

BRCs and CRCs become effective in conducting training programs and other inputs in a cascade mode from State to field level. There is not much focus on the professional development of BRCs and CRCs for effective academic monitoring and on-the-job support to the teachers.

10. Cadre and Personnel Management

There are 153 sanctioned posts in SCERT out of which 83 posts are filled. There are about 31 vacancies of lecturers against sanctioned posts of 49. Most of the lecturers have post-graduate qualifications. SCERT has proposed complete re-structuring as per the scheme released by MHRD – the detailed qualifications and staff deployment still needs to be worked out. A separate cadre for teacher educators is also being proposed.

At present, faculty members are posted and transferred between the secondary/higher secondary schools and DIETs/SCERT. DIET Principals are of the cadre of Joint Directors in the Department of School Education being posted on transfer. The Deputy Directors, Assistant Directors and Joint Directors working in SCERT are from the Department of School Education.

11. Partnerships and Collaborations

The partnerships with Azim Premji Foundation and Room to Read seem to be working effectively – they focus on capacity building of key individuals in the system (e.g. teachers, teacher educators, school leaders) and specific programs like learning levels assessment, reading improvement programs and building libraries.

The team observed that there is active collaboration between Azim Premji Foundation and SCERT/DIETs in the development of the D.El.Ed. curriculum along with capacity building of teacher educators for effective transaction of the same including the working of Regional Resource Groups. Learning level assessment for Classes 1 and 2 was designed in collaboration with Azim Premji Foundation, DIETs conducted the assessments, analyzed the findings and developed reports - the findings are being discussed at DIET and BRC level meetings for improvement. The State also works with Azim Premji Foundation on school leadership programs for Head Teachers. The Foundation has also supported SCERT/DIET libraries to select about 300 books and journals titles relating to education.

SCERT works in partnership with Room to Read India for the reading improvement program among elementary school children. Room to Read has provided about 500 library books to identified school libraries and established reading rooms in the schools where additional classrooms are available. A manual for teachers has been developed on improving reading among children and a six-day orientation for elementary school teachers in collaboration with SCERT conducted. Room to Read also provides volunteers provided volunteers to guide teachers in reading/story telling events.

12. Process and Performance Indicators

The Annual Work Plan 2012-13 was prepared using the specified format as provided by the Guidelines. The state level dashboard and the process and performance indicators were duly filled up. However, the usage of indicators for better planning and implementation is yet to be realized.

As observed by the JRM team, most DIET Principals and teacher educators have not yet understood the Teacher Education Scheme and some have not even heard of the Teacher Education Guidelines (June 2012). SCERT needs to work on the dissemination of information to all teacher educators concerned about the policy and perspectives of teacher education.

13. Other Observations

- i. Classroom observations in elementary schools revealed 'typical' transaction of lessons with teachers orally explaining the lesson followed by writing of answers to the exercises given in the book on the blackboard and students busy copying down the written text on the blackboard.
- ii. Box files have been introduced in the form of portfolios in elementary schools. However, it is found that there is no proper understanding on the nature of portfolios and its maintenance on the part of the teachers and children. Very little pages/material is seen in the box files.
- iii. Review meetings at DIETs, BRCs and CRCs do not seem to focus on academic issues and effective implementation of the curriculum. The minutes of the meetings seldom reveal the academic performance of teachers or the challenges faced by them. Developing a strong State-level academic resource group might help to plan this better.
- iv. An effective follow up plan on the learning level assessment reports is required to address the poor performance of children in Language and Mathematics.
- v. The spirit of the CCE lies in the comprehensiveness of assessment i.e. areas of assessment and continuity in assessment. Curricular areas such as Art Education, Health & Physical Education, Work Experience, Value Education etc. need to be given proper weightage and find place in the over-all report format. CCE seems to be mostly focused on outcomes and not on processes. Student performance on projects, assignments, notebooks, box files etc. must be given weightage under Formative Assessment. A clear cut weightage for the formative and summative assessments must be shown. It is also suggested to work out curricular and assessment standards across all the subjects in the school curriculum.
- vi. The roles and responsibilities for Physical Education teachers need to be clarified and due weightage in CCE must be given.

- vii.** Many schools that the team visited had children's literature which was not being used much. Books could be kept in the classrooms to make them more accessible to children. Children could be made responsible for the issue and collection of books and maintaining of the issue register. Sharing sessions on book reading in schools could be encouraged. In some schools, children had art work-books – this is a very good sign.
- viii.** Most BRCs did not have the kind of resources that they ought to in terms of books, journals, TLM, training manuals, handbooks etc. The only exception among those visited was the one which is run in partnership with Azim Premji Foundation.
- ix.** Almost all BRC and CRC visit reports and monthly reports focused on the items such as mid-day meal, school construction, conduct of training programs, data collection, enrollment, records, DISE formats, filling of QMT tools, uniform positions, free textbook distribution, providing LLA formats, list of teachers for training programs etc. – there was almost nothing on academic performance of teachers, teacher preparation, classroom transaction, student engagement or student learning outcomes. Working with DIETs to develop capability of BRCs and CRCs would be critical. Along with this, it is important for the administration to understand that the BRCs and CRCs are supposed to be academic institutions whose central job is teacher support in the classroom.
- x.** Conversations with in-service teachers undergoing training at DIETs revealed interesting views on the reasons for poor learning outcomes of children in elementary schools. Most teachers spoke about lack of infrastructure, single teachers, lack of parental interest/participation, extra work for teachers, improper blackboards, mid-day meal, school construction work, record work etc. as reasons for this. Most of them did not think that poor classroom processes also contributed to poor learning outcomes.

Part V

District Institutes of Education & Training (DIETs)

All 13 districts in Uttarakhand have functional DIETs working under the Department of School Education. DIETs in Rudraprayag, Champawat and Bageshwar have been up-graded – they are like mini-DIETs catering to a population of less than 2000 teachers in each district. The total number of sanctioned faculty posts is 325 in all 13 DIETs against which the total number of filled faculty positions are 226.

All DIETs have seven branches in their organizational structure (as per the Pink Book) though the services of the faculty are mostly used interchangeably.

Overall Observations

1. All the DIETs visited by the JRM team were functioning well with all structures in place. The Principals and staff were enthusiastic and working in collaboration, attending to both pre-service and in-service training programs.
2. DIET functioning was based on the pattern suggested in the 'Pink Book' with seven departments/branches in place. Although these departments were manned by select faculty members, most of them worked collectively in the discharge of the roles and functions of the Institution.
3. All the DIETs visited have their own buildings. The necessity to augment the infrastructure facilities ranges from 'needed' to 'urgently needed' across DIETs. Some of the DIETs possess accommodation for only two to three departments. Therefore, two or three departments are functional in a single room. Some need additional hostel accommodation. In some, about 50% of the pre-service trainees could be accommodated in these existing hostels. According to the SCERT report of the DIETs, 6 DIETs have their own hostel; 6 DIETs, including the 3 recently upgraded DIETs do not have a hostel, and the hostel for the DIET at Chamoli is under construction.
4. The utilization of the budget needs special attention. Data shows that about only 50% of budget released is being utilized and the balance carried forward to the next year. The reasons for poor utilization are due to delayed release of the budget which happens only at the end of the financial year which does not allow the timely conduct of activities and programmes as planned in the AWP.

5. Faculty is inadequate in DIETs like Pithoragarh, Pauri and Uttarkashi. About 25-30% of the sanctioned posts for academic staff are vacant across the DIETs. The three upgraded DIETs are yet to increase the number of posts for faculty and supporting staff to function as full-fledged DIETs. It was observed that the tenure of a Principal in an Institution is very short.
6. The special D.El.Ed. course is being run in every DIET. The course is for 180 days of which 90 days is used for theory classes in the DIETs and 90 days for field-based practice in lab schools or selected schools. The DIETs are fully occupied with 180 days training in theory followed with field-based supervision.
7. All the DIETs visited have developed annual work plans and budgets for every year and submitted to SCERT for consolidation. The Planning and Management Department at DIET is responsible for the development of AWPBs (Annual Work Plan Budgets) as well as its implementation in terms of developing an actionable calendar for the entire year based on the approved programs from MHRD.
8. DIETs have selected a lab area for mentoring and for field-based innovations and practice. Every faculty member has selected two schools for intensive mentoring and support. DIETs have also conducted a workshop for lab area schools on quality education.
9. DIETs have established very good linkages with the BRCs, CRCs, SSA and RMSA of their respective district as well as with the SCERT at the State level. Some of the DIETs together with the BRCs and CRCs have prepared a calendar of activities for their various programs.
10. Some DIETs that the team visited have prepared TLMs and reading material for teachers and student teachers on areas such as inclusive education and English teaching.
11. The decision of each DIET having a particular area of expertise is an excellent idea – this is yet to be implemented.
12. DIETs collaborate with NGOs in areas where they need assistance to improve their programs and activities.

Specific Observations

1. Curriculum and Pedagogical Practices – Pre-Service

DIETs were conducting a four-semester BTC Course (pre-service elementary teacher education) since 2010 for the preparation of prospective teachers. The curriculum has been developed in light of NCF 2005 and NCFTE 2009 in collaboration with various agencies such as NCERT, Azim Premji Foundation and others. Interaction with the DIET faculty on classroom practices revealed the need for a deeper engagement with the aims and perspectives of NCF 2005 and NCFTE 2009 to address real classroom issues that would prepare them for the school environment. Although a sense of understanding, accepting and aligning with the shifts in curriculum and pedagogy are evident, the change in focus from skills to knowledge and reflection is yet to take place.

Class Room Processes: In the D.El.Ed classes (Special BTC) that were observed, lecture method and group work were being used. While the lecture provided an opportunity for teacher-trainee teacher interaction, it was not structured to take into account students' experiences, and an understanding of differences of their backgrounds. During interactions, opportunities for students to speculate and voice different ideas were minimal. Group work seemed to generate a great deal of enthusiasm with students - each member of the group actively participated in the activity. This experience can be used to discuss how classroom can become an interesting place suited to a wide range of abilities and interests and to inquire into what strategies work for what purposes and in what situations.

Teachers could also try using hands-on activities and Art (both Visual and Performing Arts) as a methodology to stimulate learning in the classroom.

Classroom Observation

The teacher made most of the decisions related to group work; students did not participate and were not expected to decide about how they will undertake the task or about how the groups will operate.

The topic assigned to groups related to local aspects of the environment. Students seemed to be able to relate to it and discussed with others in the group.

The discussion at the end of the activity did not encourage students to challenge or support other's contributions or speculate and make suggestions. The discussion was largely teacher-dominated and questions asked of the students were closed with a particular response in mind.

Adequate focus has been given to field-based practice and assignments. Practice teaching is conducted and monitored largely through observation schedules and lesson plans prepared by the students. The quality of supervision, however, needs to change from monitoring to mentors/supervising teachers providing opportunities to students to explain their practice, being critical and reflective while examining their own students' personal beliefs about teaching. The role of mentors/supervising teachers and their supervision practices need to be discussed critically. Supervising teachers also need to ensure that the assumptions underlying the practicum are shared in schools where the practicum is organized.

DIETs could also track their alumni so that there is a connection between their graduates who are teaching in schools and the mentor/supervising teacher. The experiences of graduates can be integrated into the curriculum.

The practice teaching experiences can be coordinated with the schools in the area so that teachers in the schools can be available for mentoring the student teachers and they in turn will benefit from this experience. This could become an institutionalized process that forms the bridge between the school and teacher education institution and which would eventually become one continuity factor in pre-service and in-service teacher education. Linkages with schools in the area need to be institutionalised as their working and the impact on the classroom teaching-learning determines the real success of the DIETs.

Assessment of pre-service teachers continues to be based on tests, observation-based instruments and lesson plans. A comprehensive assessment framework based on NCTE's vision of what constitutes effective teaching needs to be put in place. A variety of formats that include portfolios documenting teacher's actual teaching experiences during practice teaching, tasks where the student-teacher analyzes student work, evaluates textbooks, analyzes a teaching video, and lesson planning exercises can be introduced.

Action Research was conducted in the DIETs visited and most were well documented. The approach, however, needs to address the change in teaching and learning in the context of NCFTE 2009. Results of these action researches could be further trialed by future student trainees and further research work could be based on these findings.

DIETs were mostly well-equipped but there is still a lot of scope for making optimum use of resources. Most of the DIETs visited have adequate space for Science, Mathematics, Language laboratories but the utilization of these laboratories is not the same. DIET Almora has a good Mathematics laboratory which is put to good use during practice teaching time. DIET Bhimtal has set up a very good ICT lab in which they have developed some excellent teaching material for Science and other subjects. DIET Pauri has developed a Psychology

lab where the faculty has developed a few puzzles and tests for assessing the personality, self-esteem and creativity based on international tests and administered during the in-service and pre-service training programmes. DIET Haridwar has an excellent Mathematics laboratory. The effort in visualizing such interventions is worth appreciation.

The material in these labs is mostly in the nature of displays and used for static lab-based activities and experiments. The material required for field-based investigations and explorations need to be explored and attempted. The concept of Science need to be learnt through the process of field-based investigations, discovery and explorations which need to be promoted and conceptualized among school teachers and pre-service trainees. The TLM in the Mathematics lab must be more interactive in nature rather than display. The Practicum component of the curriculum needs to be much more interactive rather than limiting it to static lab-based experiments.

The area which all the DIETs must review and study is the concept of Work Education. The paradigm shift in the concept of work education has to be studied and appreciated for it to be transacted in the spirit of the NCF 2005.

All teacher educators should be encouraged to document their teaching plans and share them with students – they should also consider writing regular reflection notes on their classes. Peer observation of classrooms would help in improving practice as would regular student feedback on pre-service teaching.

2. Curriculum and Pedagogical Practices – In-Service

The level of engagement of most DIET faculty in the in-service programs is remarkable. What makes it more so is the collaboration and linkage that has been built with the BRCs, the CRCs, SSA and the RMSA in the conduct of in-service teacher education programs in each of the districts visited by the JRM. Many DIETs and BRCs together have formed resource groups in different subjects, which if utilized in the manner that they have planned for, would be a boon for teachers.

DIETs are conducting training programs conceptualized at SCERT level such as leadership programme for the head teachers, Continuous Comprehensive Evaluation (CCE), Master Trainers Programme, ECCE programme, computer training, Yoga, health and Ayurveda etc. Training needs are identified through a process involving interaction with teachers, feedback forms and monitoring formats used during school visits. The areas for training are generated at the level of DIET and sent to SCERT. The process was observed in every DIET that the team visited.

The DIETs at their level duly utilize the grants from MHRD under AWPBs for conducting programs such as community participation, training for Mathematics lab establishment in primary schools, art and cultural education, Right to Information Act, action research and studies etc. The DIET Almora has developed a CCE assessment format for the use of all the DIETs in the State. The fact that each DIET is planning to focus on developing a particular area of strength identified in each institution is commendable. This should not, however, prevent them from engaging in the development of other contextual programmes for their own districts.

DIETs are involved in providing training to the in-service teachers but there does not seem to be any follow-up on impact of this in school classrooms. Classroom processes in the schools visited by the team JRM team visit revealed that there is minimal implementation of child-centered activity-based approaches. Teaching is mostly confined to lecture method followed by the teacher writing answers to the exercises given in the textbooks on the blackboard and children copying from the blackboard.

The DIETs must take up studies on the follow-up of trainings and workshops in the field based on which they can devise and design appropriate programs to improve the academic monitoring of schools and onsite support. Studies on the extent of how the schools are transformed in terms of implementation of renewed pedagogy due to the increased participation and engagement of children with the teacher as facilitator is a must from DIETs.

In this connection, a visit to a BRC by JRM members revealed upon interaction, that a group of teachers who were being trained in CCE still had very little concept of the whole idea of CCE and its objectives. Two other groups of teachers being trained in English and CCE also revealed that teachers were concerned about issues other than the training itself such as, for example, the time of year in which the training is held, their school situation, the high workload which cannot be distributed due to absence of other teachers and so on.

Setting up a Training Management System in each DIET would improve and streamline the in-service teacher education program. This is necessary for capturing the district's teacher profile, training needs, training information, impact of the trainings, and for setting up a comprehensive database of the district education information. The tendency to make an impressive list of work activities for the AWP which is common in many institutions across the country can be avoided.

DIETs also need to consider teacher professional development approaches outside of training.

3. Continuous Professional Development of Teacher Educators

A major part of the professional development of teacher educators has been conducted at the Administrative Training Institute at Nainital. DIET faculty members are nominated to attend training programs of DOPT in areas of trainee skills, design management and evaluation of training - the focus is on the process and methods of training per se. The integration of the knowledge and skills of this experience with objectives and needs of teacher education and classroom processes needs to be strengthened.

Some orientation programmes have been organized for teacher educators by organizations like Azim Premji Foundation, Vidya Bhawan Society and Eklavya which have helped the faculty to develop a perspective on education and learning, especially in the context of NCF 2005 and NCFTE. The orientation of teacher educators as master trainers at SCERT for various programs has also been helpful in their capacity building and continuous learning.

The continuing professional development of these teacher educators should now focus on preparing them for their new role as envisaged by RtE, NCF, NCFTE and the 12th Plan Guidelines. Becoming reflective practitioners and documenting their experiences is as important as their constant professional up-gradation in knowledge and skills. All DIETs could consider introducing internal processes – faculty seminars, reading sessions, sharing school visit observations, discussing teaching plans and reflecting on pre-service classroom processes.

4. Infrastructure Facilities and Instructional Resources

There are 13 DIETs in Uttarakhand and all have their own building. The necessity to augment the infrastructure facilities ranges from ‘needed’ to ‘urgently needed’ across the DIETs – many need better maintenance (e.g. a huge section of DIET Bhimtal building structure is habitable and needs to be restored; the Almora DIET building is a century old and housed a Normal School in the British days but still retains its imposing beauty and needs extensive repairs; the Rudrapur DIET has just shifted into its own building which must be maintained well; the Haridwar DIET has a lot of unutilized ground space). Some of the DIETs possess enough space while others have accommodation for only two to three departments. In some of the DIETs visited, only about 50% of the pre-service trainees could be accommodated in these existing hostels.

DIETs are indeed well equipped but there is still a lot of scope for making optimum use/ management of resources, e.g. there is a lot of open space available in some DIETs begging for use and for labs may be properly spaced.

As per the DIET guidelines, the DIET library should have about 10,000 books. The books in all libraries are much below the number and many of them are not relevant at all. Besides the latest reference books, Reports of Education Commissions and Educational Surveys, Abstracts of Researches in education are not available in the libraries. Libraries in all the DIETs visited were not being managed effectively. These are located in small rooms with no adequate space for keeping the books and to serve as a reading room. The librarian posts are vacant since the inception of DIETs. One staff/faculty member is in charge to monitor the library. No educational journals were available in the DIETs visited and, in most places, there was hardly any place to sit and read the available books. There are no periodic annual grants to procure library books. Since libraries are such uninteresting places, their use by the faculty and trainee teachers seems very limited as is borne out by the entry registers. .

Among the DIETs visited, DIET Bageshwar maintained a library with a good selection of relevant books and textbooks for ready use for their students and in-service teacher trainees. The library space, however, is too small and would need to shift to a larger room.

All the DIETs need to revamp their library systems. The access to books was kept through physical registers which not only makes it difficult to search for books but also to perform data analysis on usage patterns.

An Inclusive Education Resource room is being set up at DIET Almora. A spacious room has been assigned for it and a wide selection of equipment and material are already in place. They will work in collaboration with the RCI.

A few DIETs had displays of students' works hanging on the walls. There were paintings with motivational quotations about the noble aims of teaching and teachers. The charts hung on the walls were informational. All the laboratories had TLM displays but laboratory use seemed to be minimal in most judging from the equipment available. Preparation of TLMs and reading materials in most of the DIETs is commendable. The module 'Endeavours' developed by DIET Bageshwar for English teachers is commendable for its content and the approach followed in developing it. Several rounds of brainstorming, followed by discussions, needs-analysis and a wide participation of teachers at all levels were done as part of the process. The practice of documenting experiences is also beginning to take place in a few DIETs.

Every DIET has developed 'local content' in the form of monographs reflecting and highlighting local culture, art, craft, economic and agricultural practices.

Some examples:

- *The transformation of agricultural practices in the area of Kanatal*
- *The disaster in Pundol*
- *A description of a visit to a remote habitation*
- *The story and history of Tehri dam*
- *Tamr Nagri Almora*
- *The story of Basmati*
- *Garhwali Music*
- *Medicinal Plants in Almora*

5. Institutional Leadership and Management

The leadership in most DIETs seems to be focussed on administration – DIET Principals need to be academic oriented so that there is more involvement and contribution from heads of DIETs in academic activities. This may stimulate research activities and the process of improving the academic standards.

The average tenure of DIET Principals was one year or so in the DIETs visited by the team – this is a challenge in the light of institution building. Younger faculty members seemed more active and involved than the Senior Lecturers in many places. This could be because many Senior Lecturers have spent a lot of years in district administration roles before moving to the DIET. The services of Senior Lecturers in many DIETs need to be engaged more meaningfully and constructively to create vital synergy in the institution.

The teacher education cadre that is being proposed could be a way to solve this issue.

6. Research and Innovation

Many DIETs have undertaken action research in collaboration with teachers who are being trained on action research followed by undertaking action research. Good power-point presentations reflecting on various models of action research were observed at DIET Rudraprayag.

Action research is supposed to help develop strategies for effective teaching of various school subjects and creation of knowledge to address day-to-day problems and issues.

There seemed to have been no exercise on to find out what sort of knowledge should be created to be used for the effective implementation of curriculum and effective management of schools. The findings of these research studies conducted were also not disseminated or discussed in any forums by the DIET. It often seemed that the action researches were done as just another activity. Reports were confined to the departments and only in a couple of DIETs were they placed in the libraries.

Some small-scale studies have been conducted for content generation on local specific issues. Further, studies on classroom teaching learning process in Science and language have been conducted in some DIETs. However, no action on the findings to improve the situation seems to have been attempted.

7. Leveraging ICT

Most DIETs are equipped with computers but the numbers vary from 10 to 20 in an institution. Many of these computers were supplied during 2001-02. In some of the institutions visited, about 50% of systems were not in working condition. Many work at very slow speed and most of the computers possess DVD drives to play video CDs. These systems are being used to provide six-day in-service training on computer use to school teachers.

DIET Bhimtal has developed an impressive repertoire of multi-media teaching learning material for various school subjects. DIETs at Almora and Bageshwar have a fairly good computer lab for the use of pre-service and in-service training. The Haridwar DIET has a good lab where the computers were repaired using the ingenuity of the faculty member involved at minimum cost. But the AWP of the DIETs do not indicate a very high level of ICT utilization in the teaching learning process even within the DIET.

The ICT equipment is confined to orientation of in-service teachers and using the lab for the pre-service trainees. DIETs need to build their own understanding on what it means to be 'good at ICT as a teacher' to forge a way forward in integrating ICT into the teaching-learning process. Instead of putting in more resources, it is important to investigate what strategies, experiences can enable teachers to develop their use of ICT.

8. Annual Work Plan and Fund Utilization

The utilization of budget is very poor because of delayed release of the budget almost at the end of the financial year. The data shows that about 50% of released budget is being utilized and taking the balance to the next year as carry-forward. It seems that, 50% of first

installment used to be received by the DIETs in every financial year of which about 50% being utilized.

9. Inter - Institutional Linkages

DIETs have good linkages with the BRCs, CRCs, SSA and RMSA of their respective district as well as with the SCERT at the State level. Some DIETs together with the BRCs and CRCs have prepared a calendar of activities for their various programmes.

DIETs have selected lab area for mentoring and for field based innovations and practices. Every faculty member has selected two schools for intensive mentoring and support. DIETs have also conducted a workshop for lab area schools on quality education

DIETs conduct frequent review meetings with BRCs. The major focus seems to be on the implementation of training programmes, field data and other programs planned and scheduled from SCERT/other State bodies. However, it was found that the nature and frequency of interaction between the DIETs and the BRCs & CRCs vary among the districts. In some districts there did not seem to be much discussion on the academic aspects of school functioning and children performance. The visit reports of the BRCs were not being analyzed at the DIET level nor were they documented.

The team's visits to BRCs and examination of the agenda of the monthly meetings revealed that academic aspects like lesson plans (designed by SCERT - based on 6Es) figure in the meetings but the time devoted to such topics is very little. In fact, many DIET faculty seemed very unclear on issues such as lesson planning with the 6Es. The BRCs and CRCs need a lot of support for their academic support role - the DIET needs to develop its own capacity to provide this. Training should focus more on classroom processes, planning and preparation, classroom teaching along strategies for overall school improvement (infrastructure, record keeping, provision of adequate teachers and academic resources) based on pedagogical requirements.

The minutes recorded for review meetings with BRCs in DIETs visited also revealed that there is not much sharing of DIET staff observations on teaching learning processes in the schools with the BRCs and CRCs along with steps to improve them. There is no sharing of performance of CRCs and their support to the schools with the BRCs during the review meeting. The academic aspects are missed and focus is on inputs i.e. schedules for conduct of series of trainings in a cascade manner, workshops, data collection on DISE and quality monitoring tools, TET exam, progress of civil works and other departmental programs.

10. Partnerships and Collaboration

Many DIETs collaborate with NGOs in areas where they feel they need some assistance - synergy seems to have been created between many DIETs and organizations like Azim Premji Foundation based on common understanding and mutual trust. Meaningful partnerships have been forged in areas of curriculum development and capacity building of teachers and teacher educators. An enabling environment seems to have been created for meaningful work.

Part VI

College of Teacher Education

The JRM visited the recently-upgraded CTE at Haldwani in Nainital District. This new CTE has been upgraded from the B.Ed. Department of the M.B. Govt. P.G. College. It will be serving the Districts of Almora, Nainital and Uddham Singh Nagar.

Since the CTE is a part of a larger college complex it has access to very good infrastructure facilities, science laboratories, psychology lab, E.T. room, conference halls, lecture halls and a large multipurpose hall. Multimedia equipment is available but would need to be augmented to cater to pre-service and in-service programs. The campus of the College is located in an easily-accessible area of the city. There are seven faculty members in the Department and all of them are M.Ed. and Ph.D. degree holders.

The faculty members are enthusiastic about their new roles and functions as a CTE but they are realistic enough to realize that there are added responsibilities that come as a part of this up-gradation. In preparation for this, the faculty and staff have organized several meetings to formulate a plan of action that are in line with the performance indicators in the 12th Plan Guidelines. They have also made a vision and mission statement for their Department. The main areas that they have focused upon are pre-service and in-service teacher education programs.

The CTE at Pithoragarh is the only functional CTE in Uttarakhand as reported in the AWP&B 2012-13. The AWP&B of CTE Pithoragarh however, does not have many indications of its functioning as a CTE. The current staff position shows that out of 7 sanctioned faculty posts including the Principal, only 5 posts are filled. There are 2 non-academic posts of which one is vacant. The post of Head/Principal is vacant. The roles and functions of a full-fledged CTE would be difficult to fulfill with the present staff position. The process and performance indicators suggest that CTE Pithoragarh has not progressed in any significant way from its functions as a B.Ed. College.

The JRM team could not visit the CTE at Pithoragarh for logistical reasons.

Part VII

Recommendations

The recommendations are presented in two parts: the first are general recommendations while the second are recommendations for specific institutions.

General Recommendations

1. Form a Teacher Education Core group to lead preparedness of institutions for their new role & to ensure alignment across institutions

- i. Members should be from SCERT, DIETs, CTEs, schools (elementary and secondary), identified private colleges partner organizations – they need not be heads of institutions
- ii. Members should be selected based on their **academic ability, understanding of new education perspective, ability to travel and ability to work with people**
- iii. Group should meet once in two months to review internal processes in each institution, visit institutions regularly, discuss better linkages across institutions, discuss issues within institutions and find ways to resolve them
- iv. This group should facilitate a vision-building exercise for SCERT along with DIETs, CTEs, BRCs and CRCs to encourage coherence between various efforts

2. Create rigorous processes for selection and professional development of heads of teacher education institutions

- i. It is critical for the right people to lead institutions at this time of transition
- ii. Create a rigorous process for appointment of leaders (especially DIETs) – focus on education perspective & ability to work with people
- iii. Guidelines for appointment of academic leaders need to be clearly articulated and transparent

3. Develop a rigorous professional program for heads of teacher education institutions

- i. This should include institutional visioning exercises, formal workshops, regular discussions, readings, visits, etc.

4. Ensure stability of tenure for DIET Principals

- i. The average tenure of the DIET Principals should be at least three years – five years would be ideal

5. Implement the plan for a teacher education cadre and ensure that all vacant faculty positions are filled appropriately

6. Re-activate the subject-based Regional Resource Groups (i.e. teacher educator subject-groups from across institutions – e.g. all mathematics faculty from SCERT, DIETs, identified private colleges)

- i. Share readings, share experiences, understand each topic in the new curriculum, understand the new textbooks, prepare for transaction of the new curriculum through different teaching methods, use open digital resources and forums
- ii. Meet once in two or three months for one day to present work to each other, discuss academic issues, demonstrate classes to each other and so on
- iii. Form e-groups wherever possible

7. Ensure clarity and focus in role of institutions and individuals

- i. SCERT and DIETs should focus on academic work i.e. quality concerns regarding curriculum, textbooks, research studies, capacity building of teacher educators, academic supervision etc. and should be relieved from work like conduct of scholarship examinations, data management etc. which may be assigned to boards of school education or the directorate of school education
- ii. School teachers seem to be responsible for overseeing construction work i.e. quality monitoring, making payments, work execution etc. – this work could be assigned to SMCs with a quality check from engineering staff with the head teacher confined to overall monitoring of work progress

8. Release of funds on time by MHRD to ensure that activities are undertaken as per plan

Specific Recommendations

A. State Council of Educational Research and Training (SCERT)

1. Develop an institutional vision, strategy and action plan for SCERT and facilitate the same for all DIETs and CTEs

- i.** Build deeper awareness of the role of each as academic and research institutions in alignment with RtE, NCFTE and the 12th Plan Guidelines
- ii.** Build awareness and clarity of various funds allocations, schemes, programs and provisions available for different development activities
- iii.** Encourage the independent development of annual plans and actions more informed and rooted in the needs of each geography

2. Facilitate alignment of teacher education perspective across SCERT, DIETs & CTEs

- i.** Ensure regular interaction with /across DIETs through processes like monthly meetings of all DIET/CTE Principals and monthly meetings of Heads of Departments of all DIETs/CTEs for sharing and alignment

3. Focus on professional development of teacher educators in DIETs

- i.** Develop material on subjects content, andragogy/pedagogy and teacher education perspective for teacher educators
- ii.** Focus on capacity building in teacher education perspective, subject understanding, pedagogy and research
- iii.** Encourage discussions on the revised D.El.Ed. curriculum

4. Significantly strengthen the SCERT library

- i.** Add relevant books on teacher education, reference material & journals on teacher education (e.g. those published by SAGE and NCERT)
- ii.** Add copies of NCF, NCFTE, RtE, NCERT textbooks, State textbooks, textbooks from other states, teacher education curriculum from across the country
- iii.** Ensure that a librarian is in place

5. Ensure continuous professional development for SCERT faculty

- i. This could happen through formal workshops, interactions with other SCERTs/higher education institutions/educational organizations; regular conferences, seminars, research, exposure visits etc.
- ii. Document internal institutional processes and activities – use these documents as sources for research & faculty development

6. Begin research on teacher education

- i. Focus on teacher educators for a start
- ii. Document teacher educator experiences, reflections and learnings – publish them on a website or newsletter regularly
- iii. Record the experience of SCERT faculty and other teacher educators through the design and implementation of the revised D.El.Ed. curriculum – this could be an important starting point

7. Strengthen ICT in Teacher Education

- i. Use ICT for teacher educator professional development – form teacher educator e-forums/subject learning groups/blogs
- ii. Integrate ICT into workshops/formal interactions with teacher educators whenever possible
- iii. Provide high-end systems and equipment - develop audio and video material on curriculum and pedagogy for teacher development

8. Calendarize and document all field visits

- i. Observe classes, teach pre-service/in-service classes whenever possible, have regular formal/informal discussions with teachers/teacher educators
- ii. Document visits & share during faculty meetings

9. Develop and use detailed district-wise & subject-wise data base of teachers and teacher educators across the state

- i. Create district-specific need assessment processes for in-service teacher educators in the state
- ii. Set up Training Management Systems to track professional development programs for teacher educators
- iii. The same is to be done for teachers (this has already begun)

- iv. Track student learning outcomes especially those connected to teacher/teacher educator development programs

10. Organise Teacher Educator seminars

- i. These could be held at Block, District and State levels
- ii. They could include paper presentations, reading sessions, panel discussions around a particular theme relevant to teacher education and open discussions on challenges faced/resolutions found in a particular geography
- iii. This could also be an opportunity to share good practices – experiments that have worked and others could learn from

11. Begin a dialogue with University departments/private colleges of Teacher Education to build a shared perspective

B. District Institutes of Education and Training (DIETs)

1. Develop institutional vision, strategy and action plan for each DIET in alignment with RtE, NCFTE and the 12th Plan Guidelines

- i. Build deeper awareness of the DIET as an academic and research institution and its role in the District
- ii. Build awareness and clarity of various funds allocations, schemes, programs and provisions available for different development activities
- iii. Encourage the independent development of annual plans and actions more informed and rooted in the needs of the district

2. Create processes for professional development of DIET faculty

- i. Deepen understanding of education, subject and pedagogy through formation of subject groups, regular reading sessions, faculty seminars, classroom observations, action research, formal workshops, study tours, short courses
- ii. Introduce peer observation (of classrooms) and student assessment of faculty
- iii. Ensure strong internal alignment through calendarized faculty discussions on academic issues which are documented and shared
- iv. Document institutional processes and activities – use documents as sources for research & faculty development
- v. Encourage regular discussions on the new D.Ed. curriculum, the pedagogy involved

3. Facilitate deeper interaction and reflection as part of D.El.Ed. classroom processes

- i. Design interesting activities that engage students in independent learning – projects, library work, observation of children, documenting classroom observations, writing reflective journals
- ii. Have classroom displays of student work
- iii. Develop TLM that is pedagogically relevant (re-think the Work Education unit's focus)
- iv. Introduce peer observation (of classrooms) among faculty and student feedback on faculty
- v. Encourage faculty member to plan document teaching plans and share them with students before the sessions begin – encourage faculty members to document reflections on classes taught based on their plans

4. Significantly strengthen DIET libraries

- i. All DIETs must have a librarian
- ii. Add relevant books on teacher education, reference material & journals on teacher education (e.g. those published by SAGE and NCERT)
- iii. Add copies of NCF, NCFTE, RtE, NCERT textbooks, State textbooks, textbooks from other states, teacher education curriculum from across the country
- iv. Organize library-based interactions – e.g. reading sessions, discussions based on journal articles/reviews

5. Build stronger linkages with other DIETs, increase collaboration with other institutions in the District

- i. Calendarize all school visits, observe classes, hold informal discussions with teachers/– document visits & share during faculty meetings
- ii. Identify innovative teaching practices in the district & share/disseminate
- iii. Organize all-DIET meetings at the State/Division level to encourage dialogue between DIETs – these could be used as forums to share experiences and plan together

6. Develop and use detailed Block-wise & subject-wise data base of teachers across the District

- i. Create Block-specific need assessment processes for in-service teachers in the District
- ii. Set up Training Management Systems to track professional development programs for teachers
- iii. Track student learning levels especially those connected to teacher development programs

7. Build academic capability of Block/Cluster Resource Persons with a focus on changing classroom processes and student learning outcomes

- i. Use the block/cluster meetings to discuss classroom processes and student learning outcomes in the schools – the focus must be on teacher preparation for this change
- ii. Define the block mentorship idea – use it to ensure strong connect with the school and classroom
- iii. Develop classroom observation formats, organize data on classroom observations – use them for research and to design teacher development programs
- iv. SCERT must support DIETs closely in this area

12. Begin research on classroom processes in schools

- i.** Take up studies on curriculum implementation in all subject areas at school level – this could be based on school/classroom observations
- ii.** Study impact of teacher professional development programs conducted by the DIET on classroom processes
- iii.** Document teacher experiences, reflections and learnings on their experiences in schools/classrooms – publish them on a website or newsletter whenever possible
- iv.** Document teacher educator experiences, reflections and learnings on their experiences in schools/classrooms - publish them on a website or newsletter whenever possible

13. Strengthen ICT in Teacher Education

- i.** Use ICT for teacher educator professional development – form teacher educator e-forums/subject learning groups/blogs
- ii.** Integrate ICT into D.El.Ed. classroom pedagogy whenever possible
- iii.** Provide high-end systems and equipment - develop audio and video material on curriculum and pedagogy for teacher development

8. Begin DIET alumni associations of former students

- i.** Organize regular meetings for them, encourage them to contribute to the institution and share their experience
- ii.** Track UTET results of DIET graduates – this could be used one kind of feedback to the institution

9. Organise Teacher seminars

- i.** These could be held at Cluster, Block and District levels
- ii.** They could include paper presentations, reading sessions, panel discussions around a particular theme relevant to teacher education and open discussions on challenges faced/resolutions found in a particular geography
- iii.** This could also be an opportunity to share good practices – experiments that have worked and others could learn from

10. Initiate thinking on the idea of DIET as a District Resource Centre

- i.** This has been envisaged in the guidelines for the 12th five-year plan
- ii.** This will need a strong library, competent and committed teacher educators, good connect with the field of practice and good understanding of teacher needs

Colleges of Teacher Education*

1. Develop institutional vision, detailed strategy and action plan for each CTE in alignment with NCFTE and the 12th Plan Guidelines

- i.** Build awareness of the CTE as an academic and research institution and its role in teacher education and the geography that it serves
- ii.** Build awareness and clarity of various funds allocations, schemes, programs and provisions available for different development activities
- iii.** Encourage the independent development of annual plans and actions more informed and rooted in the needs of the institution and the geography it serves
- iv.** Prepare a perspective plan for each CTE with the involvement of all faculty members – the plan must include strategies for research and documentation, material development, field connect, creating a training management system, pre-service and in-service teacher professional development, teacher educator professional development, linkages with schools, SSA, RMSA, DIETs, SCERT and other Teacher Education Institutions and partnerships

2. Ensure that the B.Ed. Curriculum is revised in line with NCF 2005 and NCFTE 2009

3. Create rigorous processes for orientation and continuous professional development of CTE faculty

- i.** Deepen understanding of teacher education, subject and pedagogy through formation of subject groups, regular reading sessions, faculty seminars, classroom observations, action research, formal workshops, study tours, short courses
- ii.** Introduce peer observation (of classrooms) and student assessment of faculty
- iii.** Ensure strong internal alignment through calendarized faculty discussions on academic issues which are documented and shared
- iv.** Document institutional processes and activities – use documents as sources for research & faculty development

4. Ensure connect with SCERT, DIETS, RMSA, SSA and the school system

- i.** Organize regular interactions with institutions connected to school education (since the CTEs are under the administration of Higher Education Department, it is easy for them to become isolated from teacher education and school education)
- ii.** Prepare AWP's in consonance with SCERT and DIETs

5. Ensure adequate infrastructure

- i. Hostels for teachers participating in in-service teacher education programs are needed especially because each CTE will be serving three or four districts

6. Facilitate continuous dialogue with identified Universities and colleges from across the State

**These recommendations are based on the visit to the College of Teacher Education, Haldwani – the team was unable to visit the other two CTEs for logistical reasons*