#### REFERENCES

- Adams, R.J. and Khoo, S-T. (1996), *ACER Quest: The Interactive Test Analysis System*, Version 2.1, The Australian Council for Educational Research Ltd, 19 Prospect Hill Road, Camberwell, Vic 3122, Australia.
- Aldridge, J.M, Fraser, B.J. and Huang, Tai-chu, I. (1999), *Investigating Classroom Environments in Taiwan and Australia with Multiple Research Methods*, in The Journal of Educational Research, September 1999, Vol. 93 il.P.48, (accessed 6 November 2000) by electronic Resource). http://web4.infotrac.galegroup.com/itw/infomark/411/928/15377876w3/pur.
- Bazeley, Pat (1999), The Bricoleur With a Computer: Piecing Together Qualitative and Quantitative Data, in Qualitative Health Research, Vol. 9, No. 2. (March 1999:279-87).
- BBC (2000), The New Language, BBC Outlook Programme on 26 October 2000.
- Beeby, C.E. (1966), *The Quality of Education in Developing Countries*, Harvard University Press, Cambridge, Massachusetts.
- Beeby, C.E. (1980a), *Reply to Gerard Guthrie*. International Review of Education, Vol. 26, 438-444.
- Beeby, C.E. (1980b), The Thesis of Stages Fourteen Years later, International Review of Education. Vol.26, 451-474.
- Beeby, C.E. (1988), *The 1987 Radford Memorial Lecture: Educational Research and the Making of Policy*, in Australian Educational Researcher, Harman, G. (ed) Vol. 15, No. 2, June 1988.
- Bird, M. (1992), Combining quantitative and qualitative methods: a case study of the implementation of the Open College Policy, in Brannen, J. (ed) Mixing Methods: Qualitative and Quantitative Research, Avebury.
- Bray, M. (1995), *The Costs and Financing of Primary Schooling in Bhutan*, Education Division/UNICEF, January, 1995, Royal Government of Bhutan, Thimphu.
- Bray, M. (1996), Educational Reform in a Small State: Bhutan's New Approach to Primary Education, in International Journal of Education Reform, Vol. 5, No. 1. January, 1996. pp. 15-25.

- Bray, M and Packer, S. (1993), Education in Small States: Concepts, Challenges and Strategies, Pergamon Press.
- Burgess, R.G. (1985), *Issues and Problems in Educational Research: An Introduction*, in Burgess (ed) Issues in Educational Research: Qualitative Methods. The Falmer Press, 1985.
- CAPSS (1996), The Purpose of School Education: A Curriculum Handbook for Teachers, Education Division, Thimphu.
- CAPSS (1997), Minutes of the CAPSS Board Meeting, Education Division, Thimphu.
- CAPSS (1998a), A Study of the Knowledge, Attitude and Belief (KAB) of the secondary school students, Education Division, Royal Government of Bhutan, in press.
- CAPSS (1998b), A Handbook for Resource Centre Development in Pilot Areas.
- Chewang, K. (1999), Continuous Assessment in Bhutan: Science Teachers' Perspectives, Unpublished M.Ed. Thesis submitted to The University of New Brunswick, Canada.
- Choden, T. (1990), New Approach to Primary Education Programme, Education Department, Thimphu.
- Choden, T. (1993), Educational Development with special reference to New Approach to Primary Education in Bhutan, unpublished essay submitted in partial fulfillment of M.Ed. course at the UNE.
- Cohen, L and Manion, L. (1994), Research Methods in Education, Routledge, London.
- Collister, P and Etherton, M (1991), Children Actively Learning: New Approach to Primary Education in Bhutan. Voluntary Service Overseas, UK.
- Craig, H.J, Kraft, R.J. and Plessis, Joy du (1998), *Teacher Development: Making an Impact*, USAID and World Bank.
- Cropley, A.J. and Dave, R.H. (1978), *Lifelong Education and the Training of Teachers*: Developing a Curriculum for Teacher Education on the Basis of the Principles of Lifelong Education, UNESCO.
- Cuban, L. (1988), Fundamental Puzzles of School Reform, in PHI DELTA KAPPA, January, 1998, p. 341-344.

- Denzin, N.K. and Lincoln, Y.S. (1994), *Handbook of Qualitative Research*, Sage, Thousand Oaks, California.
- Dorji, J. (1984), Geography Curriculum for Year 9 to 13 in Bhutan with Special Reference to Developmental Stages of the Child, unpublished dissertation submitted to University of London, Institute of Education, UK.
- Dorji, J. (1999), *Curriculum Review*, Unpublished report submitted to the Ministry of Health and Education, Thimphu.
- Dorji, T. (2000), Rubrics Assessment as an Instructional Illumination of Bhutanese Student Writing. M.Ed. Thesis submitted to the University of New Brunswick, Canada, March 2000.
- Dyenka, K. (1999). *Teaching High School English in Bhutan: A Study at the Crossroads of Language*, Literature and Culture. M.Ed. Thesis submitted to the University of New Brunswick, Canada, April 1999.
- Education Department (1976), *National Education Policy*, Royal Government of Bhutan, Thimphu.
- Education Department (1984), *The National Education Policy*, Royal Government of Bhutan, Thimphu.
- Education Department (1989), *Third Quarterly Policy Guidelines and Instructions*, September 1989, Thimphu.
- Education Division and UNICEF (1990), Report of National Survey on Non-enrolment, Dropout and Repetition in Primary Education in Bhutan, Royal Government of Bhutan, Thimphu.
- Education Division (1990), Fourth Quarterly Policy Guidelines and Instructions, April, 1990, Thimphu.
- Education Division (1991), Seventh Five Year Plan (1992-97) Education Sector, Volume 1, Policies and Strategies, Royal Government of Bhutan, Thimphu.
- Education Division (July, 1991), Seventh Quarterly Policy Guidelines and Instructions, July, 1991, Royal Government of Bhutan, Thimphu.
- Education Division (March 1991), Sixth Quarterly Policy Guidelines and Instructions, Royal Government of Bhutan, Thimphu.

- Education Division (March 1992), *Eighth Quarterly Policy Guidelines and Instructions*, March, 1992, Royal Government of Bhutan, Thimphu.
- Education Division (May 1993), Report of the Third Biennial Incountry tour-cum-Conference of the Heads of Secondary and Tertiary Institutes, Royal Government of Bhutan, Thimphu.
- Education Division and UNICEF (1993), Review of Primary Education in Bhutan with special emphasis on New Approach to Primary Education: the Final Report, Royal Government of Bhutan, Thimphu.
- Education Division (March 1994), *Final Report on the Educational Planning Workshop*, December 23, 1994 January 4, 1994, Phuentsholing.
- Education Division (May 1994), Twelfth Quarterly Policy Guidelines and Instructions, Royal Government of Bhutan, Thimphu.
- Education Division (May 1995), Fourteenth Quarterly Policy Guidelines and Instructions, May, 1995, Royal Government of Bhutan, Thimphu.
- Education Division (1996), *The Purpose of School Education in Bhutan: A Curriculum Handbook for Teachers*, Royal Government of Bhutan, Royal Government of Bhutan, Thimphu.
- Education Division (1997), Annual School Visit Report of Inspectors of Schools, Thimphu.
- Education Division (1997), Seventeenth Education Policy Guidelines and Instructions, November 1997, Royal Government of Bhutan, Thimphu.
- Education Division (1998), Eighteenth Education Policy Guidelines and Instructions, December 1998, Royal Government of Bhutan, Thimphu.
- Education Division (1998), *General Statistics: 1998*, Royal Government of Bhutan, in press.
- EMSS (1997), Annual School Visits Report, Education Division, Thimphu.

- Evans, D.R (2000), *Primary Education in India*. Book Review, in Comparative Education Review, Feb.2000 v44 il p81, Dixon Library, UNE, Electronic Resources. Article # 34 (accessed 28 September 2000) http://web5.infortrac.galegroup.com/itw/infomark/829/531/718654.
- Freire, P. (1972), *Pedagogy of the Oppressed* (translated by Myra Bergman Ramos). Penguin Education.
- Fullan, M.G. and Hargreaves, A. (1991), What's worth fighting for? Working Together for Your School. Australian Council for Educational Administration.
- Fullan, M.G. (1991), The New Meaning of Educational Change, Cassel.
- Fullan, M.G. (1999), Change Force: The Sequel. Falmer Press, USA.
- Geuss, Raymond (1981), The Idea of Critical Theory: Habermas and the Frankfurt School. Cambridge University Press.
- Griffith, V.L. (1980), *The Quality of Education in Developing Countries* by C.E. Beeby, 1966, in Comparative Education Review, 1980 (pp. 200-201).
- Grundy, S. (1987), Curriculum: Product or Praxis. The Falmer Press.
- Guthrie, Gerard (1980), *Stages of Educational Development? Beeby Revisited*, in International Review of Education. UNESCO Institute for Education, Hamburg and Martimus Nijhoff, 1980 (pp. 411-449).
- Habermas, J. (1972), Knowledge and Human Interests, 2<sup>nd</sup> ed., Heinemann, London.
- Hameed, A. (1988), Primary Education in the Republic of Maldives, M.Ed. Thesis submitted to the University of Western Australia, Perth.
- Hargreaves, A. (1994), Changing Teachers, Changing Times: Teachers' Work and Culture in the Post Modern Age. Cassel.
- Harley, F.B. (1988), New Approach to Primary Education: Evaluation and Report, UNICEF, Thimphu.
- Harley, B. (1993), Review of Primary Education in Bhutan with Special Emphasis on New Approach to Primary Education: the Final Report, Education Division and UNICEF, Thimphu.
- Hasrat, B.J. (1984), *History of Bhutan*, Education Department, Thimphu.

- Hermann-U (1995), *The Teaching of English as a Second Language in the Cook Islands:* an Analysis. M.Ed. Thesis submitted to the University of Canberra, Canberra.
- Hughes, A.S. et al (1998), Building upon Strength: A review of the Class VI and Class VII Examinations, BBE, Education Division, Thimphu.
- Jameson, Sharyn (1999), Beyond Action Research: Conducting Teacher Based Research.

  Research Monograph Series. Language Australia, May, 1999.
- Kemmis, S., Cole, P. and Sugget, D. (1983), *Orientations to Curriculum Transition:*Towards the Socially Critical School. Victorian Institute of Secondary Education,
  Australia.
- Kuensel (1989), *His Majesty tours seven Dzongkhags in the East*, Vol. 4, No. 17, May 13, 1989, Thimphu.
- Laird, D, et al (1998), Curriculum Contestation, in Hatton, E. (ed) Understanding Teaching, Harcourt Brace (1998).
- Laird, D.J., Maxwell, T.W. and Tenzin, W. (1999), *INSET within Bhutan*, *1996-1998 and the INSET Framework within Bhutan 2000-2004/6*. Department of Education, Royal Government of Bhutan, SEP, Thimphu, pp. 42-45.
- Lee, A., Green, B. and Bennan, M. (2000), Organisational knowledge, professional practice and the professional doctorate at work, in Research and knowledge at Work: Perspectives, case studies and innovative strategies, eds J. Garrick and C. Rhodes, London, Routeledge, 117-136.
- Leedy, P.D. (1981), How to do Research. McMillan.
- Levin, H. (1978), Criteria for evaluating research proposal: Memo to the A.P.A. Committee, Stanford University, in McPherson R.J.S. and Weeks, J (eds), 1990 *Pathways to Knowledge in Educational Administration*, Australia College of Educational Administration, Armidale.
- Maykut, P and Morehouse, R. (1984), Beginning Qualitative Researcher: A philosophical and Practical Guide. The Falmer Press.
- NIE (July, 1997), *The National Institute of Education: Plans and Proposals*, Document submitted to Education Division.
- Pratt, B. and Loizos, P (1992), Choosing Research Methods: Data Collection for Development Works. Oxfam Development Guide No. 7. Oxfam.

- Pring, R. (1976), Knowledge and Schooling, Open Books, London.
- QSR (1998), NUD\*IST 4: Introductory Handbook, QSR Pty. Ltd. Australia.
- Quireshi, H. (1992), Integrating methods in applied research in social policy: a case study of carers, in Brannen, J. (ed) Mixing Methods: Qualitative and Quantitative Research, Avebury.
- Rinchen, P. (2000), Continuous Assessment as a Method of Student Evaluation in Primary Schools in Bhutan: An Analysis of Policy and Practices in English Curriculum, 1986-1998. Unpublished Ed.D. Thesis, University of New England, NSW, Australia.
- Rose, D. and Sullivan, O. (1996), *Introducing Data Analysis for Social Scientists*, OUP, Buckingham.
- Royal Government of Bhutan and UNDP (1990), Environment and Sustainable Development: The Paro Declaration, Thimphu.
- Skillbeck, M. (1974), School Based Curriculum Development. Harper and Row, London.
- Smith, L.S. and Lovat, T.J. (1991), *Curriculum: Action and Reflection*, Social Science Press.
- Taba, H (1969), Curriculum Development: Theory and Practice, Harcourt, Brace and World, Inc. Heinemann, London.
- Tatum, D.S. (1998), Research Problems Rasch Solutions: Decision Making, in Popular Measurement, Vol. 1, No. 1, Sring 1998. (p. 6-7) Institute for Objective Measurement.
- The Planning Commission, (1999), Bhutan 2020: A Vision for Peace, Prosperity and Happiness, Royal Government of Bhutan, Thimphu.
- The Royal Government of Bhutan (1997), A Royal Decree on the Youth Development Programme: Investing in the Future, Trashichodzong, Thimphu.
- Thinley, P. (1999), The Efficacy of "Intervision" as a School Level Change Process: A Descriptive Analysis of the Experiences of Four Participating Schools in Bhutan, Unpublished M.Ed.(Hons) Thesis submitted to the University of New England, New South Wales, Australia.
- Tyler, R.W. (1949), *Basic Principles of Curriculum and Instruction*. The University of Chicago Press, USA.

- UNICEF (2000), Education For All: No Excuse, World Education Forum, Dakar 2000, Online (accessed 6 November 2000), <a href="http://www.unicef.org/pubsgen/noexcuse/">http://www.unicef.org/pubsgen/noexcuse/</a>.
- Vine, K. (2000), Suggestions and advice provided during discussions at UNE.
- Wagner, T. (1994), *How Schools Change: Lessons from Three Communities*, Beacon Press, Boston, USA.

# **APPENDICES**

## Appendix I. The Office Order from the Ministry of Health and Education to conduct the study.



Telephone No. 22627, 22148 Gram: EDUCATION, THIMPHU FAX: 22578, 23550

### ROYAL GOVERNMENT OF BHUTAN MINISTRY OF HEALTH AND EDUCATION

EDUCATION DIVISION
Curriculum and Professional Support Section

Ref. CAPSS/Edn/16(b)/97- 1 49

20 October, 1997.

#### Office Order

In the last ten years or so our education system has achieved tremendous progress not only in indegenising the curriculum materials, but also making teaching and learning processes in schools more activity oriented and child centred. A lot of energy and resources have been spent in this wonderful development by our officers and teachers.

However, as we progress in our efforts to make education more meaningful both for the children and for the nation, it is important that what is programmed as 'education' should be critically studied from time to time. This will allow us to know the reality in schools as well as the worth of the curriculum materials that are developed at the Division. In particular, it is pertinent to see how modern education is linked with the traditions, customs and values.

As such, an analytical study of the curriculum materials and situation in schools where the curricula are being implemented, has become a priority. This study is also necessary before we decide to make further changes in our curricula. This will also help determine what we should expect from the Basic Education System has level of which is going to be raised from the present class VI to class VIII.

The main components of the study will be as follows:

- 1. Syllabus and textbook, including aims and objectives, and contents with reference to the needs and aspirations, values of national (culture) and global perspectives.
- 2. Methods of delivery in the classrooms teachers teaching and children learning. This also includes other areas of learning not specified in the formal curriculum settings.
- 3. The assessment of the teaching and learning processes in the schools, including the monitoring system both at school, dzongkhag and national levels.

- 4. Teacher preparation and readiness in the implementation of the curricular changes and other plans and policies of the Division.
- 5. The facilities and management of the schools in the effective implementation of the education plans and policies.

The main task will be carried out by a task force consisting of the following members:

1. Mr. Nima Wangdi, Joint Director of Education,	Chairman.
2. Mr. Pema Thinley, Principal, Sherabtse College,	member
3. Ms. Kezang Doma, Secretary, BBE.	member
4. Mr. Mingbo Dukpa, Chief Inspectorate.	member
5. Mr. Tenzin Choeda, Planning Officer, Education	member
Mr. Phub Rinchen, Dy. Director, CAPSS.	member
7. Mr. Wangchuk Rabten, Director, TTC, Paro.	member
8 Mr. Jagar Dorji, Director, CAPSS.	Secretary/Coordinator

Due to distance problems, Mr. Pema Thinley and Mr Wangchuk Rabten will attend meetings only when possible and necessary, but they should participate through telecommunication and postal services.

All the curriculum officers at the CAPSS will be involved in this study as well. As such some activities related to major curricular changes may be suspended until the study is over.

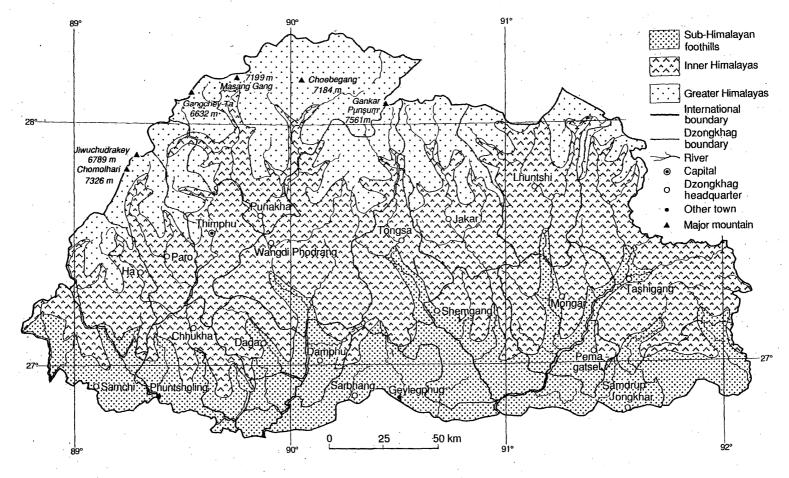
The task force will be expected to submit the report during the 2nd Education Conference and the 8th CAPSS Board meeting in Paro in August, 1998.

Coangey regedup)
Secretary of Education.

cc:

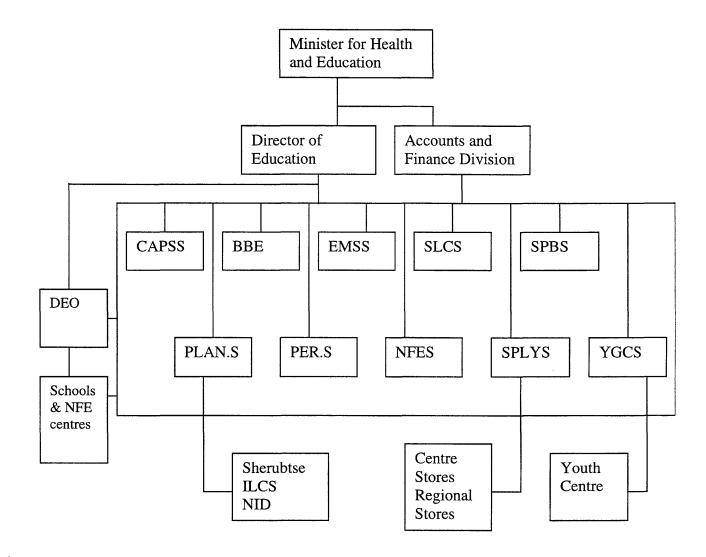
1. Members of the task force.

2. All section heads of the Education Division.



Map of Bhutan showing the Foothills, Inner and Greater Himalayas.

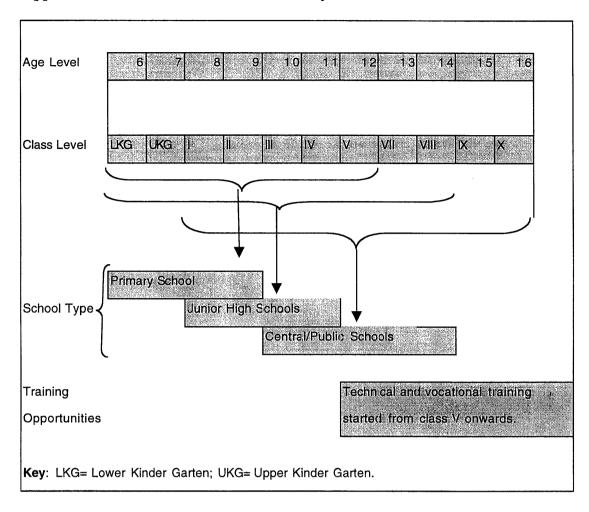
### Appendix III. Administrative Structure of the Department of Education, under the overall Ministry of Health and Education.

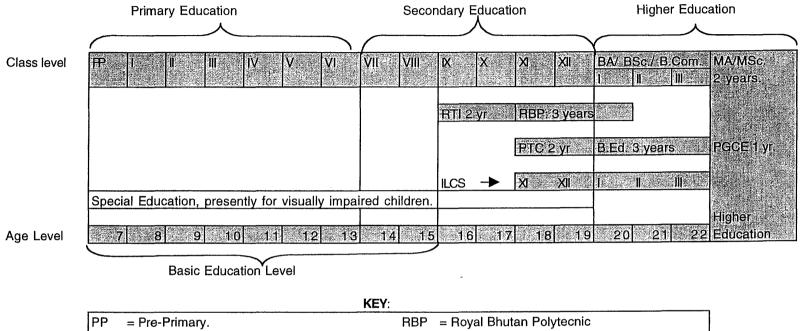


#### **Explanation**

CAPSS (Curriculum and Professional Support Section); BBE (Bhutan Board of Examination); EMSS (Education Monitoring and Support Section); SLCS (School Liaison and Coordination Section); SPBS (School Planning & Building Section); PLAN>S (Planning Section); PER>S (Personnel Section); NFES (Non Formal Education Section); SPLYS (School Supply Section); YGCS (Youth Guidance & Counselling Section); ILCS (Institute for Language and Culture Studies); NID (National Institute for the Disabled); DEO (District Education Office).

Appendix IV a. The Bhutanese Education System in the 1970s.





PP	= Pre-Primary.	RBP = Royal Bhutan Polytecnic
PTC	= Primary Teacher Certificate	RTI = Royal Technical Institute
B.Ed	= Bachelor of Education	ILCS = Institute for Language and Cultural Studies
PGC	E = Post Graduate Certificate in Education.	Higher education usually for in-service people.

Source:

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Education Department, Annual Statistics, 1999.

NB: This chart includes only the areas that come directly under Education Dept.

# Appendix V. Areas of Studies for General Education Programme $(PP\ to\ X)$

		Prima	ary Sch	ools					JHS		HS	
		PP	l .	11 -	111	ΙV	٧	VI	VII	VIII	X	Х
Learning Areas	Subject Areas											
Language	Dzongkha			0 seen 100 mg 100 mg								
	English											
		N. W. T. W.	ng States and an analysis of the	es successor annotas como		S. C. Carolla Maria		2012				
Mathematics	Mathematics										ler, d	
						emik	1 2 3 N 1 2 C 4 - 1	eregreien .o.v.ene	\$ 5. 5166\$1.23	vs prasirivo vermostis.		<u> </u>
Science and	Science					Estado						A suppression of the second
Technology	Physics	<u> </u>							ļ			La al ma
	Chemistry		ļ				<u> </u>		<u> </u>			
	Biology	ļ		<u> </u>		ļ			<u> </u>	<u> </u>		Harris Anna
	Computer Science		ļ			ļ			ļ	ļ.,		
			4 Kasabatan Co		J. 1950.00				<u> </u>			ļ
Human Society	Environmental Studies					***********			ļ	ļ	<u> </u>	<u> </u>
& Environment	Social Studies	ļ	ļ		<u> </u>			ST THE STATE OF			1	
	History	ļ	ļ	ļ			<u> </u>					
	Geography	<u> </u>	ļ				ļ	lie i i				
	Economics	<del> </del> -	ļ				<u> </u>		-	ļ		
Creative and	Visual Arts & Crafts											
Practical Arts	Songs, Dances, Music											71.4
Health, Physical	Reproductive Health											
Education &	Games and Sports								4.5			
Personal	Moral/Value Education.											
Development	Scouts.			ļ							10.8	
Socially Useful	Agriculturo	-	ļ	<del> </del>								
& Productive	Agriculture	-		<u> </u>								
	Social Forestry		-									
Work.	Basic skills in Vocation	71 20 00 00 00 00 00 00 00 00 00 00 00 00	<u> </u>	<u>L</u>	<u> </u>	J	<u> </u>					

Learning areas with specific subjects and periods allocated in the time-table.

Learning areas addressed in the co-curricular activities, school organizations or integrated in the subject areas in 1 above.

Source: Annual Statistical Report, Education, 1999.

### Appendix VI. Major curricular changes since 1986.

Year	Details of changes initiated.	Implementation.	Teacher preparatio n.
1986	*Environment Studies (EVS) in lower pry schools. Later became a project called New Approach to Primary Education (NAPE).	Pilot test in 13 primary schools on the EVS.	150 PP and class I teachers trained in Kharbandi, December 1985.
1987	*Expansion of NAPE approach to English and Mathematics and Dzongkha. *English textbooks and manuals for class VII &VIII.	Expansion to 50 schools in PP and class I in 13 pilot schools.  Monitoring done by team of curriculum officers.	In-service courses for teachers continued. Teachers oriented to changes along with NAPE.
1988 1989	*Biology textbooks and handbooks for class VII &VIII *Teachers handbook on History of Bhutan introduced to be used for class VI-VIII.	Completed and introduced in schools. Monitoring of NAPE continued. DRT concept introduced.	In-service courses for NAPE continued. No orientatio n for History.
1990	*New Science for class IV.  *New Social studies for class IV and V.  *History and Geography textbooks of Bhutan for class VI.	All published and sent to schools as provisional editions. Comments sought from teachers.	NAPE inservice continued. Social Studies (also History and Geo.) organised.
1991	*New textbooks for PP to III. *English Readers for class PP-III.	Published and sent to schools. DRT reduced.	In-service courses conducted. Idea of SBIP introduced

1992	*Science for class V.  *Social Studies for class V.  *History and Geography of Bhutan for class VII&VIII.	Published and sent to schools as provisional edition. Review class VI History and Geography continued.	-do-
1993	*Review and revision of textbooks and manuals for Social Studies.	NAPE continuing.	-do-
1994	*Geography of Bhutan for class IX and X introduced. *Class VI examination weighting made 50% internal. *Continuous assessment initiated.	Published and sent to schools in April 1994.  Through notifications of QPGI.	Continuous assessment discussed during in- service courses. No courses for this purpose.

I		T	
1995	*10 Readers in	Through	In-service
	Dzongkha for PP to IV	notification.	course
	to be used.		organised.
	*Today's Math replaced		
	with Systematic Math		
	for PP-IV. The former		
	being out-dated.	Pilot test in 25	In-service
	*EVS was to be taught	primary schools.	courses
	in Dzongkha.		conducted.
	*School calendar	PP-VI 50%	
	changed from 3 to 2	continuous, VII to	
	terms.	VIII 20%	
	Continuous assessment	continuous	
	reiterated.	assessment.	
	*History of Bhutan for	Sent to schools.	
	class X.		
	*Economics for class		
	IX provisional		
	edition.		
1996	*Revised Dzongkha	Sent to schools.	
	textbooks for class I-		
	III.		
	* 2 workbooks for	Sent to schools	In-service
	class I written.	Sent to schools	courses
	*History of Bhutan for	Sent to schools	conducted.
	class X.	for use as	
	*Economics textbooks	reference by	
	for class IX.	teachers.	
	* Purpose of school		
	education.		
	Caacacion.		
L		<u> </u>	<u> </u>

	· ·		T
1997	*Economics for class	Sent to schools.	Sent to
	X.	Language teachers	schools.
	*Supplementary reading	to implement this	Teacher
	programme for children	programme.	librarians
	introduced.	Library books	trained to
	*Values education to	being procured and	manage
	be part of school	distributed to	school
	education; draft	schools.	library.
	booklet for values		In-service
	education developed.		for
	*Concept of wholesome		reading
	education being		not done;
	discussed through		but
	CAPSS Newsletters and		guidelines
	Education Conference.		given in
			CAPSS
			Newsletter
			•

- Source: 1. Primary Education Review (Harley, 1993), 2. Quarterly Policy Guidelines and Instructions # 14 & #15 (1995).
  - 3. Education Policy Guidelines and Instructions # 17 (1997).

5. What are the views	1. What do teachers think about the supply and qualities of		
on the management	materials supplied?	5.4	Questions.
and resources in	2. What do schools do when there is excess or shortage of the	5.5-6	
schools?	materials supplied?	l	Questions.
	3. What spaces are available for schools to organize classroom and	5. <i>7</i>	
İ	other activities efficiently?		Questions.
	4. What do teachers think student population in schools?	5.9	Questions.
1	5. What facilities are lacking in schools to run the school efficiently?		Questions.
	6. What are the goals and policies of your school for 1998?		Interview.
6. What do teachers	1. How many curricular changes have the schools been asked to		
say about the	implement since 1986/87?		Interview.
curricular changes	2. How many of them do they confidently implement and how many		
during the decade	have been failed?		Interview.
1987 to 1997?	3. How are the teachers prepared for curricular changes?	6.3	Questions.
	4. What factors have led to the success or failure of the new changes?	6.4-7	"
7. What are the	1. How do schools receive information from the headquarters in		
strengths and	Thimphu?	7.1-2	Questions.
weaknesses of the	2. What difficulties have been faced when implementing the		
support from the	instructions and guidelines from the headquarters in the past?	7.4	"
Education System?	3. What do the teachers and parents suggest the headquarters to help		
	run the schools efficiently?	7.4	"
8. What are the	1. What kind of co-curricular activities are organized in the schools?		Interview
teachers' views on co-	2. What are the main purposes behind organizing the co-curricular		with
cur. activities in	activities?		teachers.
schools?			<u>[</u>

# Appendix VII b. Research Question Matrix (approved by the Task Force).

Key Questions	Research Items	Ref.	Comments
1. What are the	1. How do teachers view the syllabuses,	1-2 &	Closed Q.
teachers views on	textbooks and handbooks?	13 a	Open Q.
Curriculum	2. What are the values reflected in the	3 & 9	Close questions
organisation such	syllabuses and textbooks?	1	
as the syllabuses,	3. How helpful do they find the	6-7	"
textbooks and	handbooks?	4 ,8,10	
handbooks?	4. What do they think of the relevance of		"
	the contents of subjects they teach?	11	"
	5. What is the general curriculum aimed at?	12	
	6. What are their views on the recent	5, 13 b	Open questions
	changes in curriculum?	13 c	
	7. What issues would the teachers like to		
	raise regarding value education in schools?		
2. What are the	1. What methods of teaching do our	1-3 &	Close questions.
teachers views on	teachers generally apply in classrooms?	7	1
curriculum	2. What difficulties do they face in teaching	4-6,8b	
practices in schools	effectively?	8 a	Open questions.
, albeit teaching	3. What are the good things happening in		- F 1
methodologies?	their schools in teaching?	8 c	
6	4. What issues would they wish to raise that		
	would help implement curriculum		
	effectively in schools?		
3. What are the	1. How do teachers practice assessment in	1-2	Closed
teachers' views	classrooms?	3-4	questions
on assessment and	2. What difficulties do they face in		
evaluation?	practising assessment of students work?	5-9	
	3. What other means do they use to	10 a	Open questions
	evaluate students works?	10 b	
	4. What do teachers think about the		
,	assessment in schools?		
4. What are the	1. What do teachers think about the way	1-3	Close questions
views of the	they are prepared to take up the task of		
teachers on the	teaching?	4-5	
teacher preparation	2. To what extent do they find in-service		
and teaching?	courses adequate to update their	6	
0	profession?		
1	3. What is the level of confidence in the	7-9	
	teachers regarding the mastery of the		
	subjects they teach?	10 a	Open questions
	4. What difficulties do they face in the	10 b	
	initial period of their employment?		
	5. How do they look at their works in the		
	schools?	ļ	

5. What are the views of teachers on the management and facilities in schools?	<ol> <li>What do teachers think about the way the school is being managed?</li> <li>What is the working atmosphere like in their schools?</li> <li>What facilities are lacking in schools to run the school efficiently?</li> <li>What do they have to say about the facilities and management style in their schools?</li> </ol>	1-5 9-10 6-8 11 a 11 b	Closed questions.  Open questions.
6 What are the strengths and weaknesses of the support from Education	1. What kind of support and encouragement do teachers and schools get from Education Division, Dzongkhags and parents?  2. What support do the teachers expect	1-7	Close questions Open Questions
Division, Dzongkhag and parents?	from Education Division and Dzongkhags to help run the schools efficiently?	8b.	Open Questions
7. What are the other issues that are not addressed in the 6 areas above?	Open question		Written comments.

#### Appendix VIII. CURICULUM REVIEW QUESTIONNAIRES

May, 1998

**IMPORTANT:** 

Dear Teacher,

The questionnaires are intended to help gather your views on the organisation and practice of the curricula, and assessment of students learning as well as study the real situation in our schools. This study is then hoped to result in designing better strategies to improve the curricula and the way they are implemented. Please remember your honesty can make a big difference.

While in general it should be anonymous you may choose to write your name on the top or bottom of this page. The questionnaires should be used by full time teachers employed before 1995. Since Dzongkha is done in a separate study, Dzongkha teachers need not participate in this. The information you provide should also be about the present school.

There are six sets of questions. Each set has some objectives given at the top of the page. The grading scale is also explained on each page.

There is a sixth box at the right side after every statement. This is the code box. Whatever box you have ticked in the grading scale, please write that number in the code box. Suppose you have ticked grade scale 4 then you write 4 in the code box. Once again, your views will be most valuable for the study. Please start now.

Thank you (Signed) Jagar Dorji Director CAPSS

А.	rersonal init	rmation					
1.	Gender:	1. Ma	le	2. Fem	ale		Code
2.	Nationality:	1. Bh	utanese	2. Non-	-Bhuta	nese	<b>Q</b> .
3.	Year of joinir	ng services in B	Shutan: 19	•••			
4.	Your last acad 1. Below 6. MA/MSC	demic qualifica 2. ICSE	ation: 3. ICSE	4. ISCI	E	5. BA/BSC	Code
5.	-	fessional qualit		ree/certifica M.Ed	ate) 5. Oth	ners	Code
6.		ce courses atte		986			Code
	1 2	3 4	5 6	7	8	9	
7. locat	Location of y ion. Then put the	our school: Ple	•	•	the bo	xes below the Code	relevant
	1. Urban	2. Semi-urba	n 3. I	Rural	4. Rei	mote	
•	1. u <b>rban=</b> daily 1 2. s <b>emi-urban =</b> 3. <b>rural=</b> roadsi 4. <b>remote=</b> more	BHUs, shops, ide schools & c e than one day	electricity, rone day walk walk from hi	oadhead w from highw igh ways/to	ith reg vays; wns).	ular services;	·
8.	Please put a ( x to while respon code box.						h to refer in the Code
	1. Class Level:	2. PP-III	3. IV-VI	4. VII-	VIII	5. IX-X.	
9.	Indicate whether a subject teacher 1. Class teacher	er.	ss teacher (te	eaching all	subjec	ts in one class)	or Code

#### **B.** Questionnaires

Please put a tick (÷) in any one of the 5 boxes against each statement that matches with views. Each box represents a grading scale as explained here:

1 = Strongly Disagree; 2 = Disagree; 3 = Uncertain; 4 = Agree; and 5 = Strongly Agree.

your

**Objective**: This section is intended to find out your interpretation of the school curriculum in terms of clarity of the contents, relevance to children's learning needs and to social and cultural needs.

1.	Curriculum Organisation: Syllabuses,						
	Textbooks and Manuals.	1	2	3	4	5	Code
1.	The syllabuses contain clearly defined objectives.			۵			
2.	Syllabuses provide clear guidelines on how to assess						
	student performance.						
3.	Traditional values are adequately covered in the						
	syllabuses.						
4.	The contents in the syllabuses are relevant for						
	children's learning needs.						
5.	Project works are too many for students to cope.						
6.	The present syllabuses are too vast to cover in time.					<b>:</b>	
7.	Teacher's handbooks are flexible.						
8.	Contents of the textbooks are relevant for the						
	children.						
9.	Present textbooks cover Bhutanese moral						
	values adequately.						
10.	Games and sports are given less importance						
	at present.						
11.	The present curriculum fully prepares						
	children for life.						
12.	There has been too many changes in the						
	syllabuses in recent years.						
13 (a	<ul><li>Write any comments on syllabuses, textbooks and nimplemented at present.</li><li>(12 line spaces left for writing).</li></ul>	nanu	als t	hat a	re be	ing	
13 (b	Please write below what Bhutanese are give (12 line spaces left for writing)	n in	our (	curri	culur	n.	
What do you think are the main issues with regard to value education your school today?  (12 line spaces left for writing)						on in	

1 = Strongly Disagree; 2 = Disagree; 3 = Uncertain; 4 = Agree; and 5 = Strongly Agree.

**Objective:** This section intends to invite your views on how the curriculum is being practised in your school. It focuses on: the difficulties in teaching, in using various

Each box represents a grading scale as explained here:

teac	thing methods, how restricted are the situations	s in yo	our sch	ool.				
2.	Curriculum Practices in school		1	2	3	4	5	code
1.	I do depend on the textbooks for all my les	ssons.		<u> </u>				
2.	As I gain experiences there is no need for les	sson						
	plans.							
3.	Learning by memorisation is good.							
4.	Overcrowded classes hamper Teacher-stude	nt						
	interaction.							
5.	Activity based teaching is very difficult in n	ıy sch	ool.	) O				
6.	Children should be given more time in the se	chools	s. 🗆	ם נ			Ċ	
7.	I believe child centred teaching is good for I	3hutai	n. 🗆	) 🗆				
8 (a 8 (b 8 (c	(13 line spaces left for writing)  ). What difficulties are you experiencing with (13 line spaces left for writing)	ı your	teachi	ng at	the p	resen	it sch	
	box represents a grading scale as explained here: Strongly Disagree; 2 = Disagree; 3 = Uncertain; 4= Agre	e; and s	5 = Stroi	ngly A	gree.			
	ective: This section is devoted to understanding your vie e curriculum as well as students learning.	ws on 1	he pract	ices of	assess	sment	and ev	aluation
3. A	Assessment and Evaluation	1	2	3	4	5	•	Code
1.	Assessment is a part of my daily lessons.							
2.	I put more stresses on written tests more							
	than home works.							
3.	I do not have enough time to conduct							
	continuous assessment.							
	218							

4.	At present continuous assessment is in	_		_				_
_	confusion.	u	U	Ч	u	l	J	u
5.	I find examinations more effective than		_		_			
_	continuous assessments.		u	u	u		_ _	u
6.	Project works enhance students learning.				u	į	_]	<b>.</b>
7.	Evaluation of student works can reveal				_	,	_	
0	problems in teaching practice.					l		ū
8.	Evaluation of students' work can reveal				_		_	
_	problems in syllabuses.		Ц	u	ū	ı	J	u
9.	I do communicate problems related to							_
	syllabuses to CAPSS.							
	a). Please give your views on assessment ar and classroom.  (18 line spaces left for writing) b). What are the main problems do you assessment in your class?  (18 line spaces left for writing)			-			·	
Obje	Strongly Disagree; 2 = Disagree; 3 = Uncertain; 4 = Agrectives: This section asks you questions regarding the witical and relevant are the pre-service courses to your job	ay you v			•		er and	l how
4.	Teacher preparation and teaching:		1	2	3	4	5	Code
1.	Pre-service training has prepared me with ac	dequate	e					
	teaching skills.	•					<u></u>	
2.	Pre-service training has strong links with so	hool						
	curriculum.							
3.	I feel confident to teach after my pre-service	÷						
	training.							
4.	In-service courses have improved my skills							
	in teaching.							
5.	There are opportunities in this school to upd	ate						
	my subject knowledge.							
6.	I feel I must study more in the subjects							
	that I teach.							
7.	Teaching is a mentally satisfying job.							

8. 9.	In the initial period of my career, senior colleagues encouraged me to use the skills I						
	had learnt from training.						
10(a)	Please provide additional comments on the programme and on the teaching profession.  (18 line spaces left for writing)	e pre-s	ervi	ce t	each	ner e	education
10(b)	Describe how you have been able to implement to in the pre-service teacher training.  (18 line spaces left for writing)	he teach	ing	skill	s tha	t yoı	acquired
	box represents a grading scale as explained here: rongly Disagree; 2 = Disagree; 3 = Uncertain; 4=Agree; and	5 = Stron	gly A	gree.			
qualit	etives: This section intends to understand your views on the ry, support to you as a staff, how accountable you are, the relaphere of working in your school.	-	-				_
5.	Management and Facilities	1	2	3	4	5	Code
1.	I have well defined responsibilities apart						
	from teaching.						
2.	The head teacher has helped me improve						
	my teaching.						
3.	My school has high expectations from						
1	students.						
4.	We usually tell our students about the expectations.						
9.	I have to give progress reports on my						
	works to the head teacher once in a term.						
6.	My school has acute shortage of furniture.						
7.	There is adequate supply of learning	_			_	_	
O	materials in my school.						
8.	The rooms is too small for the number of				<b></b>		
0	children in my class. Working atmosphere in my present	U	<b>_</b>		<b>_</b>	<b>_</b>	u

	school is pleasant.			ם כ	ם כ	3 0		
10.	There is mutual respect among the							
	teachers in this school.			ם כ	ם כ	ם נ		
11(a	). Give your comments on the existing facilities	s in t	he pi	reser	ıt sch	nool.		
	(18 line spaces left for writing)							
	(b) What do you think of the way your school	is m	nanag	ged a	t pre	sent?		
	(18 line spaces left for writing)							
1 = S	box represents a grading scale as explained here: trongly Disagree; 2 = Disagree; 3 = Uncertain; 4 = Agree							
•	ctives: In this section you may give your honest views on ation Division, Dzongkhag, and Parents that makes your				-		-	
6.	Support from Education Division,							
	Dzongkhag and Parents.	1	2	3	4	5	Coc	de
1.	My requests are usually responded to							
	by Education Division.							
2.	Guidelines and instructions from the							
	headquarters are clear.							
3.	My hard works in the school are recognized							
	by the Education Division.							
4.	Parents are very cooperative for school							
	development.							
5.	We have too many things to do in the school.							
6.	I would more officials from Education							
	Division, Dzongkhag and parents.							
7.	I know who to write to about the various							
	problems we face in the school.							
8(a).	What material support do you expect from I (18 line spaces left for writing)	Educ	ation	Div	rision	and	Dzong	khag?
8(b)	<ul><li>What professional support do you expect fro Dzongkhag?</li><li>(18 line spaces left for writing)</li></ul>	om tl	he Eo	luca	tion !	Divis	ion and	i

7.	Please make any comments you wish to make on the areas and issues that are not
	covered in the items above.

(26 lines left for open comments)

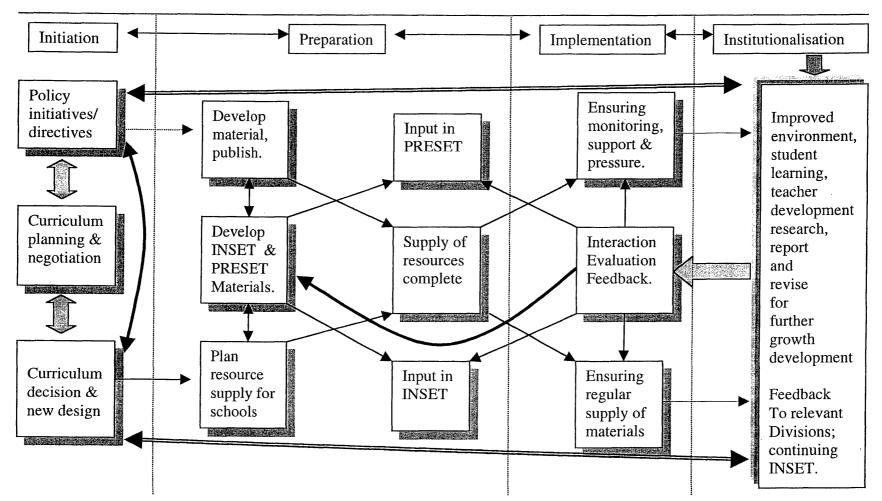
**THANK YOU.** You may now hand over the completed questionnaires to the person who gave it to you or put it in the envelope provided, seal it, sign on it and hand it to your head teacher.

# Appendix IX. Sample of Nodes coded in NUD\*IST for Curriculum Organisation.

```
(2)/CO(13)
(2 1)/CO(13)/13a CO
(2 1 1)/CO(13)/13a CO/Syllabus
(2 1 1 1)/CO(13)/13a CO/Syllabus/Vast
(2 1 1 1 1)/CO(13)/13a CO/Syllabus/Vast/Math
(2 1 1 1 1 1)/CO(13)/13a CO/Syllabus/Vast/Math/Primary
(2 1 1 1 1 2)/CO(13)/13a CO/Syllabus/Vast/Math/Secondary
(2 1 1 1 2)/CO(13)/13a CO/Syllabus/Vast/Science
(2 1 1 1 2 1)/CO(13)/13a CO/Syllabus/Vast/Science/primary
(2 1 1 1 2 2)/CO(13)/13a CO/Syllabus/Vast/Science/Secondary
(2 1 1 1 4)/CO(13)/13a CO/Syllabus/Vast/Social Studies.
(2 1 1 1 5)/CO(13)/13a CO/Syllabus/Vast/English
(2 1 1 1 5 1)/CO(13)/13a CO/Syllabus/Vast/English/primary
(2 1 1 1 5 2)/CO(13)/13a CO/Syllabus/Vast/English/secondary
(2 1 1 2)/CO(13)/13a CO/Syllabus/Relevancy
(2 1 1 2 1)/CO(13)/13a CO/Syllabus/Relevancy/Relevant
(2 1 1 2 2)/CO(13)/13a CO/Syllabus/Relevancy/Not relevant
(2 1 1 2 2 1)/CO(13)/13a CO/Syllabus/Relevancy/Not relevant/Math
(2 1 1 2 2 2)/CO(13)/13a CO/Syllabus/Relevancy/Not relevant/Social
Studies.
(2 1 1 2 2 3)/CO(13)/13a CO/Syllabus/Relevancy/Not relevant/Science
(2 1 1 3)/CO(13)/13a CO/Syllabus/Change often
(2\ 1\ 1\ 4)/CO(13)/13a\ CO/Syllabus/No\ tallying
(2 1 1 5)/CO(13)/13a CO/Syllabus/Manuals important.
(2 1 1 6)/CO(13)/13a CO/Syllabus/Manuals help
(2 1 1 7)/CO(13)/13a CO/Syllabus/Problem in Supply
(2 1 1 8)/CO(13)/13a CO/Syllabus/No Flow
(2 1 1 9)/CO(13)/13a CO/Syllabus/No change
(2 1 1 10)/CO(13)/13a CO/Syllabus/Suggestion
(2 1 2)/CO(13)/13a CO/Textbook
(2 1 2 1)/CO(13)/13a CO/Textbook/Appropriate
(2 1 2 2)/CO(13)/13a CO/Textbook/Supply
(2 1 2 3)/CO(13)/13a CO/Textbook/Math
(2 1 2 3 1)/CO(13)/13a CO/Textbook/Math/Problem
(2 1 2 3 2)/CO(13)/13a CO/Textbook/Math/Good
(2 1 2 4)/CO(13)/13a CO/Textbook/Science
(2 1 2 4 1)/CO(13)/13a CO/Textbook/Science/To improve
(2 1 2 4 2)/CO(13)/13a CO/Textbook/Science/Good
(2 1 2 5)/CO(13)/13a CO/Textbook/English
(2 1 2 5 1)/CO(13)/13a CO/Textbook/English/ok.
(2 1 2 5 2)/CO(13)/13a CO/Textbook/English/to improve
(2 1 2 5 3)/CO(13)/13a CO/Textbook/English/overlap
(2 1 2 6)/CO(13)/13a CO/Textbook/Physics
(2 1 2 7)/CO(13)/13a CO/Textbook/Biology
(2 1 2 7 1)/CO(13)/13a CO/Textbook/Biology/Change oft.
(2 1 2 7 2)/CO(13)/13a CO/Textbook/Biology/continuity
(2 1 2 7 3)/CO(13)/13a CO/Textbook/Biology/like manual
(2 1 2 7 4)/CO(13)/13a CO/Textbook/Biology/support
(2 1 2 7 5)/CO(13)/13a CO/Textbook/Biology/sensitive
(2 1 2 7 6)/CO(13)/13a CO/Textbook/Biology/manual good
(2 1 2 8)/CO(13)/13a CO/Textbook/EVS
(2 1 2 8 1)/CO(13)/13a CO/Textbook/EVS/To revise
(2 1 2 8 2)/CO(13)/13a CO/Textbook/EVS/overlaps
(2 1 2 8 3)/CO(13)/13a CO/Textbook/EVS/need textbook
(2 1 2 8 4)/CO(13)/13a CO/Textbook/EVS/Link problem
(2 1 2 8 5)/CO(13)/13a CO/Textbook/EVS/vast
(2 1 2 8 6)/CO(13)/13a CO/Textbook/EVS/difficult
(2 1 2 9)/CO(13)/13a CO/Textbook/History
```

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(2 1 2 9 1)/CO(13)/13a CO/Textbook/History/vast
```

- (2 1 2 9 2)/CO(13)/13a CO/Textbook/History/reference
- (2 1 2 9 3)/CO(13)/13a CO/Textbook/History/weighting
- (2 1 2 9 4)/CO(13)/13a CO/Textbook/History/revise
- (2 1 2 10)/CO(13)/13a CO/Textbook/Geography
- $(2\ 1\ 2\ 10\ 1)/CO(13)/13a\ CO/Textbook/Geography/relevance$
- (2 1 2 10 2)/CO(13)/13a CO/Textbook/Geography/standard.
- (2 1 2 10 3)/CO(13)/13a CO/Textbook/Geography/vast
- (2 1 2 10 4)/CO(13)/13a CO/Textbook/Geography/short
- (2 1 2 10 5)/CO(13)/13a CO/Textbook/Geography/ok
- (2 1 2 10 6)/CO(13)/13a CO/Textbook/Geography/confuse
- (2 1 2 10 7)/CO(13)/13a CO/Textbook/Geography/revise
- (2 1 2 11)/CO(13)/13a CO/Textbook/Social Studies
- (2 1 2 12)/CO(13)/13a CO/Textbook/Suggestion
- (2 1 2 12 1)/CO(13)/13a CO/Textbook/Suggestion/quality book
- (2 1 2 12 2)/CO(13)/13a CO/Textbook/Suggestion/old-new
- (2 1 2 12 3)/CO(13)/13a CO/Textbook/Suggestion/exposure
- (2 1 2 12 4)/CO(13)/13a CO/Textbook/Suggestion/flow
- (2 1 2 12 5)/CO(13)/13a CO/Textbook/Suggestion/instruct.
- (2 1 2 13)/CO(13)/13a CO/Textbook/Chemistry
- (2 1 2 14)/CO(13)/13a CO/Textbook/Problem
- (2 1 2 14 1)/CO(13)/13a CO/Textbook/Problem/contents
- (2 1 2 14 2)/CO(13)/13a CO/Textbook/Problem/contents ok
- (2 1 2 14 3)/CO(13)/13a CO/Textbook/Problem/changing
- (2 1 2 14 4)/CO(13)/13a CO/Textbook/Problem/supply
- (2 1 2 14 5)/CO(13)/13a CO/Textbook/Problem/Binding
- (2 2)/CO(13)/13b CO
- (2 2 1)/CO(13)/13b CO/National
- (2 2 1 1)/CO(13)/13b CO/National/Identity
- (2 2 1 2)/CO(13)/13b CO/National/Legends
- (2 2 1 3)/CO(13)/13b CO/National/History
- (2 2 1 4)/CO(13)/13b CO/National/Love, loyalty
- (2 2 1 5)/CO(13)/13b CO/National/Pride
- (2 2 2)/CO(13)/13b CO/Cultural
- $(2\ 2\ 3)/CO(13)/13b\ CO/Religion$
- (2 2 4)/CO(13)/13b CO/Social
- (2 2 5)/CO(13)/13b CO/work values
- (2 2 6)/CO(13)/13b CO/Sources
- $(2\ 2\ 7)/CO(13)/13b\ CO/Methods$
- (2 2 8)/CO(13)/13b CO/Aims
- (2 2 9)/CO(13)/13b CO/Personal
- (2 2 10)/CO(13)/13b CO/Environmental
- (2 2 11)/CO(13)/13b CO/No value
- (2 2 12)/CO(13)/13b CO/Miscellany
- (2 3)/CO(13)/13c CO
- (2 3 1)/CO(13)/13c CO/Parents
- (2 3 2)/CO(13)/13c CO/Youth problem
- (2 3 3)/CO(13)/13c CO/Bad influence
- (2 3 4)/CO(13)/13c CO/Exposure
- (2 3 5)/CO(13)/13c CO/Teachers
- (2 3 6)/CO(13)/13c CO/Issue lists
- (2 3 7)/CO(13)/13c CO/Relationship
- (2 3 8)/CO(13)/13c CO/Focus
- (2 3 9)/CO(13)/13c CO/Abuses
- (2 3 10)/CO(13)/13c CO/Discipline
- (2 3 11)/CO(13)/13c CO/Materialism



Appendix X curriculum

change

**Schematic** 

natic diagram for in Bhutan based

management of on Fullan (1991).

Figure 7.1. A schematic diagram for management of curriculum change in Bhutan based on Fullan (1991).

Note: Double arrows mean two-way interaction; thin lines indicate normal flow of information while thick line indicates emphatic communication and feedback. Double lines indicate interaction directly bypassing the normal channel which is sometimes necessary.