
Research in Comparative Education

A TREND REPORT

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Comparative education as a subject for systematic study, unlike comparative law, comparative religion, comparative linguistics, etc., had a very late start, although civilized man's interest in how others educate the young is as old as, say, interest in how others manage their civic affairs. It was only after 'national' systems of education developed in the 19th century that journeys were undertaken by educationists specifically for study, and comparison with a view to borrowing features from other educational systems they considered more successful than their own.

In the universities, comparative education as a subject for study began in the early decades of the 20th century when, after the First World War, internationalism emerged as a new phenomenon. The nation was accepted as the unit for comparison. The educational system came to be recognized as as important as the political and economic set-ups if one wanted to understand the configuration of the constituents and social dynamics of a nation. The establishment of the United Nations Organization and, subsequently, of its agencies, e.g. UNESCO, gave a great fillip to specialists and researchers in comparative education by providing well-documented material on education on an unprecedented scale.

The Directory of International Statistics, United Nations Documents Index (UNDOC), UNESCO's European Centre for Higher Education and its publications made valuable international data and literature available for comparativists. Regional bodies like the Council of Europe, Organization for Economic Cooperation and Development (OECD), comparative education societies in several countries, the World Bank and others

stimulated research activity in comparative education. Yet, there are inherent difficulties researchers in developing countries have to face. In departments of education this subject has not been accorded parity of esteem and recognition with others. Only a few universities can claim to have a specialist in the subject. Un-sponsored and unfunded research, because of the high cost of travel to and stay in other lands, is out of the question for most researchers. Proficiency in languages not belonging to a common family poses another problem, much more serious in Asia than, say, in Western Europe.

Therefore, research studies of Ph.D. scholars, barring a few, continue to be imitative and of an ad hoc nature, as pointed out by writers of trend reports for this section in the earlier volumes of the Survey. The result is that no trend is perceptible, if 'trend' means, as defined in the dictionaries, 'a specified general direction', 'general and continued tendency'. Comparativists have failed, at least in developing countries, to provide to planners and policy makers, on a sufficiently large scale, inferences and conclusions, based on authentic data, about educational innovations and experiments in other countries. Research has been, by and large, vogueish and sycophantic in the sense that, more often than not, their conclusions are that policies and practices which have yielded rich dividends in the affluent western societies would be fruitful in other lands also.

The present report is based on a survey, in a general way, of studies covered in the earlier volumes of *Survey of Educational Research* (Buch, 1974, 1979, 1986) and, specifically, of researches reported between 1983 and 1987. Thus there were, in all, 102 reports to be examined, 37 included in the previous volumes, and 65 in this one.

Of the 102 studies reported up to date 35 were in the decade 1971-80 and the rest in the period 1981-88. In fact, from 1976 to 1985 research activity in this field was at its peak. Of the 102 studies completed since 1971 till today, as many as 76, i.e. two-thirds, had been completed between 1976 and 1985. During this period a large number of foreign scholars, especially from Thailand and Bangladesh, were working in Indian universities for the Ph.D. Most of them, and nearly all from Thailand, conducted research which can be categorized as "Area Studies".

Table 5.1

DECADE-WISE DISTRIBUTION OF STUDIES IN COMPARATIVE EDUCATION

Decade	No. of Studies
1941-50	0
1951-60	0
1961-70	0
1971-80	35
1981-Present day	67
Total :	102

Table 5.2

UNIVERSITY-WISE DISTRIBUTION OF STUDIES IN COMPARATIVE EDUCATION SINCE 1971

University	No. of Studies
MSU, Baroda	16
SPU, Vallabh Vidyanagar	15
Delhi	9
Punjab	16
AMU, Aligarh	7
Bombay	9
Total :	72

Research on this subject carried out outside the universities has been on a negligible scale; and, among the universities, just six of them have carried out the bulk of Indian research in comparative education. This is because most of the foreign scholars were attracted by availability of research facilities there. In no other universities have more than five Ph.D. scholars been awarded degrees in this field. Of the 112 studies includ-

ed in this section, only seven were carried out in a department of psychology and six in a department of sociology. The rest were conducted in departments of education, with two or three exceptions.

As will be explained below, there is no specific theme or approach which has been the focus of research in a particular university. However, in the Centre of Advanced Study in Education (CASE) of the M.S. University, Baroda, 'organizational climate' and 'morale' were the themes chosen by, or assigned to, foreign scholars, probably because in these areas a number of local Ph.D. scholars were also working. In Delhi and Punjab universities during very recent years, research studies having a strong sociological tone have been undertaken by foreign scholars.

Of the studies concerning Thailand and Bangladesh, only five and three respectively are, what may properly be called comparative studies, i.e. comparisons between two or more countries. The rest are all case studies. This trend persists among a very large number of other foreign researchers too. In fact, out of 102 studies on which this trend report is based, a large number are case studies or intra-country studies and only three inter-country studies.

'Area studies', when cumulative, yield valuable data for future research on a much larger, say international scale. National or regional 'comparative studies' may not be too rigidly restricted to cross-national enquiries, which are of little value if merely parallel descriptions are given and similarities and contrasts are not explained in socio-economic or historico-philosophic terms. Some studies comparing the Indian with foreign educational systems tend to be on the former patters.

Table 5.3

THEME-WISE DISTRIBUTION OF STUDIES

Theme/Type	No.
I Administration Organization	8
II Teaching Subjects	8
III Teacher Education, Teachers	19
IV Non-formal Education, Technology of Education	7
V Achievement, Motivation, Personality	11
VI Economics of Education	4
VII Sociological	23
VIII Historical	17
IX Philosophical	5
Total :	102

No classificatory principle was found really suitable for Table 5.3. The use of 'Theme' or 'Type' is on pragmatic grounds only. The twenty studies reviewed in the comparative section of the Third Survey had been classified into six 'Themes/Topics'. Not only has the number increased more than five times, there is also greater diversification of topics consequent upon inclusion of, say, topics of a sociological or philosophical nature having comparative perspectives also.

ADMINISTRATION, ORGANIZATION

Panchal (1973) was indeed too ambitious in taking up a comparative study of administration of elementary education in India, the UK, USA, and USSR. As if that in itself would not have been a formidable task, examination of factors that influenced problems, practices, attainments, expenditure and failures was added to the objectives of the study. Patel (1974) again made a comparison of the role of government in administration and organization of secondary education in India, the USA and UK. Panchal and Patel adopted a similar methodology, viz. 'reading' relevant literature and 'interviewing people who had direct experience' of the systems. Administration and organization of teacher education in Thailand and Gujarat was compared by Phodhipracha (1976), presumably for convenience in data collection in this Indian state.

With a view to suggesting changes in the existing set-up in Thailand and to make the rectors' decisions 'more acceptable and implementable', Prasit (1982) examined their role as viewed by teachers and the principals themselves in Thailand. School administration was the subject of Sriviha's (1986) enquiry also. From the data collected by means of a questionnaire constructed by the researcher the conclusion was that, while the teachers felt that principals lacked enthusiasm, resourcefulness and a constructive approach, the principals complained about non-availability of time and the heavy load of multifarious routine, administrative activities.

Saenghirun's (1983) interests was in the administrative set-up for continuing education and for the application of low-cost media in non-formal education. The enquiry was descriptive in nature. Distribution of the work of 'Centres' and 'Divisions' only is reported. Taking Illinois and Delhi Universities as representatives of

American and Indian universities, Mehendiratha (1982) compared university administration in the two countries. The finding from the data collected through observation, experience, review of literature and interviews was that American universities had greater autonomy and decentralization than Indian universities.

Pracha (1981) and Sriratna (1983) completed their research work shedding light on the administrative problems faced by Departments of Agriculture and schools respectively in Thailand. It appeared that the mechanism for coordination and cooperation between the school administrators and the community representatives was not functioning well.

TEACHING SUBJECTS AUDIO-VISUAL AIDS

Amoradhat (1975) made a critical study of the problem, provision and use of audio-visual aids in secondary schools of Thailand. With a view to improving the teaching biology in secondary schools of Thailand, Muttaqi (1981) made an attempt to present a new curriculum. His compatriots chose other school subjects and carried out similar investigations. Aziz's (1984) as well as Ehsan's (1985) interest was respectively in science and environmental education. Data about teaching practices, laboratory and library facilities, workload for teachers, class size, etc., were collected by visiting schools, observation, use of check-lists and questionnaires. The findings were not different from what they have been in India in weak schools situated in rural areas especially, as shown in surveys made by the NCERT. Khan (1985) repeated the same kind of research for geography, but also included examination in detail of the syllabus for the subject. Descriptive statistics and quantitative techniques were used for data analysis. The findings and recommendations were of the usual type. Miyan's (1986) research into commercial education followed the same pattern, but the main interest was in the employers' opinion about the product. They said the diploma holders performed better than non-diploma holders.

Bajracharya (1986) carried out a study of the existing science curriculum and wanted to evolve a functional model for its improvement. It had a three-phase design—(i) study, (ii) formulation in the light of certain objectives, and (iii) evaluation of the formulated model. Tools, self-prepared, were a class observation sheet and documentary analysis material.

Aram (1986), after a survey and comparison of math-

ematics education in the People's Democratic Republic of Yemen (PDRY) and India from the point of view of trends, issues and problems, made some practical suggestions to be considered by educationists in the PDRY. The curriculum should have specific objectives clearly stated, in conformity with the prevailing socio-economic situation and future needs of the country, as was by and large the case in India.

TEACHERS AND TEACHER EDUCATION

No comparative study was made up to the 1960s in teacher education. Chilana (1973) and Shah (1974) compared in-service teacher education in India with that in the Philippines and USA respectively. Chokshi (1976) and Phodhipracha (1976), in the same university, carried out similar studies, the former for Gujarat and the Philippines, the latter for Gujarat and Thailand. Dube's (1981) was an intra-nation study, comparing programmes and progress of teacher education in Madhya Pradesh and Maharashtra. Pramool (1979) carried out an investigation into the role of teachers in Thailand and Gujarat. But why Gujarat?—it is not representative of India, yet the research gives that impression. From the study the generalization about the whole of India appears to be facile.

Yodswuwan (1980) examined factors affecting programmes of in-service teachers in Thailand. Shafiqul Islam (1980) adopted the experimental method in order to compare the two approaches to teacher education, viz., micro-teaching and the traditional approach. Malani (1975) investigated the problems of Asian teachers and their attitude towards innovations in classroom teaching. Raj (1981) compared the attitudes and values of expatriate and native teachers in Ethiopia.

Ghosh's (1977) study was theoretical. In the conclusion based on a comparison of teacher education in India and the USA and UK, there are platitudes like 'there were differences as well as similarities in the systems', 'the Indian system needed to be made more dynamic and required innovations and change from time to time'. Samart's (1983) objective was to find out how effective the test for entrance to the Diploma in Education course in a teachers' college in Thailand was. Persons from whom the data were collected were 'all' of the opinion that 'all the competencies' needed should be developed; although the teachers themselves 'had no clear-cut concept' of the new syllabus.

Pradhananga (1986) in Nepal made a similar evalua-

tive study of the elementary teacher training course. It involved data collection on the product and process of the training and teachers' opinion about, and attitude towards, the syllabus. What this study revealed does not augur well for teacher training in the country, because the respondents felt the diploma did not contribute to their professional growth. Another study of teachers' attitude towards the teaching profession was Wera Chaisrisook's (1982). The objective was to find out to what extent teachers' favourable attitude towards their profession contributed to their professional growth and their efficiency, as rated by students, colleagues and principals. An attitude scale and questionnaire were prepared, and the data collected when submitted to analysis of variance and other statistical techniques, revealed (i) the effect of a favourable attitude was positive, (ii) the holders of a degree and diploma holders did not differ in their attitudes. Sirrassamee's (1980) conclusion from research was that when individual guidance was given to problem cases according to humanistic ideology, teachers' attitude towards teaching changed.

Saita Prasarthphak (1984) and Nayar's (1984) theses were on the role conflict of women educationalists, a common phenomenon in all societies in general, and in traditional societies in particular. The former made a study of female teachers and administrators in Thailand, and the latter of Asian (Sri Lanka, Nepal, India) female teachers. Saita Prasarthphak's enquiry yielded information on degrees of role conflict experienced by women teachers and women administrators at various levels. The finding from Nayar's research was that teachers from egalitarian social background of higher occupational mobility and of higher occupational commitment experienced, by and large, less role conflict.

Two studies, one by Phonchhun Nuthep (1985) and another by Chaichana Potivara (1981) had concern with another kind of conflict which affected teachers' morale. Both were carried out in Thailand and reached similar conclusions, viz. where principals/presidents left more initiative with teachers and the organizational climate was open rather than closed, teachers' morale was higher. Vichao (1983) and Sarkar (1985) also had interest in teachers' morale and organizational climate. The former constructed three tools in the Thai language for, (i) organizational climate, (ii) teacher morale, (iii) leadership behaviour and collected data in primary schools. When submitted to appropriate statistical techniques the analysis showed, (i) about two-thirds of the schools had average teacher morale, (ii) more than 80

per cent of the low morale category were municipal schools. In Sarkar's (1985) study the focus was on the effect of organizational climate of secondary schools on the role perception of teachers. The findings did not differ appreciably from the inference drawn from other run of the mill researches. Saovaluk (1983) was interested in the social maturity of pupil-teachers in relation to certain variables. It was found that in Thailand they had high social maturity if they had high socio-economic status, and dominance and leadership personality traits.

Ariya (1986) conducted research into the extension service programme of teachers' colleges in North Thailand. Besides the academics, the community leaders 'fully supported' the programme, which was far from effective. Such studies would be more edifying if they had a comparative perspective.

NON-FORMAL EDUCATION, ADULT EDUCATION

Up to 1976, in this important area, particularly important for researchers in Afro-Asian countries, only two research studies were conducted, both in the same year in the same university—Poona. Both were sociological in tone and about educational television (ETV). Jafar (1976) wanted to find out what relationship, if any, there was in Iran between concern for social mobility, receptivity and demand for ETV programmes. Sekhavat (1976) took up the same topic in the department of sociology.

Between 1976 and 1985, five studies have been reported, all about Thailand. The enhanced interest in this area is an outcome of the increasing need being felt for Distance Education and the use of technology in education in most developing countries. Non-formal education (NFE) needed or desired in the Bangkok Metropolitan Area of Thailand was the subject of Somrit's (1985) research study. The needs were identified on the basis of interviews with, and response to a questionnaire filled by students, organizations and concerned experts. The findings included the opinions of the target population about the quality of the programme and the problems faced by the personnel concerned.

The relevance of the NFE programme in Region 5 of Thailand from the educands' point of view in respect of employment opportunities, professional growth and economic betterment, was examined by Thongplea (1985) for Ph.D research. Courses in industry, business

and agriculture were, the respondents felt, 'relevant' and yet most of the trained persons remained 'unemployed'. Nor was there any significant increase in the income of those who were in employment already. Pramua Unchai (1987) constructed and standardized an attitude scale in order to compare the attitude of various groups of teacher educators towards programmes of NFE leading to lifelong education in Thailand. Male as well as female teacher educators of high creativity level had more favourable attitudes. Saenghirun (1983) observes in a study completed in 1983 that, in Thailand, NFE began with the adult education programme. That explains why, for research about the administration of adult education, the available documents about NFE were examined and information was sought from the NFE authorities. It appears that the enquiry focused only on the organizational and administrative set-up.

Sanguan Songwiwat's (1984) objective was the development of Programmed Learning Material (PLM) of B.Ed. level in the North East Region of Thailand, and to use it for comparison of, (i) traditional, and (ii) programmed learning methods. This experimental study concluded that the former yielded better results.

MOTIVATION, ACHIEVEMENT PERSONALITY

Mathew (1944) had, way back in 1944, made a comparative study of educational ideas in the writings of Freud, Adler and Jung. Srinivasan (1969) compared (i) scholastic achievement, (ii) proficiency in language of certain class categories to find out if there was any relationship between these. Kureshi *et al* (1978) made a cross-cultural study of n-Ach, hope of success and fear about failure among African and Indian students, Giani (1982) carried out research for a Ph.D. in psychology to find out to what extent personality and achievement-motivation determined appeal and retention of the content of advertisements among students: (i) Indian and (ii) foreign. Based on analysis of data collected from a sample of 50, the interesting findings were that Indian students had a higher mean recognition score on coloured advertisements, and that foreign advertisements appealed more to girls than to boys.

Sultana (1983) and Md. Sahjahan (1982) both produced these for Ph.D. in psychology. The former's comparative study was about the effect of internal-external locus of control, and purpose in life on the adjustment patterns of adolescent boys and girls in Bangladesh; the

latter compared the need-patterns of university students of Bangladesh and India. The main educational implications of Sultanas' study were that the curriculum should suit the students' interest and aptitudes. They should be allowed free expression of their emotions and normal interest in sex, and greater participation in health-related activities. Sahjahan's conclusion was that Indian students felt the need for change more strongly than their Bangladesh counterparts. Prasad (1980) also made a cross-cultural study for a PhD in the psychology of Indian and American college students' dreams. Such investigations have relevance for education because they may be useful to teachers interested in counselling, mental health and psychosomatic diseases.

The subject for Basu's (1981) investigation, carried out in a department of psychology, was about personality characteristics of East Pakistani and Tibetan backward refugee children. Poor ego-function, rationalization, and need for autonomy were found to be characteristics common to both groups. Tibetan children were found to be more intelligent, maybe because of the 'better academic atmosphere' they enjoyed. Whether certain personality traits of college students in Thailand had any relationship with their social maturity was Saovaluk's (1983) study. For measuring social maturity, a scale was prepared by the researcher and a personality inventory in use in India was translated into Thai. Students high on social maturity were found to be high on traits such as dominance, leadership and radicalism. Taking samples of academics in Bangladesh and Chandigarh, Hossain (1983) examined the nature and distribution of their scores on the dimension of temperament, emotional characteristics and intelligence to see if these were interrelated. Great pains were taken about the use of suitable tools and elaborate statistical techniques; but what educational implications the study has, if any, is not clear.

Findings from Kanchana Watthayu's (1985) research clearly show, as was evident from investigations carried out previously, that in boys' as well as girls' n-Ach scores, besides their anxiety level, the organizational and administrative set-up was a factor. The four tools made use of had been translated into Thai by the researcher.

ECONOMICS OF EDUCATION

Only two studies were made in the economics of educa-

tion in the 70s, one in Gujarat University by Dave (1979) and the other in the Department of Economics of Bombay University by Pandey (1976). Analysing data collected from various reports and documents of the Government of India, Dave's main conclusion was that, with a higher percentage of income from the agricultural sector, the expenditure on primary education increased but there was more secondary as well as higher education in areas which offered more employment in industry. Pandey attempted a cost-benefit analysis of education in Nepal. His attempt to estimate 'the precise' contribution of education to Nepal's economy is based on yet unresolved controversies about 'returns' from education, 'earnings pattern' and 'private cost and public cost'.

After nine years of Pandey's study Mall (1985) examined the procedure, policy, procurement and utilization of financial resources in school education in Nepal. Findings from the data, collected from primary and secondary sources and responses to a questionnaire given to social workers besides administrators, were that only meagre funds are left for important items, e.g. library equipment and audio-visual aids; because income from local resources is declining and a lion's share of the grants is utilized for payment of administrators' and teachers' salaries. Several other countries, both Afro-Asian and European, (e.g. the U K) have had similar experience and hence the stress on the use of technology of education, as observed by John Vaizey.

In the same year, Roy (1985) investigated into quantitative and qualitative progress of education during the first five-year and the second two-year plan in order to identify some of the factors responsible for economic development in Bangladesh, and to suggest more effective factors in economic growth. The abstract of Roy's thesis sheds no light on the latter objective.

SOCIOLOGICAL STUDIES

Sociologists have an omnibus repertoire because their interests are manifold. There is Sociology of Education, of Medicine, of Law, and what not. Educational issues and problems which for a long time were primarily looked upon from the individual's and, therefore, from the psychologist's point of view, have now come to be considered more and more from that of the sociologist and the social psychologist.

Beg (1962) made a cross-cultural study of Indian and American students' desirable and undesirable concep-

tions of life. To find out if language abilities of children belonging to class categories had any relationship with their scholastic achievement, Srinivasan (1969) carried out an investigation. Five studies were made concerning Iranian students. Bakshai (1973) examined the causes of indiscipline among students in Iran; two enquiries, Sekhavat's (1976) and Jafar's (1976), were concerned with the sociological study of educational television (ETV) in Tehran; Mehr (1976) in the same year carried out a socio-economic survey of students of Tehran University; and Karbassi (1981) compared the social adjustment and occupational aspirations of Indian students in Indian and German universities.

Comparative studies for the Ph.D. degree were made by Kerawalla (1979) and Hossain (1978) about the linguistic tangle in India and the introduction of universalization of primary education in Bangladesh respectively. It is difficult to understand why Hossain could not present in the study a comparative perspective by including, even if briefly, references to, say, India as Kerawalla did by comparing and contrasting the situation in India and the U S S R. Some researchers' concern was with comparison of systems of education: Patel's (1975), Mammitil's (1977), and Sirirassamee's (1980).

Surveys were conducted to examine: education as an agent of change by Islam (1983), social background of college students by Dharamvir (1978), impact of education on a community in Nagaland by Sarkar (1979), image of 'self' of and 'other national groups' by Marr *et al* (1979), socio-cultural background of teachers, foreign and native, in Ethiopia by Raj (1981), and role perception and expectation of university students in Thailand by Bunturungsook (1979). Survey type research has attracted researchers in increasing numbers because, as explained above, more and more researchers in comparative education conduct 'area studies'. A welcome shift in very recent years appears to be their interest in people's attitude towards and participation in educational programmes which have an impact on society.

Kanchana Watthayu, (1985) studied the attitudes of participating people from the community towards functional literacy and family planning programmes in central Thailand. Analysis of data collected by using a self-constructed Likert-type scale revealed that, generally, people from urban areas, women and younger persons on the whole, had more favourable attitudes. A similar study was made by Suwimon (1985) who collected data

by means of a self-constructed tool. A not unexpected finding was that highly educated parents in urban areas had favourable attitudes towards school programmes. Problems and obstacles that stand in the way of agencies and organizations responsible for rural development in general and agricultural education in particular engaged the attention of Phangcham (1985). Khatun's (1986) objective was to present data on the expansion of education and its effect on modernization of rural population in Bangladesh. The study was carried out in two villages. A descriptive comparative method was employed. The study revealed that, although the educated had, comparatively, a more modern outlook, their secular and civic orientation was not different. Ugai (1983) also had compared Nigerian and Indian college students by using a 'modernity' scale, and discovered that Nigerian students had higher scores. It is not clear whether the composition of the parallel groups was similar.

Pant (1984) made a more comprehensive and important study of village communities in Nepal. A survey of people's involvement in educational development and the modalities of interaction between school and society showed that the institutional set-up did not provide any effective participation to the common man, except in the form of 'labour donations'. This is true of several third world countries, as foreign participant observers have pointed out: 'Educational claims are expressed by governments to reflect the internal trends in favour of mass education, but are implemented in favour of the political elite on which the governments depend for their survival (Dave, L.A., 'Educational Policy in Bangladesh': 1978-81, *Comparative Education*, Vol. 19, No. 1, 1983, p. 86). Education left the ascription-based structure and traditional values untouched. To make suggestions for improvements in vocation-based education suiting the needs and aspirations of Indian society, Thrasia (1983) prepared a curricular framework 'in the light of opinions' received from people who had spent 'years in long visits to U.K., U.S.A.'. After comparing the educational systems of the USA and India, Rebellow (1986) came to the conclusion that the Indian school system was not preparing students to face the future. Reghavakumari (1986) found, by carrying out investigation in scheduled caste (SC) and scheduled tribe (ST) girls' social attitudes, that SC girls had more favourable attitudes towards work than ST girls. Ara (1983) studied in Bangladesh student activists' socio-political attitudes towards nationalism, minorities, religion, and violence.

HISTORICAL STUDIES

A large number of researches conducted from 1951 to 1981 were area studies. Educational development in a country or a region of a country was presented in a historical perspective. In a few cases, the researchers compared educational development in two regions of one country, i.e. attempted what may be called 'intra-national' studies.

Gokhale (1951) studied the 'origin' of Buddhist education and its 'development' in India and some other countries. Ghosal's (1973) study is described as 'comparative' because it examines the curricular trend in India during as well as after the British period. Karmali (1975) too adopted the historical approach to compare educational development in the 'Old' and 'New' Conquests in Goa from 1910 to 1961. Dave (1979) and Singh (1980) completed inter-state studies of development of education in India—that of Gujarat, Maharashtra and Bihar in the former case; and that of Madhya Pradesh and Uttar Pradesh in the latter (1947-74).

Ali Abd Al Rahman (1964) wrote a thesis on educational development in Iraq during the 'Abbasid Period', Sahib (1963) of Fiji during the colonial period, Aino (1964) of Southern Nigeria (1887-1953), Lall (1981) of Singapore (1819-1969).

Sirirassame (1980) compared the systems of higher education in Thailand and India, beginning with a historical account. Coonjan (1973) presented education in Mauritius in a historical perspective and compared the existing structure with that in India, with a view to stressing the need for improvement.

Mushtar (1975), Lingajammanni (1976) and Sreenivasan (1978) adopted the historical approach in examining the 'foreign influence' on Indian education. Sharma (1978) confined himself to examining the influence of the USA alone.

Masih (1976) dipped into a much-explored field: the contribution of Christian missionaries towards education in India in the early colonial period. This is one of the subjects which cry for original and new interpretations from historians in general and educationists in particular. But what content analysis technique was applied by Masih to the primary sources, viz. the Despatch of 1854, Press, etc., is not clear. Similarly Rakshit (1985) did not break new ground in the study of Tagore's contribution to the spread of education in modern Bengal. This study could easily be excluded from the comparative education section but for its

claim that it includes a comparison of the educational thought of Tagore and his contemporary 'educational thinkers' like Sri Gurudas, Ashutosh Mookerjee, Gandhi and several others. It is highly unlikely that what Nurul Islam (1983) researched into had been left unexplored during the 25 years or so after the end of British rule; nevertheless, it was worth doing in the new national set-up in Bangladesh. An attempt was made to make suggestions for a workable time-bound plan by examining the factors which have in the recent past impeded universalization of primary education in Bangladesh.

Siddique (1986) covered educational developments over very recent years in Nepal under the New System Plan, 1971-76. It is not a 'critical study' as the title claims and is overloaded with statistics taken from official documents in Nepal and UNESCO publications. The contents may, however, prove useful to contemporary comparative education specialists and future historians.

Das's (1986) claim to provide 'a tool for researches in Chinese education' sounds too tall; yet the study 'Education in Post-Mao China (76-90)', painstakingly carried out, is of great interest to comparative educationists. The conclusion that Mao's approach to education was eclectic and not antithetical to Confucianism is open to question.

PHILOSOPHICAL STUDIES

It is difficult to say why for a decade or so no study of a philosophical nature in a *comparative perspective* has been made while a very large number of scholars obtained Ph.D. degrees during this period after conducting research on topics from Manusmriti to Sai Baba.

Even earlier, only five comparativists took up research which can be mentioned in this section. Subrahmanyam (1958) compared the educational ideas of Tagore and Gandhi, presenting profiles to bring out contrasts. But 'character building', 'inner sides of life', 'the unity of truth', which, the researcher says, characterized the philosophy of one or the other of the two thinkers were really shared by both. Later, Mishra (1977) dipped into the writings of Rousseau, Nunn, Dewey and Gandhi in search of similarities. Goswami (1961) stereotyping the East and the West as spiritual and material, underrated the variety subsumed under each. Kuzhandavelu (1965), and Robinson in 1970, worked on an already much-explored theme, viz., Dewey's educational philosophy and Gandhi's.

All these five comparative, reflective type studies were taken up by researchers who appear to have preferred to go along the beaten track, which tendency *per se* may not detract from the quality of the research. But there must be a new vision, a new approach, if not novelty; otherwise these look like a rehash of earlier studies taken up by Ph.D. scholars who keep an eye on the calendar and/or are diffident about venturing out into uncharted territories.

This holds true, though to a lesser degree, about a large number of empirical studies as well. The worst offenders are some of the researchers who completed correlational-type studies using foreign tests, inventories, check-lists, etc. or their translated versions, and in many cases, without reference to the calculus of logic, they draw conclusions. What may be merely coincidental is interpreted in terms of cause and effect, like the increase in the import of whisky bottles and in the arrival of missionaries. In such cases, to make amends for lack of adequate clarification of concepts, formidable statistical techniques are arrayed, where simple tests of significance or percentages would do. The tail is made to wag the dog. During the last two or three years there have been some exceptions. Examples are evaluative studies concerning teaching of school subjects, investigations into the traditional curriculum with a view to formulating the new, new educational programmes for community welfare etc. and people's attitudes towards and participation in these.

As far as comparative education is concerned, the influence of the methodology of the physical sciences, via educational psychology, has been overwhelming. There is controversy between two schools of thought. One stresses that comparative education is a 'science', and the other refuses to reject as 'mythology' anything that is not confirmed on the basis of empiricism, and accords respectability to subjective, personal, judgements also. The logic of the objectives of research and a judicious exercise of the researcher's discretion have been sacrificed—especially in some studies concerning 'confirmation'/rejection' of hypotheses—for strict adherence to the steel frame laid down in books of 'methodology of research'. Often, undue preoccupation with refinement of methodology blunts the edge of originality.

Senior academics in developing countries where English is the principal medium for higher education tend to look to the USA and UK for the latest trends, methods and tools for educational research. In this situation, important issues and problems in their own countries

are likely to be neglected or denied priority. In many of these 'new democracies' pressure groups emerge demanding a say in educational decision-making, e.g. political activists owing allegiance to different ideologies, university students, constituents in a federal structure, weaker sections of society, ethnic and linguistic minorities. Various measures have been tried to meet their competing or conflicting demands. Few comparative education researchers, foreign or Indian, have worked in universities here on such common problems. Experience of Afro-Asian countries may be of great values to each other.

Although four or five Ph.D. theses have been completed examining foreign influences, mainly British and American, upon the Indian education system, no systematic research has been conducted to show how practices and priorities in educational research itself have remained tied to those in the UK and USA and to what effect. From several countries, large groups of senior students come to India for higher studies. No serious longitudinal study has been made—at least none is reported in this section—about their conceptions of India and Indian culture before and after their stay. Findings from such investigations, if carried out from time to time, may be of considerable importance to educationists, social scientists and even the union ministry of external affairs, which may commission research on this and similar subjects as well. A team of researchers, not excluding Ph.D. scholars enrolled in regional universities, under a time-bound project to be coordinated and wholly financed by the centre, or its various agencies like the University Grants Commission, should be appointed, if the objectives of the Education Policy (1986) are to be realized. Cumulative case studies may be taken up from time to time, their data and findings collated, or comparative inter-states investigations may be carried out, to throw light on what factors, economic, political, cultural, and social, are promoting or inhibiting the progress of the various schemes which have been recently introduced, such as autonomous colleges, navodaya vidyalayas, open universities. There are already apprehensions in the minds of some educationists and social scientists that the proponents of the New Education Policy formulated the programmes without taking a well-considered view of these factors.

Considering that Delhi is the seat of foreign embassies and consultants, and other facilities are available there, it would be a suitable place to set up a Centre, which may be developed into an Institute of Comparative Education. The Comparative Education Society of India should initiate efforts in this direction.

ABSTRACTS: 227—284

227. ARA, S., *A Comparative Study of Socio-Political Attitudes of Activists in India and Bangladesh*, Ph.D. Psy., All. U., 1983

The objectives were (i) to compare socio-political attitudes like nationalism, democracy, minority attitudes, religiosity, violence, and social change in the conservatism-radicalism continuum of student activists and non-activists of India and Bangladesh, (ii) to compare personality variables of authoritarianism, dogmatism, and I-E control of student activists and non-activists of India and Bangladesh, (iii) to compare demographic background of parental income and education of student activists and non-activists of India and Bangladesh, (iv) to compare value patterns of two dominant political-value clusters of equality and freedom of student activists and non-activists of India and Bangladesh, and (v) to compare the value pattern of India and Bangladesh student activists and non-activists, irrespective of ideological differences.

The study utilized two samples—one for India and the other for Bangladesh. Each sample consisted of 90 subjects. The subjects were selected from the faculties of arts, commerce, law and science randomly, with an age-range of 18 to 28. All respondents were male students drawn from undergraduate and post-graduate classes. Muslim students were selected as respondents in Bangladesh and Hindu students in India in order to keep religious variable controlled. The Conservatism-Radicalism Scale, Koul's Adaptation of Authoritarianism Scale (A-Scale), Hasan's Adaptation of Dogmatism Scale (D-Scale), Liverant Rotter's Internal-External Control Scale (I-E Scale), Rokeach's Value Inventory and Income and Education Questionnaires were used by the investigator for collection of data. The data were analysed with the help of t-test, correlation, and Kaiser's Principal Method of Oblique Rotation Technique.

The findings were: 1. Indian rightists (IR) as compared to Indian leftists (IL) and Indian non-activists (INA) and also Bangladesh rightists (BR) as compared to Bangladesh leftists (BL) and Bangladesh non-activists (BNA) were found significantly more conservative. On cross-national comparison, BR were more conservative as compared to IR. IL were more radical as compared to BL. BNA were more conservative as compared to INA. 2. IR were significantly more nationalis-

tic as compared to IL and INA; BR were significantly more nationalistic as compared to BL. But there was no significant difference between BR and BNA. On cross-national comparison, IR and BR did not differ significantly on nationalism but BL and BNA were found significantly non-nationalistic as compared to IL and INA respectively. IR were significantly more anti-democratic as compared to IL and INA. BR were also significantly more anti-democratic as compared to BL but no significant difference was found between BR and BNA in democratic attitudes. BL were significantly more democratic as compared to BNA. On cross-national comparison, the differences between IR and BR between IL and BL on democratic attitudes were found non-significant but the INA were significantly more democratic as compared to BNA. 4. IR in comparison to IL and INA, and BR in comparison to BL and BNA had significantly more negative attitudes towards the minority. IL and BL had significantly more liberal attitudes towards the minority as compared to BNA. On cross-national comparison, there was no significant difference on minority attitudes between IR and BR, between IL and BL and between INA and BNA. 5. IR as compared to IL and INA, and also BR as compared to BL and BNA were significantly more religious. IL and BL were significantly less religious as compared to INA and BNA respectively. On cross-national comparison, no difference was found between IR and BR. But IL and INA were found significantly less religious as compared to BL and BNA respectively. 6. IR were found significantly more non-violent as compared to IL and INA. BR were significantly more non-violent as compared to BL but not with BNA. BL were significantly more violent as compared to BNA. On cross-national comparison, IR were significantly more non-violent as compared to BR. No significant difference was found between IL and BL and between INA and BNA. 7. IR as compared to IL, and INA, and also BR as compared to BL and BNA were significantly more resistant towards social change. IL had a more favourable attitude towards social change as compared to INA but no significant differences were found between BL and BNA in their attitudes on social change. On cross-national comparison, BR and BNA were found significantly more resistant to social change as compared to IR and INA respectively. But BL had significantly more favourable attitudes towards social change as compared to IL. 8. IR as compared to IL and INA and also BR as compared to BL and BNA were found significantly more authoritarian. But IL were significantly less authoritarian as com-

pared to INA. On cross-national comparison significant difference was found between IR and BR and between INA and BNA. But IL was significantly less authoritarian as compared to BL. 9. IR was found significantly more dogmatic as compared to IL and INA but no significant difference was found between IL and INA. But both BR and BL were significantly more dogmatic as compared to BNA. On cross-national comparison no significant difference was found between IR and BR and between INA and BNA. But IL were significantly less dogmatic as compared to BL. 10. IR and IL were significantly more internally controlled as compared to INA. IL were more significantly internally controlled than IR. Both BR and BL were more internally controlled than BNA but the difference was not significant. On cross-national comparison, IR and IL were significantly more internally controlled as compared to BR and IL respectively. 11. IR as compared to IL and INA, and also BR in comparison to BL and BNA had significantly higher parental income. No significant difference was found between IL and INA and between BL and BNA. No cross-national difference was found between the comparable groups on parental income except between IL and BL in which the latter had significantly less parental income as compared to the former. 12. IL as compared to IR and INA, and also BL as compared to BR and BNA had significantly more educated parents. Though IR and BR had parents with less education as compared to INA and BNA respectively, the difference was not significant. No cross-national differences were observed between comparable groups on parental education. 13. IR and IL had significantly higher preference for equality as compared to INA. BL had significantly higher preference for equality as compared to BR and BNA. On cross-national comparison, IR and INA had higher preference for equality as compared to BR and BNA respectively. 14. IR had significantly higher preference for freedom as compared to IL. BL had higher preference for freedom as compared to BR and BNA, but the difference was not significant. On cross-national comparison, IR had significantly higher preference for freedom as compared to BR. No significant difference was observed between IL and BL and between INA and BNA. 15. Factor analysis revealed conventional religious morality (India 1st factor, Bangladesh 3rd factor); striving for nationalistic values (India 2nd factor, Bangladesh 7th factor); little emphasis on competitive striving (India 3rd factor, Bangladesh 9th factor); and little emphasis on universalistic peace, aesthetic value and hedonism (Bangladesh 2nd factor and India 4th factor).

228. ARAM, S.A., *A Comparative Study of Mathematics Education in People's Democratic Republic for Yemen (PDRY) and India*, Ph.D. Edu., Del. U., 1986

The objectives of the study were (i) to describe the present status of the major areas of mathematics education, at general secondary level, in the PDRY and India and identify (a) the traits, trends, and emphasis, (b) the issues and problems, and the measures being taken to solve them, (c) innovative experiences in various aspects of mathematics education, (ii) to make practical suggestions for one or both the countries in the various aspects of mathematics education, (iii) to identify the methods of teaching mathematics which were mostly used by general secondary school teachers, (iv) to find out the attitudes of mathematics teachers towards the textbooks they used for teaching purposes, (v) to examine the procedures of the evaluation of students achievement, and (vi) to examine the programmes of education of mathematics teachers.

The study followed the survey method of research. The sample was selected from two different cultures, India and People's Democratic Republic of Yemen (PDRY). From India a sample of 50 student-teachers was selected randomly from the department of education of Delhi University. In the case of the PDRY, a sample of 50 student-teachers was selected from the school teachers of Aden. The programme of mathematics education was studied with respect to evaluation of objectives, curriculum, textbooks, teaching methods, evaluation and teacher education. The tools used in the study were a locally prepared questionnaire for teachers, and an observation sheet.

The findings of the study were: 1. The objectives of mathematics education in India had been connected with national goals, the socio-economic status and the role of school in preparing the individual for the society. But in the PDRY, there had been no mention of any explicit statement concerning these aspects. 2. Objectives played an important role in the task of selecting teaching methods in both the countries. 3. In India, objectives also played some role in planning school curriculum. But this was not so in the goals mentioned in the PDRY. 4. In India objectives were stated clearly and explicitly in desirable behavioural and assessable terms, but in the PDRY these had not been stated in such an elaborate manner. The objectives of teaching mathematics in India, belonged to five areas, viz., social, cultural, personal, technical and aesthetic. But in the

PDRY, objectives were not so specific and could not be categorized for one particular domain. 5. In India, the stress in teaching mathematics was on the development of thinking and several abilities of students, whereas in the PDRY, the emphasis in teaching mathematics was on application of mathematics and the development of inductive and deductive thinking. 6. The mathematics occupied an important position in the school curriculum in both countries. 7. In India the mathematics curriculum was so designed that it was connected with socio-economic situations as well as with the present and future needs of the society. But in the PDRY, there was no particular document that dealt with the mathematics curriculum at the general secondary stage. 8. In India the curriculum took three aspects into consideration, viz., learner, teacher and mathematics, but in the PDRY the curriculum designed was not connected with these three aspects. 9. The curriculum in the two countries differed in some aspects as using unifying concepts and format of logical approaches, emphasizing the coordination and balance among different branches of mathematics, teaching geometry and the nature of the reform. 10. In the matter of mathematics textbooks, both the countries were similar in the following aspects: (a) containing adequate enrichment topics, (b) providing a foundation for the further study of mathematics and other subjects, (c) not providing or suggesting any type of materials for students' or teachers' further use. 11. The acceptability means showed that the miscellaneous aspect of Indian textbooks was good whereas it was average for those of the PDRY textbooks. 12. The same techniques of teaching were found being used almost equally by the mathematics teachers of both the countries. 13. Indian mathematics teachers used the following techniques more than PDRY teachers—ensuring learning through questions, presentation of the content through drawing diagrams, selection of a problem, presentation of the problem through breaking it up into points, ensuring understanding the problem through graphs and solving similar problems, exercises by students independently, and drilling in solving typical difficulties of the problem, in the classroom.

229. ARIYA SOMBOON, *A Study of Extension Education Activities as Organized by the Northern Teachers Colleges in Thailand*, Ph.D. Edu., MSU, 1986

The major objectives of the study were (i) to study the

administrative policy for extension education at Ministry of Education level in Thailand, (ii) to study the nature of extension education activities as offered by the northern teachers colleges in Thailand, (iii) to study the administrative structure of each teachers college for extension education with respect to its organization recruitment, budgeting and physical facilities, (iv) to study the problems of extension education as felt by teachers colleges, and (v) to study the opinions of the community and teachers' college personnel regarding extension education.

The sample consisted of all the eight teachers colleges of northern Thailand, all the rectors, vice-rectors and heads of faculties of these colleges. The sample of instructors comprised 171 instructors taken on a random basis. Two hundred and forty-five teacher-trainees were selected at random from 1200 trainees. The sample of community leaders and participants consisted of 199 members who were willing to cooperate. The tools for data collection were an interview schedule for rectors, a questionnaire regarding extension activities, a checklist and an opinionnaire for vice-rectors and faculty heads, a check-list to study perceptions of instructors, trainees and community participants. The analysis of data was based on percentages of occurrence. The median test was used to test the significance of differences.

The major findings were: 1. The introduction of the extension education programme was the outcome of the need for linking teachers colleges to the national programme of rural development. 2. The organization of the extension programme was based on clusters of teachers colleges. The rector of one of the colleges of the cluster acted as the convener of the cluster. 3. Academics and community leaders were found to extend full support to the programme. They were of the opinion that the programme injected vitality into teacher education. 4. The instructors and teacher trainees were the main field workers working with the community. 5. The extension programme included primary services like health and nutrition education and also general education to the rural community. It aimed at enhancing production skills and employment opportunities. 6. According to rectors and vice-rectors, the programme resulted in an additional load on the academic staff but they nevertheless appreciated the importance of the programme. 7. Both the college authorities and the staff felt the shortage of persons specially qualified for implementing the extension programme. 8. A majority of instructors felt there was a sort of rigidity in the pro-

gramme, its planning and implementation. 9. There was avoidable delay in providing feedback, according to the instructors. 10. The vice-rectors and instructors opined that the periodic evaluation system did not function as expected. 11. The vice-rectors at the top and the lecturers felt the attitude of the senior academics to the programme was indifferent. 12. The teacher trainees perceived the extension activities as being more relevant to community needs than to those of the instructors. The community had a favourable attitude towards the programme. 13. The vice-rectors, heads of faculties and trainees felt that the major outcomes of the extension programmes were that the participants developed fraternal feeling, became wise consumers and realized the value of education. The programme also increased the clients' participation in community life.

The major educational implication of the findings is the need for developing expertise in extension education, integrating extension education, integrating extension with preservice training and periodically reviewing teacher-education curriculum in the light of the changing needs of the community. A second implication of the study is the need for in-service training of the staff of the teachers colleges in the area of planning and organizing extension education activities. The trainees need to be trained not merely in pedagogy but also in methods and techniques of working with the community.

- *230. AZIZ, M.A., *A Study of Science Education Programme in the Secondary Schools of Bangladesh*, Ph.D. Edu., MSU, 1984

The major objectives of the inquiry were (i) to study the science education programme mainly in terms of physical facilities, budget allocation, science teachers, procedures of teaching, evaluation etc., and (ii) to study science education practices in some selected schools with better than usual results and varied physical facilities.

The investigation was conducted in two phases. In the first phase, a survey was conducted in 500 secondary schools of Bangladesh and it was followed by an analysis of existing science textbooks. In the second phase, ten schools were selected—five with high and five with low facilities with better than usual results in science. The data were collected with the help of a questionnaire, an opinionnaire, an analysis sheet, interview schedules, an observation schedule and an attitude scale. Data from 500 schools were collected by mailing

the questionnaire whereas data from ten schools in the second phase were collected through visits by the investigator. The main statistical techniques used for analysing the obtained data were frequency occurrence percentages, mean, median and product-moment coefficient of correlation.

The major findings of the study were: 1. All types of schools showed, in general, shortage of science teachers except non-government rural girls schools. 2. The average class size for science was much higher than the optimum (40) in all types of schools, except non-government rural girls schools. 3. The supervision system of schools was very weak and the schools were not being supervised regularly by the inspectors. 4. Due to their non-science background, the majority of the heads of the schools were not very enterprising in respect of science education, and the majority of the schools did not have reports of the existing curriculum and syllabus committees.

231. BASU, G., *A Comparative Study of Personality Characteristics of the Tibetan and East Pakistani Backward Refugee Children*, Ph.D. Psy., Pat. U., 1984

The main aims were (i) to find out the causes of backwardness of the refugee children in studies, (ii) to analyse some behavioural aspects of refugee children, and (iii) to compare the personality characteristics of Tibetan and East Pakistani backward refugee children.

The sample consisted of 190 refugee girls, Tibetans (100) and East Pakistanis (90) ranging in age from 8 to 10 years. They were students of primary schools which had classes from I to IV. There was an equal number of 'backward' and 'normal' students in both the groups. The extreme 'backward' and 'normal' cases were not considered. The average of the first and second terminal examinations as well as the yearly class promotion test results were considered the main criteria for differentiating the 'backward' children from the 'normals'. Raven's Coloured Progressive Matrices Test, Alexander's Pass-Along Test, Children Appreciation Test and an interview schedule were used. The class teachers of the students were also interviewed to verify the statements of the students.

The study revealed: 1. The East Pakistani and Tibetan refugee subjects showed a marked difference among themselves, specially in intelligence test scores. 2. Tibet-

an refugee children had a better academic atmosphere with the improved type of facilities than the East Pakistani refugee children. 3. The 'normal' children obtained higher mean scores in intelligence tests than the 'backward' children. 4. The difference between the two sets of 'backward' children was not found to be as prominent as the difference between the two sets of 'normal' refugee students. 5. The Tibetans, whether 'backward' or 'normal', were better than the East Pakistanis in intelligence. 6. Both the Tibetans and East Pakistani 'backward' groups contained a greater number of irregular students than the 'normal'. 7. Inadequate ego function and other personality traits like rationalisation and need for autonomy were characteristic of backward children from both the groups.

232. CHAICHANA POTIVARA, *A Study of Organizational Climate and Teacher Morale in the Teachers' Colleges of Thailand*, Ph.D. Edu., SPU, 1981

The objectives of the study were (i) to investigate the organizational climate of the teachers colleges of Thailand and to develop the profiles of all colleges, (ii) to investigate the morale of teacher educators in teachers colleges of Thailand, (iii) to investigate the leadership behaviour of the presidents of teachers colleges in Thailand, (iv) to investigate the relationship between organizational climate and morale of teacher educators working in the teachers colleges, (v) to investigate the relationship between leadership behaviour and morale of teacher educators, (vi) to investigate the relationship between organizational climate and leadership behaviour in the teachers colleges of Thailand, (vii) to study the inter-relationship between organizational climate, teacher educators' morale and leadership behaviour in the teachers colleges of Thailand, and (viii) to investigate into the correlates of the organizational climate and teacher educators' morale.

The Organizational Climate Development Questionnaire (OCDQ) constructed by Halpin and Croft, Leadership Behaviour Description Questionnaire developed by Halpin and Winer and Purdue Teacher Opinionnaire constructed by Bentley and Rampel were used for collecting the required data. The data were collected from 530 teacher educators of all the 36 teachers colleges of Thailand. An analysis of variance, t-test and product-moment coefficient of correlation were used to arrive at conclusions.

The major findings were: 1. Out of 36 colleges, 23 had an open climate while 13 had a closed climate.

2. The distribution of teacher morale in teachers colleges in Thailand varied from low to high but the majority of the colleges fell under low-morale category. 3. The presidents of 36 teachers colleges exhibited a leadership behaviour pattern varying from the HH to the LL pattern. Fifteen of the 36 presidents were described as effective leaders by the members of their staff, 13 of the 36 presidents were described as ineffective leaders, four out of the 36 presidents exhibited the HL pattern of leadership behaviour and four of the 36 presidents exhibited the LH pattern of leadership behaviour. 4. The morale of teacher educators in teachers colleges having an open climate was high. 5. The morale of teacher educators in teachers colleges having autonomous, controlled, familiar and paternal types of climate ranged from high to low. 6. The morale of teacher educators in teachers colleges having closed climate was scattered from high to low, with a tendency towards low. 7. The teacher rapport with the principal was better in teacher colleges having open, controlled and paternal climates than that in the colleges with autonomous, familiar and closed climates. 8. The teacher educators of colleges having paternal and autonomous climate had more satisfaction in teaching than those having controlled, familiar and closed climate. 9. The rapport among teachers was more in colleges having open, autonomous, controlled, familiar and paternal climate than that among teacher educators in colleges with closed climate. 10. The teacher educators of colleges having an open, controlled autonomous and paternal climate were found more satisfied with their salary than the teacher educators in colleges having a familiar and closed climate. 11. The morale of teacher educators was high in the colleges with presidents who were perceived as effective leaders, and was low in teachers colleges with presidents who were perceived as ineffective leaders. 12. It was found that the initiating structure of the presidents and morale of teacher educators affected each other and that in the colleges whose presidents were found high on initiating structure, the teacher-educator morale was also high and in colleges whose presidents were found low on initiating structure the teacher-educator morale was also low. 13. It was found that consideration and teacher-educator morale affected each other and that in colleges whose presidents were perceived high in consideration, the morale of teacher educators was high, and in colleges whose presidents were found low in consideration, the morale was also low. 14. The organizational climate seemed to be affected by the leadership behaviour of the college presidents. 15. The morale was found to be low

in teachers colleges located in Bangkok and in the Central Region, average in the North and North-East Regions and high in the Southern Region of Thailand. 16. There was no significant relationship between the strength of the colleges and organizational climate of college. 17. The sex and teaching experience of teacher educators did not affect their morale.

233. EHSAN, Md. A., *An Evaluative Study of the Environmental Education Programmes in the Primary Schools of Bangladesh*, Ph.D. Edu., Del. U., 1985

The specific objectives of the study were (i) to examine the nature and scope of the existing environmental studies (science) programmes in respect of the following components: (a) objectives, (b) content, (c) teaching-learning strategies, and (d) instructional media; (ii) to evaluate these components of the existing programmes in order to determine their strengths and weaknesses on the criteria given below: (a) Evaluation of objectives against the criteria: whether stated clearly, precisely and in behavioural terms, coverage of cognitive, psychomotor and effective domains, whether appropriate and attainable, built up on pupils' pre-programme level of understandings and important for further learning, (b) evaluation of content against the criteria: relevancy, clarity, up-to-dateness, suitability to learners' need, interest, ability and experience, sequencing, content balance, development of scientific attitude and process skills, (c) evaluation of teaching-learning strategies against the criteria: whether leading to the attainment of objectives, whether helpful to provide guidance with regard to teaching methods, appropriate to the age, ability and interest of the children and use of strategies in the class during the environmental studies lessons, (d) evaluation of instructional media against the criteria of being relevant and interesting, feasible and practical for use.

The survey method was employed in the study. The study was conducted in three phases. The first was concerned with environmental studies (science) for classes III, IV and V. The second phase was solely concerned with opinion study of primary school teachers and teacher educators. Here a sample of 107 respondents was taken; of them 32 were primary-teacher educators and 75 primary school teachers. The data were collected through a questionnaire for both the primary teachers and teacher educators. The third phase was concerned

with the development of modified programmes of environmental studies (science) for classes III, IV, and V. A validity assessment questionnaire was used for both the primary teachers and teacher educators.

The findings of the study were: 1. The general programme objectives of teaching environmental studies (science) had not been explicitly stated in the existing programmes. 2. Although there was a mention of a few instructional objectives for each class (III to V), these objectives had not been stated clearly, precisely and in behavioural terms. Most of these instructional objectives appeared to cover the cognitive domain only. 3. All the respondents preferred to see modifications in the instructional objectives and, according to them, each objective should be specific, stated in behavioural terms, with stress on the cognitive, psychomotor and effective development of the children. 4. All content units of classes III, IV and V were suitable to the learners' needs, abilities, interests and experiences. 5. The sequential arrangement of the content units of classes III, IV, and V programmes were not helpful to develop pupils' understanding. 6. The survey showed that, although there was a balance of content between physical and biological sciences in the programmes of classes III and IV, little content balance existed in the class V programmes. 7. Respondents agreed that the programme contents of classes III, IV, and V needed to be modified so as to make them more specific, clear and explanatory. The contents also needed to be psychologically and logically organized in order to maximize learning. 8. For the newly developed programmes, results indicated that every programme objective was an acceptable objective of environmental studies (science) which confirmed the validity of the programme objectives formulated by the researcher. 9. The set of programme objectives had fulfilled the categories of environment education objectives as recommended by the UNESCO conference held at Tbilisi (USSR) in 1977. 10. According to the panel of experts, instructional objectives appeared to cover the cognitive, psychomotor and effective domains. This showed that the modified programmes would help to promote balanced development of the learners' behaviour in the three domains. 11. All the content topics of the modified programmes were up-to-date and suitable to the learners' needs, interests, ability and experience. 12. Responses indicated that the sequential arrangement of the content units would help in developing pupils' understanding. 13. The experts felt that the contents of the modified programmes would offer 'Content balance' between the

physical and biological science units. 14. The teaching-learning strategies suggested in the modified programmes were feasible and practicable for use by teachers in the school. 15. All the experts felt that the suggested instructional media had been taken into account through locally available resources and low-cost materials.

234. GHOSH, R., *A Survey of the Present System of Teacher Education in the USA, the UK (England and Wales) and India—A Study in Comparison*, Ph.D. Edu., Cal. U., 1977

The major objectives were to find out the process of development of teacher education in the USA, UK and India, their differences and the influence of the other two countries on teacher education in India.

The study revealed: 1. All the three countries had a good historical background of progress in teacher education. The USA, after the Second World War, the UK after the passing of the Education Act of 1944, and India after the achievement of independence in 1947, had undergone momentous changes in the field of teacher education. 2. By the middle of the present century teacher education became an integral part of the system of education. It became less static. New experiments were conducted in this field. 3. In India schoolteachers generally came from the lower-middle-class group and suffered from financial problems and were victims of frustration. They did not enjoy much security. In the developed countries teachers were not victims of circumstances, although they hailed mainly from middle-income groups. 4. The curriculum and courses of study in all three countries needed revision and reform. The social and economic status of schoolteachers in all these countries was not beyond criticism. There were similarities as well as differences amongst the systems of teacher education in the USA, UK and India. 5. The teacher-education programme needs dynamism, innovations and reform from time to time.

235. GIANI, R.K., *A Comparative Study of Personality and Achievement Motivation as Determinants of Appeal and Retention of Advertisement among Indian and Foreign Students*, Ph.D. Psy., Pan. U., 1982

The objectives of the study were (i) to study the reten-

tion of advertisements as a function of sex and culture, and (ii) to study the correlation of age, personality, and achievement motivation with retention of advertisements.

The study employed a two-way factorial design (2×4) yielding four conditions (sex \times nationality). An equal number of subjects of each sex was selected from two groups of students—Indians and foreigners. The number of students in each condition was 50. The tools used in the study were the Eysenck Personality Questionnaire (1978) and the Ray Achievement Motivation Questionnaire (1975). The retention of advertisements was measured using recognition scores for 24 pairs of advertisements. The data so collected concerned seven variables, viz., age, extraversion, neuroticism, psychoticism, lie (social desirability) scale, achievement motivation and recognition scores.

The findings of the study were: 1. The foreigners had higher recognition scores than the Indians. 2. Culture emerged as a significant determinant of extraversion and lie (social desirability) scale, with mean scores favouring Indians for extraversion and foreigners for lie scale. 3. Culture did not emerge as a significant determinant of achievement motivation. 4. Girls scored higher on recognition of advertisements as compared to boys. 5. Boys scored higher on extraversion and girls on lie-scale. 6. The correlation between neuroticism and retention of advertisements emerged as significant for the total sample, Indians and boys. 7. Psychoticism was negatively correlated with retention of advertisements. 8. No relationship between achievement motivation and retention of advertisements was found. 9. Age was negatively related with extraversion, neuroticism, and positively related with lie scale and achievement motivation. 10. Neuroticism had positive correlation with psychoticism and recognition scores of advertisements. 11. Psychoticism had negative correlation with lie-scale and achievement motivation. 12. In the case of foreigners, age, extraversion and neuroticism were positively correlated with psychoticism. 13. In the case of Indians, age was not found to be related with any variable. However, extraversion was negatively correlated with neuroticism. 14. On informative advertisements, t-ratio emerged significant with the mean favouring girls rather than boys. 15. Persuasive advertisements appealed to girls more than boys. 16. For coloured advertisements girls had superior recognition than boys. 17. For black and white advertisements girls had higher recognition scores than boys. 18. On Indian advertisements, also, girls had higher recognition scores than boys. 19. For-

eign advertisements appealed more to girls than to boys. 20. Foreigners favoured informative, persuasive, black and white and Indian advertisements. On coloured advertisements, Indians had higher mean recognition scores than the foreigners. 21. In the case of the total sample, recognition mean scores were higher for the persuasive category as compared to informative category. 22. In the case of foreigners, mean scores were higher for informative as compared to the persuasive category. 23. Indians got higher scores on informative rather than the persuasive category of advertisements. 24. For girls, negligible differences were obtained on the informative *vs* persuasive category. 25. Boys had higher mean recognition scores on coloured advertisements than other categories of advertisements.

236. HOSSAIN, M.A., *Personality Differentials of Secondary School Teachers and the Teacher Trainees of Bangladesh*, Ph.D. Edu., Pan. U., 1983

The objectives of the study were (i) to construct and standardize a scale to measure the emotional characteristics commonly present among secondary-level teachers, (ii) to study the nature and distribution of scores of the dimensions of temperament, emotional characteristics and intelligence of secondary-school teachers and the teacher-trainees of Bangladesh, (iii) to study inter-correlations between the dimensions of temperament, emotional characteristics and intelligence of subjects, (iv) to study the underlying factor structure of the dimensions of temperament, emotional characteristics and intelligence of the subjects, (v) to study the main and interaction effects of the categories of subjects and their levels of intelligence on the dimensions of temperament and emotional characteristics, and (vi) to study and compare the dimensions of temperament, emotional characteristics and intelligence, when the subjects were grouped (a) as secondary school teachers and teacher-trainees, (b) on the basis of differences of sex, (c) on the basis of the differences in qualifications, (d) as teacher-trainees of Bangladesh and student-teachers of Chandigarh.

The sample of the study comprised 366 subjects of Bangladesh including 188 secondary school teachers and 178 teacher-trainees. Along with this, 50 student-teachers from the College of Education, Chandigarh, were taken for cross-cultural study. The subjects were administered (i) the Thorndike (1966) Dimensions of Temperament; (ii) the Emotional Characteristic Inven-

tory developed by the investigator; (iii) Raven's (1962) Advanced Progressive Matrices—sets I and II.

The findings of the study were: 1. The scores on the dimensions of temperament, emotional characteristics and intelligence fell within the limits of normal distribution. 2. The inter-correlation between the dimensions of temperament, emotional characteristics and intelligence ranged from -0.168 to 0.290 . 3. The results of factor analysis helped in identifying seven factors on the basis of common elements in each of the factors. 4. The results of analysis of variance revealed that the significant main effects due to the categories of subjects were found in the case of the variables—sociable, cheerful, and anger. Significant main effects due to three levels of intelligence were found in the case of the variables of accepting and happiness. The interaction effects were significant in the case of the variables—cheerful and happiness. 5. The results of the comparison between the secondary school teachers and teacher-trainees of Bangladesh on the dimension of temperament, emotional characteristics and intelligence revealed that the significant differences were found only in the case of certain variables, viz., sociable, ascendant, cheerful, happiness, anger, jealousy and intelligence. 6. The results of sex differences on dimensions of temperament, emotional characteristics and intelligence were observed in the case of variables—tough-minded, shyness, frustration and intelligence. 7. The differences due to qualification were found between science teachers and non-science teachers only on the variable—sociable, whereas the differences between the non-science teachers and the science trainees were found to be significant in case of the variables—ascendant, cheerful, happiness and intelligence. 8. The comparison between teacher-trainees of Bangladesh and student-teachers of Chandigarh revealed that significant differences were found in the case of variables—placid, impulsive, worry, depression and affection.

237. KANCHANA WATTHAYU, *A Study of Achievement Motivation of Secondary School Students of Thailand in relation to Teacher Morale of their Institution*, Ph.D. Edu., SPU, 1985

The objectives of the study were (i) to determine the levels of teacher morale in the secondary schools of Thailand, (ii) to study the level of achievement motivation (n-Ach) of secondary school students studying in schools having different levels of teacher morale, (iii) to

study the proportion of various components of achievement motivation of the secondary school students studying in schools having different levels of teacher morale, (iv) to study the effect of sex, socio-economic status (SES) and anxiety on the score for n-Ach of students belonging to different teacher morale groups of schools, (v) to study the relationship between n-Ach and sex, n-Ach and SES, and n-Ach and anxiety of the secondary school students belonging to different teacher-morale groups of schools, and (vi) to study the relationship between achievement motivation and academic performance of the secondary school students belonging to different teacher morale groups of schools.

The tools used for collecting data were: (i) the Purdue Teacher Opinionnaire (PTO), (ii) TAT standardized by Prayag Mehta, (iii) the Achievement Value and Anxiety Inventory Item developed by Prayag Mehta, (iv) the Socio-Economic Scale constructed by Pathak and Patel. One hundred and eighty teachers selected at random from 12 secondary schools of Educational Region No.1 and 1540 students selected at random from class IX were used as the sample. The tools were administered to teachers and students. The product-moment correlation and t-test were used to draw conclusions. The $2 \times 2 \times 2$ factorial design was used for this study.

The major findings were: 1. The mean n-Ach score of students belonging to high teacher morale schools was higher than that of the students belonging to average and low teacher morale schools. The mean score of students belonging to average teacher morale schools was higher than that of students belonging to low teacher morale schools. 2. The students verbalized the components like Need (N), Instrumental Activity (I), Achievement Thema (Ach. Th.), Anticipation of Goal Success (G_a^+) and Positive Emotion (G^+). Components like Obstacle in the Self and Obstacle in the World (Bp, Bw), Negative Emotion (G^-) and Help by Another Person (NUP) were not verbalized. 3. There was a significant effect of SES and anxiety on the n-Ach level of students in all the schools, whereas sex had an effect on n-Ach of students in average and low teacher morale schools. 4. There was a significant interaction effect of SES and sex in high morale schools. The interaction amongst sex, SES and anxiety was significant and effected n-Ach level of students belonging to only high teacher morale schools. 5. The boys with low SES and high anxiety had the lowest mean n-Ach score in all the three teacher morale schools while the girls belonging to high SES having low anxiety had the highest mean n-Ach score in average teacher morale schools and in low teacher mor-

ale schools. 6. The boys and girls belonging to higher teacher morale schools did not show significant difference in their n-Ach level whereas those belonging to average teacher morale group and low teacher morale group had significant differences. The mean n-Ach score of girls was higher than that of boys in average as well as low teacher morale schools but it was not so in high teacher morale schools. 7. The difference between mean n-Ach scores of high and low SES students belonging to high, average and low teacher morale schools was significant. The mean n-Ach score of high SES students was higher than that of low SES students in all the schools. 8. The mean n-Ach score of low anxiety students was higher than that of high anxiety students in all the schools. 9. There was a significant negative correlation between n-Ach and sex in average as well as low teacher morale schools whereas there was no correlation between the two variables in schools with high teacher morale. 10. There was a significant positive correlation between n-Ach and SES in all the schools. 11. There was a significant negative correlation between n-Ach and anxiety in all the schools. 12. There was a significant positive correlation between the n-Ach and academic performance of students in all the schools. 13. On the whole it was concluded that the difference between mean n-Ach scores of students belonging to high, average and low teacher morale groups could be attributed to the teacher morale irrespective of sex, SES and anxiety level of the students.

238. KHAN, A.A., *A Study of Teaching Geography at the Secondary School Level in Bangladesh*, Ph.D. Edu., MSU, 1985

The objectives of the study were (i) to study the objectives of teaching geography at the secondary school level in Bangladesh, (ii) to examine the suitability of the content in the syllabus and textbooks in geography at secondary school level, (iii) to study academic background, experiences, and workload of geography teachers, (iv) to survey the methods and procedures of geography teaching and evaluation, and (v) to identify the problems related to textbooks, teaching aids, and other instructional inputs as perceived by geography teachers.

The sample of the study consisted of 180 secondary schools of Bangladesh. All the headmasters of the 180 schools, 45 experts and 125 geography teachers, constituted the sample of respondents. The tools of the study

were a check-list, an opinionnaire, questionnaires for geography teachers and geography students, an observation schedule and an interview schedule. Data were collected through record survey, interviews with respondents, administration of questionnaires and observation of classes. The objectives formulated by Bangladesh National Curriculum and Syllabus Committee (1977) were adopted as major criteria to evaluation. Descriptive statistics and qualitative techniques were used for analysis of data.

The major findings of the study were: 1. Till 1983 geography was taught as a compulsory subject in the humanities, and an optional subject in the science, home-economics and agriculture groups at the secondary school stage. 2. Since 1984, this subject was included as a compulsory subject for all the streams. 3. Six out of 16 objectives of teaching geography were found to be surplus after covering all the four objectives recommended by Unesco. 4. The content of geography textbooks and syllabi were not adequate to achieve all the prescribed objectives. 5. The geography teachers were highly qualified. 6. However, one-third of them were untrained for teaching at the secondary stage. 7. Government, urban schoolteachers were more experienced in teaching geography than their rural counterparts. 8. Around three hours per week were devoted to teaching geography in rural areas, whereas around two hours per week were devoted to this in urban areas. 9. On an average, around 50 per cent of the geography teachers taught other subjects like Bengali, English and mathematics also. 10. Most of them were given the responsibility of geography teaching on the basis of their geography studies at the graduation stage. 11. Most of the geography teachers faced problems with regard to laboratory facilities, practicals, supply of teaching aids and training for handling hardware for teaching geography. 12. They found that the syllabus was too lengthy to be covered in the prescribed time. 13. All the teachers used the lecture method of teaching. 14. Discussion, demonstration and assignment methods were used by very few teachers. 15. A written test was the main mode of evaluation. 16. Half-yearly examinations were conducted in almost all the schools. 17. Almost all the school headmasters had problems related to library and laboratory facilities for geography education.

*239. LUTTI NONGNUANG, *A Study of Organizational Climate of Secondary Schools of East Zone of Thailand in the Context of Some Variables*, Ph.D. Edu., SPU, 1988

The objectives of the study were (i) to classify the cli-

mates of secondary schools in the east region of Thailand, (ii) to investigate the leadership behaviour of school administrators in Thailand, (iii) to investigate the teacher morale of secondary school teachers in the east of Thailand, (iv) to examine the role conflict of teachers in secondary schools of Thailand, (v) to investigate the relationship between organizational climate and leadership behaviour in secondary schools in the east of Thailand, (vi) to examine the relationship between organizational climate and teacher morale of secondary school teachers working in the east of Thailand, (vii) to examine the relationship between organizational climate and the role conflict of teachers in secondary schools of Thailand, (viii) to investigate the inter-relationships among organizational climate, leadership behaviour, teacher morale and the role conflict of teachers in secondary schools in Thailand.

The Organizational Climate Descriptive Questionnaire constructed and standardized by Halpin and Croft, the Leadership Behaviour Descriptive Questionnaire developed by Halpin and Winer, the Purdue Teacher Opinionnaire constructed by Ralph R. Bentley and Averno M. Rampel and the Teacher Commitments and Conflicts Questionnaire constructed by Saita Prasertphak were used for collecting data from 406 teachers and 29 administrators from 29 secondary schools randomly selected, regardless of sex, age, teaching experience and qualifications. Analysis of variance was used for analysing the data.

The major findings were: 1. 44.83 per cent of the secondary schools had an open climate, while 55.17 per cent had a closed climate. 2. The principals of all 29 schools exhibited leadership behaviour patterns varying from high initiative structure and high consideration (HsHc) to low initiative structure and low consideration (LsLc). About 31 per cent of the administrators were described as effective leaders and an equal number as ineffective leaders, 13.79 per cent of them exhibited an HsLc pattern of leadership behaviour and 24.14 per cent an LsHc pattern of the leadership behaviour. 3. The administrators who obtained high scores on either consideration or initiating structure had a greater tendency to appear in open tendency climates. The administrators who obtained low scores on either dimension were more likely to be in the closed tendency climate. 4. The 62.07 per cent of the schools had high teacher morale, 31.03 per cent had low teacher morale and 6.90 per cent had average teacher morale. 5. The schools with high teacher morale were more likely to appear in open tendency climates and schools with low teacher morale were more

likely to appear in the closed tendency climates. 6. The teacher rapport with principals of schools with open climate was better than that of those with closed climate. 7. The teachers in schools with open climate were found more satisfied with teaching than those with closed, paternal and controlled climates. 8. The relationship between teachers in schools with open and autonomous climate was better than that of those with closed climate. The relationship between teachers of schools with autonomous climate was also better than that of teachers of those with paternal climate. 9. The teachers in open climate schools were more satisfied with their salary than those in controlled school climate. 10. The teachers in paternal climates were more satisfied than those in closed climates. 11. The teachers in open, autonomous, controlled, paternal and closed climates enjoyed the same level of teacher morale on curriculum issues. 12. The teachers in open school climates were more satisfied with teacher status than teachers in controlled and closed climates. The teachers in paternal school climates were more satisfied with teacher status than those in closed climates. 13. All teachers in different climate categories had the same level of teacher morale on community support to education. 14. The teachers in open school climates were more satisfied with the school facilities and services than those in controlled school climates and closed climates. The teachers in autonomous and paternal climates were also more satisfied with school facilities and services than those in controlled school climates. 15. The teachers in open, autonomous, controlled, paternal and closed climates had the same level of community expectations. 16. Except the teachers of open and closed climates, teachers of all other climates had the same level of total teacher morale. The total teacher morale in open school climates was higher than that of teachers in closed school climates. 17. There was a high level of relationship between teachers' role conflict and organizational climate. All the schools with high conflict fell in the closed-tendency climate, while most of the schools with low conflict were in open-tendency climate. 18. The teachers in closed school climates had a higher level of conflict with the teacher's role than those in open and controlled climates. 19. Teachers in a closed school climate had a high level of conflict with principals than those in autonomous and open school climates. Teachers in paternal and controlled school climates had higher conflict with principals than the teachers in open school climate. 20. Teachers in different types of climate categories had the same level of conflict with students except in open and closed

climates. The students had higher conflict with teachers in closed climates than with teachers in open school climates. 21. The total role conflict of teachers in closed and paternal climates was higher than the role conflict of teachers in open and autonomous school climates.

240. MALL, S.B., *An Investigation into the Policy and Procedure of Procurement and Utilization of Financial Resources in School Education of Nepal*, Ph.D. Edu., Del. U., 1985

The objectives of the study were (i) to study the trends in the financing of education in Nepal's education system, (ii) to examine the current educational funding policies for education in Nepal, (iii) to identify the agencies and the personnel entrusted with policy formulation relating to development of school education, and to examine the system, process and procedure of formulating educational funding policies in Nepal, (iv) to identify the sources for procurement of funds for school education in Nepal, and (v) to evaluate the current resources mobilization as well as utilization approach prevailing in school education in Nepal.

The study was a historical survey. The data were collected from primary and secondary sources. They included information concerning, (a) policies and procedures of financing school education in Nepal, (b) analysis of existing documents and records, (c) field study (survey of schools), (d) interaction through questionnaires with the personnel who were directly or indirectly connected with the financing of education in Nepal. The personnel included 60 educational planners and administrators, 350 school-level personnel and 30 panchayat and social workers. They were administered a questionnaire to collect empirical data about financing of school education in Nepal. The items in the questionnaire were weighted on a six-point scale to determine the priorities.

The findings of the study were: 1. In the case of financing policy for school education in Nepal, most of the respondents suggested that the government should, (a) support the entire schooling cost in remote areas, (b) support primary education in the entire country, (c) bear the schooling cost of female students in the remote areas, (d) bear the schooling cost of disadvantaged students in the entire country, (e) provide free textbooks to all secondary level girl students, (f) provide scholarship to poor but talented students in the entire country, (g) give grants-in-aid on the basis of student achievement

in secondary level schools, (h) give cash awards to meritorious schools on the basis of competition, (i) give complete autonomy to private and boarding schools in financial matters, and (j) bear the entire cost of in-service training for teachers. 2. The agencies which were directly or indirectly concerned with formulating funding policies for school education in Nepal were the National Education Committee, the National Planning Commission, and the planning division of the Ministry of Education at the national level; the District Education Committee at the district level; and the School Management Committee (SMC) at the local school level. 3. Planning was done by the budget section, the programming section, the statistical and manpower section, and the school administration section of the Ministry of Education. 4. Most of the schools faced financial problems due to the delayed release of grants from the government. The major causes of delay as reported by school-level personnel were, (a) executing official approval from higher authorities, (b) procedures for releasing funds, (c) long decision-making time, (d) rules and conditions, (e) complicated and unclear financial regulations. 5. Major sources of income for schools in Nepal were, (a) government grants for teachers' salaries and allowances, (b) tuition and other fees, (c) income from land and property, and (d) local donations, endowments and panchayat grants. 6. The income from the fixed assets of schools, as also from local contributions for schools, declined sharply after the implementation of the National Education Policy, 1971. 7. The budgetary provisions of the primary and lower secondary schools were not satisfactory as there were gaps in the resources. In the case of secondary schools, the financial conditions were a little better. 8. The constraint of resources and their utilization had also been reflected in the institutional cost of school education per pupil. 9. The percentage of total expenditure in schools showed a major share taken by salaries of teachers. It was about 94 per cent, 87 per cent and 85 per cent of the total expenditure in primary, lower secondary and secondary schools respectively. 10. The average teacher cost amounted to 82.1 per cent of the institutional cost. The non-salary expenditure on recurring items amounted to 7 per cent of the total institutional cost. 11. Capital cost was as low as 6 per cent in school-level expenditure. It was even lower in primary schools where the need for new physical facilities was more acute. 12. The cost of health services, drinking water, financial concession to students, social and cocurricular activities, books and magazines, was reported to be only nominal.

241. Md. ANOWARUL AZIZ, *A Study of Science Education Programme in the Secondary Schools of Bangladesh*, Ph.D. Edu., MSU, 1984

The objectives of the enquiry were (i) to study the science education programme of Bangladesh with reference to physical facilities, budget allocations, science teachers, methods of teaching science, evaluation procedures and problems of science teaching, (ii) to study the science textbooks in terms of content, language etc., and (iii) to study the science education practice in selected schools with varied physical facilities.

The investigation was conducted in two phases. In the first phase, a survey was undertaken and the science textbooks were studied. In the second phase, the science education practices in five selected schools with high facility and five schools with low facility were studied. The different tools used were questionnaires and analysis sheets, interview schedules, observation schedules and two attitude scales. The sample consisted of 500 secondary schools, out of 6459 schools in Bangladesh, for survey, and ten selected schools for intensive study.

The major findings were: 1. All schools showed a general shortage of science teachers, except non-government rural girls schools. The shortage of science teachers was more acute in non-government urban schools. 2. The average class size was much larger than the optimum size of forty in all types of schools, except non-government rural girls schools. 3. The supervision system of schools was very weak. 4. Due to their non-science background, the majority of the heads of the schools did not take special interest in science education. 5. The number of periods allotted per week for science teaching was less than the number officially prescribed. 6. The duration of the science periods varied from 40 minutes in about 70 per cent of the schools to 35 and 30 minutes in about 26 per cent and 2 per cent of the schools respectively. 7. About 19 per cent of the schools had no science laboratories. 8. The majority of the science laboratories did not have water, gas and electricity supply. 9. About 7 per cent of the schools had dark-room facilities, 3 per cent had aquaria and 22 per cent, botanical gardens. 10. Only 14 per cent of schools had adequate scientific equipment. 11. Very few schools had audio-visual gadgets. 12. The libraries of all the schools were poor. 13. About 44.6 per cent schools had reasonable finances. 14. Only 6 per cent of the science teachers were M.Sc.s, 87.2 per cent B.Sc.s and about 7 per cent were undergraduates. 15. More than 50

per cent of science teachers had a third division all through their academic career. 16. Only about 39 per cent of the science teachers were professionally trained. 17. The average teaching load of the science teachers was about 34 periods per week. 18. Almost all the science teachers used the lecture method for teaching science. 19. Teaching aids like models and charts were only occasionally used. 20. The discovery and enquiry approaches of science teaching were not followed in any schools. 21. The community resources were not used by science teachers. 22. A large majority of the science teachers evaluated the students through annual and terminal examinations. 23. Monthly and fortnightly tests and class quizzes were not reported from any school. 24. The physical aspects of the science textbooks were rather poor. 25. The science textbooks were prepared in accordance with the objectives of science teaching. The content-organisation reflected the syllabus. 26. The non-government schools with high and low facilities could not appoint well-qualified science teachers because of financial difficulties. 27. Admission to non-government schools was competitive, on merit basis, in both the categories of schools. 28. There was no difference in the teaching procedures in both the categories of schools. 29. In schools of both types, teaching aids remained underutilised. 30. The students of schools of both types had a favourable attitude towards science. 31. The attitude of the science teachers towards their profession was favourable in both categories of schools. 32. The coefficient of correlation between attitude and science achievement was positive in both types of school.

The major educational implications of the findings of this research are: (1) The supervision of science teaching should be streamlined. (2) The supervisor should see that innovative science teaching methods are used by the teachers. (3) Objective-centred evaluation through objective types of tests should be introduced. (4) A planned programme of in-service education of science teachers should be developed.

242. Md. SHAHJAHAN, *A Comparative Study of the Need-patterns of University Students of India and Bangladesh*, Ph.D. Psy., BHU, 1982

This cross-cultural study was undertaken to compare the need-patterns of university students in India and Bangladesh, and to find out if distinct masculinity and femininity patterns of needs were traceable.

For this purpose, a Bengali version of the Tripathi Personal Preference Schedule (a modified EPPS) was developed and scale values were determined for each of its 135 statements in 15 need variables on the basis of administration to a sample of 100 male and 100 female Bangladeshi students, employing the method of successive categories. The scale values for the Indian, Bangladeshi and American samples were highly correlated, indicating their consistency across the three cultures. Using these statements, a forced-choice type scale was developed with each item having a pair of two statements of equal scale value but representing two different traits. Reliability coefficients for each of the subscales were determined on the basis of a large Bangladeshi normative sample, and its validity was established against Kundu's neurotic personality inventory. The main study samples were from established universities in Hindi area and West Bengal in India. Hindi or Bengali versions of the scale were administered. A sample was drawn from the normative sample for the Bangladeshi group.

The results indicated: 1. n-dominance and n-heterosexuality constituted the universal masculinity component and deference, affiliation, succorance, change and order as the universal feminine component. These findings were collated with the findings of an earlier cross-cultural study on Indian and American students. 2. Bangladeshi boys had higher means on n-achievement, n-change and n-heterosexuality than Hindi-speaking boys and the latter had higher n-exhibition, n-intraception, n-dominance and n-aggression. 3. The Bangladeshi female sample had outstanding communal components of n-ach, n-change and n-aggression, and Hindi-speaking females had n-autonomy, n-affiliation, n-interrogation and n-dominance. 4. It was concluded that both male and female Bangladeshi students are more orderly and systematic than their Indian counterparts. Need for change was stronger on the Indian side. The Bengali-speaking Indian females seemed to be less systematic and orderly even in comparison with their Hindi-speaking counterparts.

243. MEHENDIRATHA, R.R., *University Administration in India and the U.S.A.—A Comparative Study*, Ph.D. Management, Kur. U., 1982

The objectives of the study were (i) to apply the theory

of human behaviour to the organization and management of a university for the understanding of human behaviour, (ii) to demonstrate how various organization and management aspects of the institutions of higher learning in general and Delhi University in particular needed serious reorganization in management, and (iii) to critically evaluate and compare shared and non-shared organizational features of a western university (Illinois) and a non-western university (Delhi University).

For the purpose of the study two universities were selected on the basis of their administrative, budgetary and academic similarity. These universities were the University of Illinois and the University of Delhi. These universities had more than one campus, provided instruction and research facilities in a wide range of humanistic, technical and scientific areas. The data were collected through observation, experience, interviewing and review of literature. The Vice Presidents, Vice Chancellors, deans, department heads, faculty members and officers were interviewed with the help of an interview schedule. Further, 200 books, periodicals, articles and monographs concerned with the management of the two universities were reviewed.

The findings of the study were: 1. The objectives of the US universities and those of India were not different. Their primary objectives were teaching, research, generating and disseminating knowledge, and contributing to public services. The actors on the two scenes also looked alike—students, teachers, administrators, legislators and public men. The architects of the university network were the Boards of Trustees, Courts, Executive and Academic Councils, Finance Committees, Research Boards, Grants Commissions or Committees, university officers, such as Board Chairmen, University Presidents, Vice Presidents and many other academic administrators such as deans, department heads, registrars, treasurers, finance officers, etc. 2. Concepts of delegation of authority and management of human resources and decision-making processes looked outwardly the same. Even the pressure groups in the universities were the same, that is, students, teachers, administrators and their unions/associations, political groups, parents, governing boards and government agencies. 3. It was 183 years after the first university (Harvard) was established in 1636 before the Americans thought of reviewing their university performance and changing their governance patterns. Indian universities, established during the British Raj with the limited object of 'Learning to serve the master' have their malfunctioning which would take time to be remedied.

4. Both the universities studied are state universities—Illinois being a part of the Illinois State Higher Education System and Delhi being a part of the Central University System. 5. The University of Illinois encouraged students, teachers and administrators to participate in university affairs. On the other hand, Delhi University had retained the traditional system based on non-participation. 6. The legal status of the University of Illinois gave it full academic autonomy. It could make its own statutes, by-laws, rules and regulations to suit its needs and requirements subject to the approval of the University President and Board of Trustees. On the other hand, Delhi University was a statutory university having more obligations towards government rather than the rights the statute gave it. 7. In the case of the University of Illinois, the Illinois Board of Higher Education prepared, in consultation with the universities in the State of Illinois, a ten-year master plan setting out general educational policies for the state as a whole. The all-campus administration in turn asked its campuses/colleges/departments to prepare their long-range plans. Once the master plan was approved, each university unit had full freedom to work within the general framework of higher education in the state. On the other hand, the autonomy of the University of Delhi was limited to strikes, agitations, protests, and demonstrations by students, teachers and non-teaching staff of the University in support of their demands for autonomy. Since the University Grants Commission controlled the purse of the Delhi University, it had to seek its prior approval for various courses of study, introduction of new courses and organization of other programmes, even though the University Academic Council may have approved the same. 8. The University of Illinois had participative management, collective responsibility and decentralized authority. University goals were achieved through management by objectives, programme evaluation and review and effective management information systems. Programmes, policies and decisions were made and implemented at all functional levels, the department, college and the university as a whole, so long as these were limited to those levels and were not repugnant to the policies of the campus, the state and the country respectively. On the other hand, the Delhi University structure was administrator-oriented. It had decentralization of responsibility and centralization of authority. Programme evaluation and review were non-existent. 9. The Board of Trustees of the University of Illinois exercised final authority over the University for the proper use of funds appropriated by the state and for the proper administration and governance of the Universi-

ty. The Board was responsible to the people of Illinois by whom its members were elected. On the other hand, being a statutory university, Delhi University functioned within the limits of authority fixed by an Act of the central legislature and statutes, ordinances, rules and regulations. Since the provisions of the Act were based on the principle of 'direct and control', there was no single supreme authority which exercised final operational control over the University. 10. At the University of Illinois, the Board of Trustees secured the needed funds for the University through state appropriation, gifts and donations, etc., and determined ways in which these funds would be used and left the execution of those policies to the discretion of the University President. In the case of Delhi University, the financial management was the responsibility of the Executive Council. Apart from this, the University had a Finance Committee consisting of university officers, visitors' nominees and others. Financial authority of the various officers had been specified but it was not exercised by them properly. 11. The President of the University of Illinois was appointed by the Board of Trustees at the recommendation of a search committee appointed by it and consisting of students, teachers and administrators within the University. On the other hand, the Vice Chancellor of Delhi University is appointed by the visitor in consultation with the Prime Minister and on the recommendation of a selection committee. This committee consists of outsiders nominated by the Executive Council and one nominated by the visitor. 12. In the University of Illinois there were three types of programme evaluation—evaluation by accrediting agencies in respective field of specialization, university people from outside the division under evaluation, and self-study by each unit. At Delhi University students' performance is evaluated through periodic tests and annual examinations. Non-teaching staff performance is evaluated by their supervisor. University programmes are also evaluated by the visiting teams of the University Grants Commission once every five years. Teachers, once confirmed in their position after a probation period, continue to work without caring for the development and progress of the University. 13. In the University of Illinois there was two-way communication. The University management used a downward communication system to communicate with the staff via the University Handbook, circulars, reports, briefs of minutes of various meetings, holding meetings periodically, announcements, etc. The staff used an upward system to communicate with the management by way of sugges-

tions, reactions, and opinions published in student and faculty newsletters and bulletins. The University of Delhi had only a downward communication system which resulted in staff and faculty grievances.

244. MIAN, M.A., *Developing a Programme of Curricular Content and Methodology in the Areas of Science and Agriculture Science for Teacher's Training Colleges of Bangladesh*, Ph.D. Edu., Del. U., 1983

The objectives of the study were (i) to formulate the curricular objectives in the areas of science and agriculture science for a secondary teacher education programme, (ii) to select and organize the learning experiences, (iii) to select behavioural skills that needed to be developed through learning experiences, (iv) to select the teaching-learning strategies and materials, and (v) to evaluate the programme so developed and to suggest implementation strategies.

The design of the study was complex and was divided into various phases. viz., a preliminary survey, formulation of curricular objectives for teaching science and agriculture science, identification of learning experiences in the areas of science and agriculture science, selection of skills (behavioural changes), use of effective methodology of teaching and meaningful utilization of new media and evaluation of curriculum and suggestions for their implementation. The personnel used at different phases of curriculum development as respondents were: (i) 100 teacher-educators, (ii) 50 practising instructors, and (iii) 152 training college alumni who were asked through questionnaire/an interview for their opinion on the existing curriculum. The total number of respondents who were selected in the sample was 302. The tool used in the study was a questionnaire-cum-interview schedule at different phases of the study. The questionnaire-cum-interview was concerned with suggestions about formulation of curriculum, selection of learning experiences, etc. The data so collected were analysed with the help of percentage, mean, median, mode, etc.

The main findings of the study were: 1. Regarding suitability of curriculum objectives, it required a modification in existing objectives of science and agriculture science. 2. The majority of experts considered that there was no need to make further division (sub-heads) in the curriculum while few of them (20 per cent) were in favour of more division. 3. Regarding modification of

learning experiences, all the experts were of the opinion that there was no such need. 4. It was concluded with regard to the suitability and feasibility of practical-based activities that there was no need for the deletion and modification. 5. Regarding the suitability of skills, all the experts were of the opinion that there was no need for deletion and modification of skills because these skills were in line with the contemporary trends of teacher education. 6. Regarding possible and feasible teaching-learning techniques in science, all the experts gave negative answers pertaining to teaching-learning techniques. In agriculture sciences, the experts suggested methods, viz., conference method, modified conference method, field experimentation method, demonstration method, programmed learning, project method and laboratory methods. 7. Regarding meaningful utilization of media, a majority of experts did not recommend any new media. Thirty per cent of the experts were for addition of new media in science and agriculture science teaching. 8. The important media were film projectors, CCTV, overhead projectors and film strips.

245. MIYAN, Md. S.H., *A Study of Commercial Education in Bangladesh*, Ph.D. Edu., MSU., 1986

The main objectives of the study were (i) to study the growth and development of commercial education in Bangladesh, (ii) to examine the relevance of the curriculum of the diploma course in the context of the objectives of commercial education, (iii) to study the training status, qualifications and work-load of commerce teachers, (iv) to study the problems of commercial institutes relating to physical facilities, teaching aids, libraries, etc., (v) to study the perceptions of students of commercial institutes with respect to the courses of commercial education, and (vi) to study the employers' opinions regarding the performance of commerce diploma holders.

The study included all the 16 government commercial institutes in Bangladesh. The samples of respondents included all the principals, chief instructors, instructors-in-charge, all the commerce teachers (120), 10 per cent of all students (90), 21 experts and 34 employers. The tools for data collections were information schedules, questionnaires, opinionnaires and unstructured interview schedules. Simple percentages were calculated for the analysis of data. The quantitative data were supplemented by qualitative analysis of further information obtained through unstructured interviews.

The major findings of the study were: 1. From 1965 to 1967, 16 commercial institutes were established in East Pakistan (now Bangladesh). The number remained the same till 1985. 2. The students' enrolment in commercial institutes increased by 78.13 per cent from 1971-72 to 1982-83. During the same period the output increased by 169.25 per cent. 3. The annual intake capacity in all the commercial institutes in 1983 was 1480 which was about one per cent of the S S C graduates of that year. 4. Of the total enrolment in commercial institutes from 1971-72 to 1982-83, girls constituted only 7 per cent. 5. The main objectives of commercial education in Bangladesh was to prepare skilled personnel for office occupations with a view to reducing the unemployment problem in the country. 6. The prevailing curriculum of the diploma course needed modification to suit the job requirements of the commercial education graduates. 7. The students, teachers and experts favoured introduction of a Bachelor of Business Administration course in commercial institutes. 8. The position of teaching equipment and aids was not satisfactory. 9. The methods of teaching used by teachers were traditional. Project or problem-solving methods were not used. 10. About 30 per cent of the teaching posts were vacant. 11. There were only about 7 per cent of female teachers in a total of 120 teachers. Again, seven out of eight female teachers were in the Dhaka Commercial Institute. 12. About 62 per cent of the teachers had no training to operate audio-visual teaching aids. A large number of teachers did not have a business and commercial education background and training. The facilities for in-service growth of teachers were not satisfactory. 13. The physical facilities in the institutes were not adequate. 14. According to employers, the performance of the commercial diploma holders was better than that of non-diploma holders.

246. MOHEBALI, A., *Socio-Psychological Correlates of Mental Health in India and Iran*, Ph.D. Psy., Agra U., 1982

The objectives were (i) to study the impact of cultural differences, generation gap, sex, and mental health on six types of value orientation, four modes of frustration and attitude towards social change and social distance, (ii) to study the interaction between culture and sex, culture and generation gap, culture and mental health, generation gap and sex, generation gap and mental health, sex and mental health in as many as twelve factorial ex-

periments, (iii) to study the interaction among culture, generation gap and sex, culture, generation gap and mental health, and generation gap, sex and mental health, while influencing value-orientation, frustration modes and attitudes, and (iv) to study the interactions among culture, generation gap, sex and mental health while influencing value orientation, frustration modes and attitudes.

The sample comprised 480 subjects (240 Indian and 240 Iranian). They belonged to both sexes and different levels of mental health. The PGI Health Questionnaire developed by N.N. Wig and S.K. Verma was used to measure mental health. The split-half reliability coefficient was 0.92. The Value Orientation Scale by N.S. Chauhan was used to measure value orientation. The Attitude Scale Toward Social Change and Social Distance developed by N.S. Chauhan was used to measure attitude towards social change and social distance. The Frustration Scale by N.S. Chauhan and Govind Tiwari was used to measure frustration. The data were analysed with the help of factorial design analysis of variance and Duncan's Range Test.

The findings were: 1. As a whole, Indians had more scientism value in comparison with Iranians, whereas Iranians had more traditionalism and venturesomeness value in comparison with Indians. 2. Sex did not mean differences in biological aspects only but was also a potential psychological variable. Males differed significantly in social relations, rational decisions, change appreciation and risk-taking tendencies, whereas females differed in democratism in comparison to their counterparts. 3. Indian females surpassed Indian males as well as Iranian males and females in the value of democratism. 4. An excessive magnitude of scientism, traditionalism and democratism significantly promoted the symptom of neuroticism, whereas risk-taking tendencies demoted it. 5. Adolescents showed a more scientism attitude and sometimes a traditionalism attitude. 6. Adults in comparison with adolescents tended to be more democratic. 7. The maximum resignation frustration was seen in Indians, whereas the maximum regression was seen in Iranians. 8. Females tended to be aggressive, whereas males were regressive and resignative. 9. The expression of frustration in aggression led to balanced mental status; whereas that in regression resulted in neuroticism. 10. Adolescents of India and Iran both had more aggression-frustration in comparison with their adult counterparts. 11. Indian females had predominantly more aggression whereas Iranian females had regression. 12. Indians, in spite of

differences in age and sex, had a more positive attitude to social change than the Iranians. 13. Indian females, in keeping with Indian culture, had a less social-distance attitude.

247. NAYAR, U., *Women Teachers in South Asia*, Ph.D. Edu., JMI, 1984

The main objective of the study was to examine two major dimensions of women teachers' role structure—the occupational and familial—and the extent to which the definition and combination of these two roles differed in varying socio-economic and cultural extents among women teachers at three levels of occupation, viz., primary, secondary and university, and at three stages of development of women's education. In this comparative study of the roles and status of women teachers in Sri Lanka, India and Nepal, the following three sets of issues were explored: (i) Social mobility—occupational mobility; status of women (or attitudinal mobility), (ii) definition of the teacher's role and occupational role commitment, and (iii) combination of occupational (teacher) role and familial (women) role congruence, compatibility, conflict.

The study was conducted in eight primary, six secondary and three university level institutions in each of the three countries capital, viz., Kathmandu, Delhi and Colombo, and in some primary and secondary schools of Jaffna, Anuradhapura, Polonnarwva and Kandy in Sri Lanka and Pokhra and Biratnagar in Nepal. Two tools were used in this study. (i) An adaptation of the questionnaire prepared by Nayar (1974), the first part consisting of 27 items was related to personal data and background of the respondents, the second being related to attitude and preferences, and the third with items of three point scales, i.e. agree, disagree and no opinion, under the heading of 'All about Woman'. (ii) An informal, unstructured interview schedule covering all the aspects of the topic was carried out with 180 respondents of the three countries. Out of these, 60 cases were chosen for systematization and case study.

Some important findings of the study were: 1. Women teachers did not exhibit any unidirectional occupational mobility on account of their varied socio-economic origin. Sri Lanka had the highest upward mobility among women teachers and the lowest proportion of those who were downward mobile. Occupational mobility was low among Indian women teachers and they were proportionately more downward mobile. Nepal

had the highest proportion of downward mobile respondents but offered more upward mobility compared to India. 2. The occupationally upward mobile tended to show better work role internalization and commitment, were less traditional and had higher status as women and tended to combine their occupational and familial roles with more ease. 3. The majority of respondents reported very positive parental attitudes towards the education of girls and relatively greater enthusiasm for their taking employment. 4. Women teachers had higher status as women in their societies than before in terms of age at marriage, control over reproduction, family decision-making, personal autonomy and identity. 5. The group as a whole showed a fair amount of commitment to teaching and it was seen as the most respectable profession for women. 6. A positive relationship was found to exist between women's educational development level, the occupational and the educational levels of women teachers and the mobility of women teachers, their status as women, egalitarian sex role attitudes, high occupational role internalization, commitment and professionalization and higher adjustment and low conflict between and within the occupational and familial roles of women. 7. Mobility, occupational role commitment and conflict were found related to one another. The occupationally upward mobile were high on status, had relatively more egalitarian sex role perceptions, showed greater work role internalization and lower role conflict. This relation was found to be a linear one and showed a fairly continuous trend, indicating directions for change in the role structure of South Asian educated women, especially women teachers. The discontinuities arose on account of personal socio-economic and cultural variations. Women from egalitarian social groups (with egalitarian socialization patterns) had a higher status and egalitarian sex role attitudes, higher work role commitment, lower conflict, regardless of the educational development level or the occupational level of the respondents. Women from very conservative, inegalitarian groups also developed such positive characteristics at the upper reaches of the profession or educational level. 8. With the rise of occupational and occupational levels, the ascriptive factors of religion, caste, ethnicity and sex receded and a professionally oriented middle-class culture emerged in which women in South Asian societies became less unequal than before.

248. NURUL ISLAM, A.K.M., *A Study of Some Factors Affecting the Growth of Free Universal Compulsory Primary Education in Bangladesh since 1947*, Ph.D. Edu., Mys. U., 1983

The study was aimed at (i) finding out some basic factors which affected the effective growth of universal compulsory primary education in Bangladesh since 1947, (ii) finding out ways and means to improve upon the existing primary education system, and (iii) designing a workable plan for introducing and implementing free universal compulsory primary education as a time-bound programme. The hypotheses formulated were: (1) Statutory provision for universal primary education, better physical facilities and higher expenditure on primary education result in increased enrolment. (2) Better classroom accommodation and better furniture improve attendance. (3) Improved health and sanitary conditions help increase regularity of attendance. (4) An activity curriculum results in better learning. (5) Government schools attract more children. (6) A higher percentage of trained teachers produces better attendance figures in schools. (7) Frequent visits by the inspectors of schools improve the teaching-learning process. (8) Participation of local people in school management results in increased enrolment and attendance. (9) Provision of free distribution of text-books, school uniforms, educational equipment, mid-day meals, result in improved and sustained attendance in primary schools. (10) Poverty of parents and illiteracy of guardians considerably affect the enrolment and attendance of school-going children.

The study was of a descriptive type, primarily based on the survey technique. The data regarding the statistical and historical aspects of the study were collected from both primary and secondary sources, depending upon their easy availability, and the corroborative evidence for consideration of certain hypotheses was collected by administering three types of questionnaire/opinionnaire specially designed for the purpose to three different groups: (a) head teachers of primary schools, (b) experts in primary education who were directly involved, and (c) experts in primary education who were indirectly involved. In addition, a structured interview schedule with both open and closed-ended questions was administered to the guardians of the children of school-going age. The samples for the first three groups were selected through a stratified sampling technique. In the case of the fourth group of guardians, the sample was selected randomly, both from rural and urban areas, of all the four Divisions in Bangladesh, viz.,

Dhaka, Rajshahi, Khulna and Chittagong. The sample consisted of 195 head teachers, 83 experts in primary education who were directly involved, 90 experts in primary education who were indirectly involved, and 100 guardians of the children of school-going age.

The major findings were: 1. The factors which hampered the proper growth of universal compulsory primary education in Bangladesh were poverty and illiteracy of parents and guardians; inadequate classroom accommodation and physical facilities in primary schools, inadequate number of trained teachers and number of schools; lack of furniture, lack of health and sanitary conditions, and lack of cooperation between the government and the local people. 2. Hypotheses regarding trained teachers and participation of local people could not be confirmed.

249: PANT, Y.R., *People's Participation in Education: A Socio-personal Study of Village Communities of Nepal*, Ph.D. Edu., Pan. U., 1984

The objectives of the study were to examine (i) the historical perspective and environmental setting of community participation in education, (ii) people's involvement in informal participatory activities in the development of education in the community and their perception of the local school programme, (iii) the modalities of school involvement in the village communities, (iv) the patterns and practices of monetary and labour donations in the provision of educational facilities in the community, (v) the nature of participative forums in education and their working, (vi) people's involvement in participative forums, (vii) people's performance and participation in local participative forums in education, and (viii) the socio-personal factors related to participation in education.

The sample of the study included heads of the households and members of the school committees. A group of 80 respondents from the hill locality and 70 from the Tarai locality of Nepal formed the sample of study. Besides these general respondents, all the school committee members belonging to each locality were also included in the study. The data were collected with the help of a preliminary survey of localities, a study of relevant documents, interviews and observations. The documents comprised mainly the publications of government and related agencies such as education acts, rules

and gazettes, reports of different education commissions, statistical reports. Interviews comprised face to face interview with the help of two interview schedules, one for general respondents and the other for school committee members. Further, people were observed through visits to all schools and panchayats of the two localities. For analysis of data and drawing conclusions the chi-square test and rank difference correlation were used.

The findings of the study were: 1. The structure of participating institutions did not provide any meaningful opportunity for broad participation. There was an information gap between the institutions and the common man. People at large had no opportunity to express their views through formalized forums of participation. The institutional forums had only assisting roles in the mobilization of local resources in the form of donations of money as well as labour. They did not have any mandatory powers in the management of local schools. 2. Poor and illiterate people had been deprived of the opportunity to take advantage of the educational facilities in the community. The existing educational institutions had no alternative programmes to suit local conditions. The poor people could not afford to spare their children from domestic work. The significant association between socio-personal factors like education level, role position and landholding substantiated this finding. 3. The most extensive participation of the local people was in the implementation of educational facilities in the community. Even the landless and the poor people had equally participated in donation campaigns, especially labour donation irrespective of opportunities for taking advantage of local educational facilities. 4. Involvement of local people in the decision-making and implementation of educational facilities in the community presented a more or less similar picture. However, greater involvement in the Tarai showed that the Tarai people had, comparatively, benefited more from educational facilities. But this was related to the economic condition of these people rather than the structure of the educational programme. 5. In this traditional society, education was playing the traditional role of perpetuating the existing structures and values. 6. Most people in the village communities considered the school committees as moderately effective in the management of their respective schools. 7. People's preferences regarding the nature of membership were largely in favour of elected membership although most of them had no desire to acquire membership nor to participate in decision-making at the school committee level.

250. PATTRAMON JUMPANGERN, *A Study of Social Maturity of Teachers-College Students of Western Region of Thailand, in the context of Some Psycho-Socio Factors*, Ph.D. Edu., SPU, 1986

The objectives of the study were (i) to prepare a reliable and valid tool to measure social maturity, (ii) to study the social maturity of teachers-college students of the Western Region of Thailand coming from urban and rural areas, (iii) to study the social maturity of teachers-college students of different sex, (iv) to study the social maturity of teachers-college students of different age groups, (v) to study the social maturity of teachers-college students in the context of their SES, (vi) to study the social maturity of teachers-college students in the context of certain personality traits, namely, (a) dominance vs. submission, (b) leadership, (c) radicalism vs. conventionalism, (d) neuroticism, (e) emotional stability and (f) suggestibility, and (vii) to study the social maturity of student-teachers in relation to their personal, social and family adjustment.

For collecting the data for maturity, the researcher constructed a social maturity scale by following the mixed model technique. Initially 95 statements were constructed keeping in view the behaviour of socially matured individuals. Out of these statements, by applying various techniques of item discrimination, 60 statements were selected for the final form. The age norms were established over a sample 669. The reliability of the scale established by various methods ranged between 0.78 and 0.92. The concept and concurrent validity were established. The other tools used for collecting data were SES by A.S. Patel and Personality Inventory also by A.S. Patel. For studying social maturity in relation to certain personality traits, a $2 \times 2 \times 3$ factorial design was used. Analysis of variance was used for verifying the hypotheses.

The major findings were: 1. The teachers-college students coming from urban areas were found to be more matured than those coming from rural areas. 2. The male student-teachers were found superior to the female student-teachers. 3. Student-teachers of age group 25-29 were more matured than student-teachers of age group 17-20 and 21-24. 4. The student-teachers with high SES were more socially matured than those with low SES. 5. Students with dominance personality traits were more socially matured than those having submissive personality traits. 6. Students having high leadership traits were more socially matured than those having low leadership traits. 7. Students having radicalism

personality traits were more socially matured than those having conventionalism traits. 8. Students having low neuroticism were more socially matured than those having high neuroticism. 9. Students having high emotional stability were more matured than those having low emotional stability. 10. Students having good family adjustment were more socially matured than those having poor family adjustment. 11. Students having good personal adjustment were more socially matured than those having poor personal social adjustment.

251. PHANGCHAM, P.M.C., *Higher Education and Rural Development in Thailand with special reference to Agricultural Education*, Ph.D. Edu., Del. U., 1985

The objectives of the study were (i) to study the development of Thai education at all levels, especially higher education from the historical aspect from the 19th century to the present day, (ii) to study the role of institutes of higher education in rural development, (iii) to study the trends of innovation in higher education for development, both internal and external, (iv) to study the educational technology utilized in the development and improvement of education, and the use of the natural and human resources for national and rural development, (v) to collect information from existing institutes of agricultural education, especially in North-eastern Thailand, regarding principals, directors and heads of the departments concerned with agricultural development, leaders of villages and members of community development committees in particular areas, (iv) to evaluate the programmes of rural development, including rural development plans and national education development plans, and (vii) to study obstacles confronting and problems of educational services and rural development in Thailand.

A sample of 470 subjects was taken, out of which 200 (50 principals, 50 heads of departments and 100 lecturers of the agricultural colleges), were administered a questionnaire and 270 subjects (heads of villages and members of the village committee in villages in Thungchai sub-district of North-eastern Thailand) were administered a second questionnaire. Apart from questionnaires, the interview technique was also followed by the investigator for an in-depth study. These responses on questionnaires and interview were analysed, using descriptive statistics.

The main findings of the study were: 1. Monarchist

education prevailed for at least six centuries from the Sukhothai Kingdom to the Rattanakasin Kingdom (13th to early 20th century). During this period, education was transmitted by Buddhist monks, who had been playing an important role in Thai society. 2. The structure of education was divided into three levels, namely, (a) first level consisting of three years of study providing basic knowledge, (b) second level covering three years of study which provided general knowledge and skills to enable people to earn a living, (c) third level covering three years of study providing high level of skills and knowledge in Thai, English, science, history and geography. Pali was compulsory for all students at this level. 3. During the period, 1902-31, high schools, colleges and one university were established. A school for prospective officers in the royal households and administrative officers in the provincial towns was established in 1902. The school was reorganized as 'The Civil Servant School' in 1910. This school offered courses in agriculture, commerce, education, engineering, foreign affairs, medicine and public administration. 4. During the period 1932-60, there was the successful bloodless revolution of 1932 against the old absolute monarchy. The structure of Thai education changed to a 6+4+4 pattern. Agricultural education schools and technical education schools were established in all parts of the country to improve and develop education in these fields. Three agricultural extension centres were set up in the northern, north-eastern and southern regions. 5. The post-1960 period had been the period of economic, social, educational and technological development. The first National Education Development Plan (1961-66) was introduced in 1961. Two rural universities were established, one in Chiang Mai province in the north and another at Khonkaen province in the north-eastern region. Higher education was extended to rural areas and the National Institute of Development Administration (NIDA) was established in the last year of the plan. 6. During the Second and Third Plans (1967-71 and 1972-77), four institutions of higher education were established. One rural university was opened at Songkla in the south and two in central Bangkok. The education pattern was changed from a 7+3+2+3 to a 6+3+3+4 pattern. 7. During the Fourth Plan (1977-81), 21 agricultural colleges were established in the rural areas to extend agricultural education at higher level. 8. Shortage of textbooks, and insufficient library facilities were experienced in agricultural education. 9. In the field of vocational education, the problem of shortage of qualified teachers was faced. 10. A rural doctors

training programme for rural medical service was being run in coordination with various rural institutions of higher education. 11. Agricultural education had greatly improved and developed even though there were certain problems regarding communication and transportation. 12. There was lack of coordination among various organizations, specially agencies responsible for rural development programmes. 13. There were innumerable rural development programmes carried out by various agencies, both government and religious.

252. PHONGCHUN NUTHEP, *A Study of the Impact of Leadership Behaviour Pattern of the Principals on the Teachers' Morale of Secondary Schools in Eastern Region of Thailand*, Ph.D. Edu., SPU, 1985

The objectives of the study were (i) to identify and study the leadership behaviour of the principals of secondary schools in the Eastern Region of Thailand, (ii) to identify and study the morale of teachers in secondary schools in the Eastern Region of Thailand, (iii) to study the factors affecting the morale of teachers, (iv) to study the effect of leadership behaviour styles upon the morale of teachers in secondary schools, and (v) to study the morale of teachers in relation to their qualifications, sex, age and salary and size of the school.

The tools used for collecting the data were the Leadership Behaviour Description Questionnaire (LBDQ) revised by Halpin and Winer and the Purdue Teacher Opinionnaire (PTO) devised by Rampel and Bantley. The tools were administered to principals of 40 secondary schools, 933 teachers and 998 student leaders. The $2 \times 2 \times 2$ and 10×4 factorial design were used to study the effect of factors on teachers' morale. The ANOVA, t-test, chi-square test and Newman-Keul's Sequential Range Test were used for testing the hypotheses.

The major findings were: 1. The highest morale score was elicited by principals with low initiating structure and high consideration. The middle rank was held by those having high initiating structure and high consideration. The lowest score was elicited by principals with high initiating structure and low consideration pattern. 2. The principals who possessed a leadership pattern with the dimension of consideration tended to be perceived by their teaching staff as morale boosters for the school. 3. A significant relationship existed between teacher morale and the principal's high initiating structure. 4. Initiating structure and consideration were

important for effective leader behaviour as they helped to raise or induce teacher morale. 5. A significant relationship was found between leadership behaviour and the combined independent variables of teacher's sex, salary, qualifications held, age and the size of the school. The female teachers, teachers in the high salary slab and with higher qualification and initial higher age yielded higher morale under low initiating, high consideration leadership pattern than other categories.

The study implied that if a high level of teacher effectiveness and satisfaction is to be achieved, educational administration must give a great deal of consideration to the teacher morale. The training of teachers, and training of principals for effective leadership, should be initiated in right earnest.

- *253. PIYAVADEE BOONSATHRON, *A Study of Creative Thinking Ability of Students of Higher Secondary Schools of Bangkok in the Context of Some Psycho-Social Factors*, Ph.D. Edu., SPU, 1988

The objectives of the study were (i) to prepare a creative thinking ability test, (ii) to study the main effects of sex, grade and socio-economic status on the students, and (iii) to study creative thinking ability (CTA) in relation to students' adjustment, anxiety, neuroticism, radicalism and students' self-done activities.

The investigator constructed and standardized a creative thinking ability test over a sample of 543 students of class X and XI of Bangkok. The reliability coefficients established by the test-retest method, split-half method, Rulon Formula and Flanagan formula were 0.79, 0.80, 0.82 and 0.78 respectively. The concurrent validity and congruent validity were established. They were found to be 0.66 and 0.65 respectively. Percentile norms were established for classes X and XI. Other tools used for collecting data were, (i) the Adjustment Problem Inventory by J.C. Parikh and M.T. Patel, (ii) the Test Anxiety Scale for Children by H.K. Nijhawan, (iii) the Neuroticism Scale and Radicalism vs Conventionalism Scale by A.S. Patel, (iv) the Self Done Activities Scale by I.A. Vora, and (v) the Socio-Economic Scale by B.V. Patel and I.A. Vora. The 2x2 factorial design was adopted to study the effect of independent variables.

The major findings were: 1. There was no significant difference between the mean performance of boys and girls included in the sample. 2. There was no difference

in creative thinking ability between students coming from high SES and low SES. 3. The students of grade XI had higher creative thinking ability than those of grade X. 4. The students with high adjustment level were superior to students with low adjustment level on creative thinking ability. 5. The students of grade XI and grade X were almost the same as far as creative thinking ability was concerned. The interaction effect of adjustment and grade was highly significant. 6. The students with low anxiety level and higher creative thinking ability than students with high anxiety level. The students of grade XI were superior in creative thinking ability to students of class X. The interaction effect of grade and anxiety was significant. 7. Students having a low neuroticism level were more creative than students with a high neuroticism level. The interaction effect between grade and neuroticism was significant. 8. The students of the high radicalism group and low radicalism group were almost the same as far as creative thinking ability was concerned. The interaction effect between grade and radicalism was not significant. 9. The students having high self-done activity level had more creative thinking ability than students having low self-done activity level. The interaction effect between grade and self-done activity was not significant. 10. Students coming from high SES and low SES groups were almost the same as far as creative thinking was concerned. The interaction effect between grade and SES was not significant. 11. Certain characteristics of creative children were: (i) courage in convictions, (ii) curiosity, (iii) independence in judgement, (iv) independence in thinking, (v) preoccupation with tasks, (vi) strongly intuitive, (vii) unwillingness to accept routine solutions of problems, (viii) willingness to take risks, and (ix) imaginative.

254. PRACHA, R., *Administrative Problems as Perceived by Physical Education Administrators in relation to their Leadership Behaviour in Thailand*, Ph.D. Phy. Edu., Pan. U., 1985

The objectives of the study were (i) to examine and compare the administrative problems of physical education administrators in the departments of physical education in the universities and the physical education colleges in Thailand, (ii) to examine and compare the leadership behaviour of physical education administrators, and (iii) to study the differences in administrative problems as perceived by high and low groups of administrators on the basis of total leadership behaviour.

The study followed a descriptive survey method. A sample of 70 administrators from all the seven universities having departments of physical education and 16 colleges of physical education were included in the study. The following tools were used for data collection: (i) the Administrative Problems Questionnaire, and (ii) the Halpin and Winer Leadership Behaviour Description Questionnaire (LBDQ, 1952). The data were analysed with the help of measures of central tendency and t-ratio.

The findings of the study were: 1. University teachers were mainly involved in teaching and research work and were not easily available to students during the scheduled time-table. 2. The administrators expected university teachers to pursue academic excellence more steadfastly than they expected college teachers to do. 3. The five sub-groups of the problem, viz., subject teachers; order and discipline amongst the teachers; relations of the department of physical education with the department of general education; recruitment, selection and transfer of teachers; and morale of the teachers, were perceived both by university and college administrators as not serious problems. 4. University administrators faced problems in terms of classrooms, insufficient toilet, play-ground and sports facilities. 5. The inadequacy of many physical education and sports facilities resulted from the lack of an in-depth study of campus needs based on current conditions and future requirements. 6. Due to adolescent age at the college level and mature age at university level of students, less disciplinary problems were perceived at the university level than at the college level. 7. The differential characteristic features of college and university facilities were the reasons for the differences in perception of college and university students regarding curriculum, textbooks, teacher handbooks, extra-curricular activities. 8. The university administrators' problems were more serious with regard to facilities, equipment and teaching aids. 9. The problems relating to 'department and community relations' and department finance were perceived at a less serious level, both by university and college administrators. 10. The college administrators had scored high both in initiating structure and consideration as well as in total leadership behaviour. They had high leadership qualities.

255. PRADHANANGA, G.B., *Evaluative Study of Elementary Teacher Education Curriculum of Nepal*, Ph.D. Edu., Pan. U., 1986

The objectives of the study were (i) to examine the syllabi

of elementary teacher education in Nepal, (ii) to investigate the instructional programme of elementary teacher education, (iii) to analyse coordination of different components of the functional curriculum for elementary teachers, (iv) to study the evaluation system, the product and process aspect of elementary teacher education, (v) to study the attitude of prospective teachers towards the elementary teacher education programme, and (vi) to study the application of knowledge, skills and attitudes attained through the teacher education programme in actual classroom situations of elementary schools in Nepal.

This was an evaluative study and included the assessment of objectives in the light of composite external criteria, evaluation of the teaching-learning process and the content of the courses. In order to attain the objectives of the study, different samples were drawn from different target populations concerned directly or indirectly with elementary teacher education programme. The sample included 18 administrative personnel, 8 educational experts, 14 school headmasters and 20 campus teachers and 64 student-teachers. The tools used in the study were: (i) the Opinionnaire for the Role and Other Aspects of Elementary School Education and Elementary Teacher Education, (ii) the Scale for Rating Objectives of Education Courses, (iii) the Scale of Attitude about Various Aspects of Elementary Teacher Education Curriculum, (iv) the Job-Satisfaction Scale, (v) the Baroda General Teaching Competence Scale, (vi) the School Observation Form, and (vii) the Campus Observation Form.

The findings of the study were: 1. On the list of expectations from the elementary school curriculum, highest importance was assigned to practical life situations followed by moral and academic aspects of the curriculum. 2. As the indicator of quality of elementary school education, the 'availability of teachers' followed by teachers' conduct, proportion of trained teachers in the teaching staff and the physical facilities at school were highly preferred. 3. For making elementary-teacher education more effective, the first three preferences were given to (a) the field-needed orientation, (b) teaching of professional courses in relation to actual classroom situations in schools and (c) linking theory courses with actual practice in pedagogy. 4. The elementary-teacher education curriculum consisted of 14 papers in the area of social studies, out of the 76 sub-units of social studies in elementary school education. Only 47 were covered fully and three partially by the elementary teacher education curriculum in social studies. 5. It was suggested

that the objectives of the courses in elementary-teacher education needed to be changed. 6. Regarding the objectives of the course, 'Elementary Educational Psychology', it was rated low on the criteria of 'desirability', 'correspondence with content' and 'realization through instruction'. 7. The majority of campus teachers felt that the present weightage of professional education was inadequate, course-content was heavy and was not defining itself properly and specifically. 8. It was opined that specialization courses offered separately in different areas did not guarantee mastery in the subject matter required to teach the subject. 9. The trained elementary-school teachers did not find the proficiency certificate in education contributing to their professional growth. 10. Experience of extra-curricular activities did not help trained teachers to organize similar activities in school. 11. The practice teaching experience was reported to be useful for teaching-skill development. 12. The student-teachers found courses of study in curriculum to be interesting but were dissatisfied with working conditions on the campus. 13. The student-teachers considered practice teaching as an important component of the curriculum and took it as a bridge between training and the teaching job. 14. The level of job-satisfaction was found to be independent of the teacher's status in relation to training. 15. The trained group was found superior to the untrained group in relation to classroom teaching competence. 16. The training contributed positively towards teaching skills like questioning pattern, pupil participation, class management and pupil responding and initiation. 17. Physical facilities were found severely lacking although the schools had their own buildings. 18. None of the schools maintained any tradition of parents-teachers meetings and that of forwarding students' progress reports to parents. 19. Educational planning at campus level was observed in all the campuses but it was done for final evaluation at the end of the course. 20. Students' organizations were functioning and were active in group politics rather than collective and cooperative educational activities. 21. Educational administration did not seem democratic and regular staff meetings were not encouraged.

256. PRAMUA UNCHAI, *An Investigation into the Attitude of the Teacher Educators towards the Programmes of Non-formal Education Leading to Lifelong Education in Thailand*, Ph.D. Edu., SPU, 1987

The objectives of the study were (i) to construct a tool to

measure to attitude of teacher educators towards the non-formal education (NFE) programme, (ii) to study the attitude towards the NFE programme of teacher-educators possessing different levels of creativity, (iii) to compare the attitude towards NFE programme of teacher-educators with different levels of experience, and (iv) to compare the attitude towards the NFE programme between male and female teacher educators.

The investigator constructed and standardized an Attitude Scale to measure attitude towards the NFE programme by following the Likert method of Summated Ratings. Initially, 153 scale items were prepared and, on the basis of t-value, 60 items were selected for inclusion in the final form of the scale. The reliability of the scale as determined by the test-retest and split-half methods was 0.93 and 0.97 respectively. The stanine scores were determined for the study of the other variable, the Creativity Test by Donald W. Mackennan was adopted. Its reliability was established by the test-retest method and was found to be 0.83. The $3 \times 2 \times 2$ factorial was adopted and analysis of variance technique was used for testing the hypotheses.

The major findings were: 1. The teacher-educators possessing high creativity level were significantly better in their attitude towards the NFE programme than those possessing moderate creativity level. 2. The teacher-educators possessing moderate creativity level were significantly better in their attitude towards the NFE programme than those possessing low creativity level. 3. Male and female teacher-educators possessing high creativity did not differ in their attitude towards the NFE programme. 4. Teacher-educators having more experience did not differ significantly from those with less in their mean attitude scores. 5. There was no interaction between creativity level, sex and experience. 6. There was a definite linear trend in attitude towards NFE across the creativity level. This confirmed the trend that the teacher-educators having high creativity level had a more favourable attitude towards NFE than those with other creativity levels.

257. PRASAD, B., *Content Analysis of Dreams—A Normative Study of Dreams of Indian College Students and a Cultural Comparison with American College Student Norms*, Ph.D. Psy., And. U., 1980

The objective of the study was to establish dream norms of Indian college students and to compare these norms for cultural difference with those of American college

students which had already been established by Hall and Van (1966).

The sample of the study consisted of 1000 home dreams collected from 100 students of Andhra University (50 males and 50 females) whose age ranged from 18 to 25 years. Each student contributed ten sequential dreams of 50 to 300 words in length. Using the method of content analysis, the dreams were analysed by empirical and theoretical contents. The empirical content classes included settings and objects, characters and their actions and interactions with each other, while the theoretical content classes included psychoanalytical concepts like oral incorporation, oral emphasis and castration anxiety.

The findings of the study were: 1. A male subject's dreams took place in familiar outdoor settings, involving unfamiliar male characters and objects like weapons. The dreamer's social interaction with these characters was physical aggression. Friendly interactions were limited to the verbal aspect only. 2. A male subject's dreams contained more misfortunes to the dreamer; however, the prevailing emotion was happiness. A female subject's dreams usually involved both male and female familiar characters interacting in an unfamiliar indoor setting and objects like face, hair, ears. The dreamer's non-physical aggression was depicted towards these characters. Typical friendly interactions were inviting, dating and the like. Verbal activities were dominant in the dreams. Though the female subjects dreamt of misfortunes to other characters, the prevailing emotion was unhappiness. 3. An Indian subject's dreams took place in familiar outdoor settings involving familiar characters, that is, family members and relatives. Indians dreamt more about witnessed aggression and dreamer-reciprocal friendliness. 4. An American subject dreamt more of strangers, interacting in an unquestionable indoor setting. The dreamer was usually involved in aggressive interaction and was mutual in his friendly interaction. 5. While an Indian dreamer's activities were characterized by location change and visual activity, an American dreamer's activity was characterized by movement and cognitive activity. 6. The American dreamt of success and failure to himself alone. On the other hand, the Indian dreamer's achievement outcomes, such as success and failure, were viewed as resulting to other characters.

258. PUCHONG, W., *An Investigation into Attitudes of Participating People from Community towards Functional Literacy and Family Life Planning (FLFLP) Programme in Central Part of Thailand*, Ph.D. Edu., SPU, 1985

The objectives of the study were (i) to construct a reliable and valid attitude scale to measure the attitude of participants towards the FLFLP programme, (ii) to study whether there were sex differences with regard to attitudes towards the FLFLP programme, (iii) to compare the attitudes of participants belonging to different occupation groups towards the FLFLP programme, (iv) to compare the attitudes of participants of different age-groups towards the FLFLP programme, and (v) to compare the attitudes of participants of rural and urban areas.

For studying the attitudes of participating people from the community, an attitude scale was constructed and standardized following the Likert technique. Out of 119 statements, 66 were selected for inclusion in the final form of the scale on the basis of a t-test. The reliability of the scale was established by the test-retest method, split-half method, Rulon formula and Flanagan's formula. The concurrent validity was established by correlating the scores on the scale with the teacher's opinion about attitudes towards the FLFLP programme of participating people. The sample consisted of 818 people of which 444 were from urban and 374 were from rural areas. The sample included men and women from eight provinces of the central part of Thailand. To examine the hypotheses, the t-test was used.

The major findings were: 1. The reliability of the scale as found out by different methods, ranged from 0.88 to 0.86. 2. The concurrent validity was found to be 0.708. 3. The participating people from urban area had a more favourable attitude towards the FLFLP programme than the rural participants. 4. The farmer participants had a more favourable attitude towards the FLFLP programme than the labour group and business group of participants. 5. The participants in the age-groups 15-20 and 21-40 years had a more favourable attitude than those of 41 years and above. 6. The women participants had a more favourable attitude towards the FLFLP programme than the males. 7. Participants belonging to urban areas had a more favourable attitude towards the curriculum of the FLFLP programme than the rural participants. 8. Participants belonging to urban and rural areas had more or less the same type of

attitude towards the teachers of the programme. 9. The Urban participants had a more favourable attitude towards the administration and organization of the programme than the rural participants. 10. The participants belonging to the farmers' group had a more favourable attitude towards the curriculum of the programme than those from the business group and labour group. 11. The participants belonging to farmers' group had a more favourable attitude towards teachers of the programme than the participants from business and labour groups. 12. The farmers' group of participants had a more favourable attitude towards the administration and organization of the FLFLP programme than other groups. 13. Men and women had more or less the same type of attitude towards the curriculum of the FLFLP programme. 14. Men and women had the same attitude towards the teachers than the programme. 15. The women participants had a more favourable attitude towards the administration and organization of the programme than the male participants. 16. The participants in the age-group of 21-40 years had a more favourable attitude towards the curriculum of the programme than those in the age-group of 41 years and above. 17. The participants in the age group of 21-40 years had a more favourable attitude towards teachers of the programme than participants in the age-group of 41 years and above. 18. The attitude of the participants from different age-groups towards the administration and organization of the programme was found to be more or less the same.

- *259. PURKAYASTHA, N.D., *A Study of Administrators' Behaviour in Secondary Schools of Bangladesh*, Ph.D. Edu., MSU, 1987

The major objectives of the study were (i) to investigate the behaviour of administrators of secondary schools of Bangladesh, with reference to the management pattern of the schools, particularly the organisational climate of the schools and teacher morale, and (ii) to find out the relationship between administrators' behaviour and teacher morale, administrator's behaviour and his self-concept, his dogmatism, his leadership style, and organisational climate, and also between the climate topology and teacher morale.

The study was conducted in the 54 secondary schools of Bangladesh. The sample consisted of 54 headmasters and 212 teachers. The data were collected with the help of the following tools: the Administrator Behaviour

Description Scale (Baroda Version III), the Self Rating Scale developed by Strustar and Wetzler (1958), the Teacher Morale Inventory devised by P.B. Dekhtawala (1977), the Dogmatism Scale by Milton Rokeach (1960), OCDQ (Baroda Form I), and the Proforma for Personal Data devised by the investigator. The obtained data were analysed by computing percentages and mean and employing the chi-square test and the t-test.

The major findings of the study were: 1. The majority of headmasters of secondary schools of Bangladesh manifested average administrative behaviour. 2. The perceptions of teachers about their headmasters (real self) and the perceptions of headmasters about themselves (real self) in regard to administrative behaviour differed significantly. 3. Sex, age, experience, training, qualifications, social background and economic background did not influence the administrative behaviour of headmasters. 4. Administrators' self-description was found to be significantly related to their self-evaluation of their administrative behaviour. 5. The organizational climate in the secondary schools of Bangladesh differed from school to school. 6. The effectiveness of the administrative behaviour was found to be significantly related with the organizational climate. 7. Teacher morale was found to be significantly related to the climate topology.

260. RAKSHIT, H., *Adhunik Bangla Deshe Sikshar Vikiran O ei Kshetre Rabindranather dan (Spread of Education in Modern Bengal and Tagore's Contribution to this Field)*, Ph.D. Edu., Visva Bharati, 1985

The major objectives of the study were (i) to study the educational system in Bengal immediately before the beginning of the British regime, (ii) to study the educational thoughts and activities of Rammohan, David Hare, Debendranath, Keshab Chandra, Iswar Chandra Vidyasagar, Bankim Chandra, Bhudev Rajnarayan, Ramtanu, Brahmabandhab and other intellectual leaders of Bengal before Tagore, (iii) to study Tagore and his contemporary society, socio-political movements of that time, freedom movement, the thoughts and activities of Gandhi and Aurobindo, (iv) to make a comparative study of Tagore and two other renowned educational thinkers of his time—Sir Gurudas and Swami Vivekananda, (v) to study the contribution of Tagore to the spread of education in Bengal, (vi) to make a com-

parative study of Tagore, Ashutosh and Gandhi on the idea of spread of education, (vii) to study the development of *Loka Siksha Samsad*, and (viii) to study the impact of Tagore in later periods in the areas of primary, secondary and higher education and also in the area of rural reconstruction.

The historical method was employed. Historical materials were collected from both primary and secondary sources. The primary sources were original documents like reports, journals, speeches, letters, and interviews. Secondary sources were books and journals.

The major observations were: 1. In the early 19th century, the modern system of education took shape as a result of the joint efforts of the British Government, some missionary educationists like David Hare and some leaders of the Bengal renaissance like Rammohan, Debendranath, Keshab Chandra, Iswar Chandra Vidyasagar, Bhudeb Mukhopadhyay, Bankim Chandra, Rajnarayan, Radhakanta, etc. The spread of education took place through the establishment of schools, girls schools, adult education institutes, writing of textbooks and establishment of a school book society, cultivation of the Bengali language and arrangements for mass education. This was the background of Tagore and his time. 2. When Tagore was born, it was a time of national and social arousal. An anti-superstition, rationalistic movement started and teachers like Vidyasagar, Ramtanu Lahiri, Akshay Mukar Datta, and others, influenced the whole Bengali society. The boy Tagore with a very alert and sensitive mind was much influenced by this social reform movement. The partition of Bengal, the terrorist movement and its effects, the satyagraha movement of Gandhi, the Carlyle Circular, the establishment of National Council of Education, the events in South Africa, the Jalianwallabagh events, etc. were important political events that helped in the formulation of Tagore's educational ideas. 3. The views of Gurudas Bandyopadhyay and Swami Vivekananda, two renowned educationists of Tagore's time, had much similarity with Tagore's ideas regarding aims of education, methods and contents of education, medium of instruction, the place of textbooks in formal education, women's education, religious education, and the spread of mass education. All of them wanted to bring about a synthesis of the East and the West through the spread of education. 4. For the spread of education in the country, Tagore emphasized the importance of the mother-tongue in the curriculum, science education, life-centred education, education through the senses and through direct contact with nature. He em-

phasized physical education, freedom and joy in the process of education, sense training, music and art education, self-education through library work, and a close teacher-student relationship. He was very much against an examination-centred education system. In later years, he understood the necessity of relating education to community life and the needs of the surrounding community. To him, education was the preparation for a complete life which could only become possible by living a life through knowledge and service, enjoyment and creative work. 5. Ashutosh Mukhopadhyay made a great contribution to the spread of education, particularly higher education, in Bengal. His educational ideas were in many ways similar to those of Tagore. 6. The points of agreement between the two were in the following matters: (i) Emphasizing the importance of mother-tongue and its enrichment. (ii) Making universities centres of research and generation of knowledge and, for this, collecting renowned scholars from all over the world. (iii) Emphasizing the importance of science in education. (iv) Developing a network of examination centres throughout the country for the spread of education among those who were not in a position to attend an educational institution. 7. But Ashutosh Mukhopadhyay's concept of spreading education was somewhat different from that of Tagore. While Tagore emphasized the spread of mass education, Ashutosh stood for the spread of higher education as he believed in the filtration theory of education. 8. Like Tagore, Gandhiji also emphasized the importance of the cooperative way of life, self-supporting education, the dignity of manual work and education through the mother-tongue. Unlike Tagore and Ashutosh, Gandhiji believed that there should be a national language and that Hindustani was the inevitable choice for this purpose. Gandhiji was in agreement with Tagore when he deprecated the conventional textbook and examination system. Both of them believed in self-assessment, self-government and self-help. 9. Gandhiji wanted widespread education but, unlike Ashutosh, he did not want the spread of higher education. To him the first stage in the educational programme was adult education. This adult education should be related to the life and environment of the masses and should be based on a rural handicraft. The difference between the views of Tagore and Gandhi in the matter of adult education was that Tagore did not think of making adult education craft-centred and self-supporting, although he revitalized rural crafts in Sriniketan. 10. Tagore established the Lok-Siksha Samsad for the spread of mass education.

He felt that universities had a very important role to play in the spread of mass education. The Lok-Siksha Samsad was established to promote the study of all modern subjects through the medium of Bengali. In the development of his ideas on *Lok-Siksha*, Bankim Chandra, Swami Vivekananda, Keshab Chandra and Debendranath were his predecessors. The Lok-Siksha Samsad arranged for three graded examinations leading to three degrees—*Adya*, *Madhya* and *Antya*. Later, two lower-level examinations—*Adya-Prathamiki* and *Aksharika* were introduced. The Lok-Siksha Samsad gained much popularity at that time and 410 centres were established in Bengal, Orissa, Bombay, Assam, Tripura, etc. Tagore was much inspired by the educational endeavours of the USSR in this regard. He also felt the need of books in the mother-tongue on various branches of knowledge and so the *Lokashiksha Granthamela* came into being. 11. The impact of Tagore's thought and activities in the spread of mass education on the post-independence educational commissions, planning and activities is felt in the following matters: (i) Mother-tongue as the medium of instruction at all stages of education; (ii) activity-oriented and craft-centred education; (iii) self-government of students through students' parliament; (iv) appreciating the importance of music and art in education; (v) book-banks, book-grants and earning while learning schemes; (vi) grading systems and continuous assessment schemes; (vii) adult-education, non-formal education and open university schemes; and (viii) relating functional literacy to the improvement of agriculture, cottage industry and cooperatives.

261. REBELLO, D.M., NARAYAN, L. and SUJATHA, P., *Comparative Study of Formal Schooling and Personal Efficiency in India and USA*, ASCI, 1986 (Spencer Foundation financed)

The objective of the study was to compare formal schooling programmes with respect to personal efficacy in India and the USA.

The study was longitudinal as well as cross-sectional. There were three types of samples—out of school youth sample, special sample and retest sample. The study was cross sectional for 200 out of school youth and a special sample of 120 persons, and it was longitudinal for 110 retest sample where a follow-up was made of the students studied for their schooling during the session 1977-78. The purposive sampling technique was used

to select samples from metropolitan, rural and urban areas. The out of school youth sample had an age range of 12-20 years. They were 100, 70 and 30 from metropolitan, urban and rural areas respectively. The special sample comprised 58 educated persons and 62 dropouts. They were also chosen from metropolitan, urban and rural areas and their number was 60, 18 and 42 respectively. The retest sample was drawn from the sample used in the 1977-78 session when a similar study was conducted. Personal efficiency was tested through individual productivity and the number of professions an individual could adopt.

The findings of the study were: 1. In the USA and Indian studies, there was a positive correlation between additional years of schooling and personal efficiency. 2. In the Indian set-up, the dropouts were more efficacious than their educated brothers as far as a school situation was concerned. 3. In later life, persons with education had higher levels of efficacy than those who dropped out of school. 4. Within the educated sample, the number of years of work experience was a stronger correlate of personal efficacy than education. 5. Within the dropout sample also, work experience had a stronger relationship with personal efficacy than education. 6. When 110 students studied in 1977-78 were again studied in 1985 it was found that, (a) they had a higher level of personal efficacy in 1985 than earlier; (b) among respondents still studying there was general increase in efficacy with additional years of schooling; (c) those respondents who were working had a higher level of efficacy as compared with their counterparts in school with the same level of educational attainment. 7. The results were on the whole a modified repetition of results of a USA study and the earlier Indian study (1977-78).

The study has its implications for the present Indian educational system which should prepare children to face the future with courage, self-confidence and competence. The examination-oriented system with irrelevant curriculum has to be changed.

262. ROY, M.R., *Education as a Concomitant Factor in the Economic Development of Bangladesh (A Case Study)*, Ph.D. Edu., Pan. U., 1985

The objectives of the study were (i) to investigate the quantitative progress of education during the two plan periods (the First Five Year Plan and the Two-year Plan) in Bangladesh, (ii) to investigate qualitative improvement in the field of education in the two plan peri-

ods in Bangladesh, (iii) to identify some of the important factors responsible for economic development in Bangladesh, and (iv) to offer suggestions in order to make education a more effective factor in the economic development of Bangladesh.

The study employed a documentary-cum-case-study approach. The documentary part consisted of collecting data about number of students, number of teachers, amount of expenditure on education, growth of agricultural production, growth of industrial production, foreign loans, assistance, etc. from various sources like the Constitution of Bangladesh, Five Year Plan of Bangladesh, report of the Education Commission, 1974, statistical year book of Bangladesh, etc. The case study was connected with Bangladesh and its educational development and its relationship with economic development. For this purpose, the sample was selected from administrators, educationists, economists and specialists related to the field of education and economics. The final sample of the study consisted of 50 administrators, 150 educationists, 60 economists and 60 specialists. The data from these personnel were collected with the help of an opinionnaire-cum-questionnaire.

The findings of the study were: 1. At all levels, i.e. primary, secondary and higher, the number of students, educational institutions and teachers increased during the plan period 1973-80. 2. The number of students increased in general education institutions as compared to professional, engineering and agricultural institutions during the plan period 1973-80. 3. Both at primary and secondary level, the pupil-teacher ratio decreased during the last part of the plan period. 4. At primary level, measures were taken to improve the qualitative standards of education in fields like curriculum, instructional materials, methods of teaching, teacher training, quality of teachers, number of teachers appointed, aids and grants, administration, etc. 5. At the secondary level, measures were taken to improve qualitative standards of education in general, except in the fields of examination system, physical facilities, library facilities and community involvement. 6. At higher education level, measures were taken to improve curriculum, instructional material, teacher training, the system of supervision and inspection, community involvement, etc. 7. Improvement had occurred in the different indicators of economic activity like GNP, total area cultivated and irrigated, industrial production, urbanization trends, economically active population, percentage of labour force engaged in agriculture, foreign capital, foreign exchange earning through tourism, etc.

8. Growth trends were positive in education as well as in economic development. 9. The educational sector got more or less equal importance year after year during the period 1973-80 as compared to other sectors of economy. 10. Education helped in many ways to enhance the tempo of economic development of the country.

*263. ROY, S., *A Critical Evaluation of the High School General Science Textbooks in Bangladesh*, Ph.D. Edu., MSU, 1988

The main objectives of the study were (i) to assess the general science textbooks on the basis of curriculum objectives and other requirements, (ii) to study the extent of fulfilment of academic and physical aspects of the textbooks to meet the needs of teachers and students, (iii) to conduct an in-depth evaluation of the texts by means of recording the teachers' observations on their day-to-day use of textbooks, (iv) to examine the content for accuracy, and (v) to judge the content and exercises as a measure of the effectiveness of the books in realizing the objectives of science teaching.

The sample of the study consisted of all the persons who participated in textbooks preparation as authors, editors and illustrators. In addition to this, 50 schools from nine districts of Bangladesh were chosen and all teachers of those schools teaching science from classes VI to X were selected. A stratified sample of 100 students was chosen from the selected schools. Besides these, 30 science teachers and 10 heads of different schools and 20 teachers with a professional degree were selected for in-depth study. The data were collected with the help of an information sheet, a questionnaire for authors, editors and illustrators, a questionnaire for teachers, a questionnaire for students, interview schedules for head masters and science teachers, a textbook-evaluation diary, a content-analysis sheet, and Romey's Test and classifying proforma. The data were collected by administering the questionnaires to authors, editors, illustrators, teachers and students. The investigator went through the books and recorded on the information sheet. The evaluation diaries were supplied to the teachers and collected after three months on an average. Selected heads and science teachers were interviewed. Data were analysed mainly in a qualitative manner and wherever possible percentages and average weightage value were calculated.

The major findings of the study were: 1. Books under the present investigation were written according to the

requirement of the curriculum. But the authors, editors and illustrators were not helped as mentioned in the National Curriculum and Syllabus Committee Report or in the Bangladesh Education Commission Report. They were not satisfied with the emoluments received. So the final product could not be expected to be up to satisfaction. 2. The books clearly indicated negligence in proofreading in respect of spelling mistakes, misplacement of illustrations and make-up of the pages. The mistakes in and difficulty of the content were due to the negligence of authors or due to the lack of communication and cooperation between authors, editors, illustrators and proof-readers. 3. The textbooks were not tried out before they were published.

264. SAENGHIRUN, P., *Educational Administration of Adult Education in Thailand*, Ph.D. Edu., SGU, 1983

The major objectives were (i) to study the historical development of non-formal education (NFE) in Thailand, (ii) to study structural and functional design of the non-formal education department in Thailand responsible for administration of non-formal education in the country, (iii) to study NFE programmes in Thailand in terms of adult general education, continuing education, vocational adult education and liberal education programmes, and (iv) to study applications of different communication media in NFE, specially mass-media and low-cost media.

The enquiry was basically of descriptive nature. The available documents about NFE were studied and for other information related with the structural, functional and operational areas, an interview schedule was used. A sample of 60 persons working as NFE authorities was selected. The sources of information were the Ministry of Education, the NFE Department, Divisions of the NFE Department and Regional and Provincial Administration of NFE in Thailand.

The major findings were: 1. The movement for NFE in Thailand began with adult education. There were changes in the nomenclature after the year 1979 with the extension of the scope of adult education. 2. The NFE Department was self-sufficient and well structured. Its sub-systems took care of different aspects like planning, implementation, monitoring, development of instructional aids and application of educational technology to adult education. 3. The Planning and Research Division had overall responsibility for collecting

data concerning non-formal education in order to set long-and short-term plans, monitor budgets, and collect and analyse statistical data for reference purposes. 4. The NFE Development Division had the function of Developing non-formal education curricula—both short-and long-term and general and vocational, of developing personnel efficiency, of establishing and maintaining the criteria of non-formal education and of producing relevant documents/publications. 5. The Operation Division was responsible for the planning and the operation of the programmes. 6. The Centre for Educational Technology was responsible for providing, improving and promoting methods of learning and teaching. 7. The educational supervision unit was responsible for demonstrations of teaching methods, school administration and academic work. 8. The different components of NFE were found functionally well interrelated to solve illiteracy problems, to provide vocational training courses, to administer mass media education in order to promote the people's knowledge and capabilities, solve their problems in everyday life, develop their community and perform their duties as good citizens. 9. The mass media like radio and television were commonly used in the NFE Department.

265. SAITA PRASERTHPHAK, *A Study of the Role Commitments and Conflicts of Women Teachers of Thailand in relation to some Variables*, Ph.D. Edu., SPU, 1984

The objectives of the study were (i) to prepare a tool to measure the role commitment and conflict of women teachers and administrators, (ii) to study the total role conflict experienced by women teachers and administrators of different categories, (iii) to study the role conflict in one's own area as experienced by them, (iv) to study the role-conflict in administration as felt by them, (v) to study the student's role conflict as experienced by administrators and women teachers, (vi) to study the teaching role conflict of women teachers as felt by them, (vii) to study the discipline role conflict of women teachers, administrators and students, (viii) to study the social role conflict of women teachers, administrators and students, (ix) to study the personality role conflict of women teachers, administrators and students, (x) to study the administrative role conflict of administrators, (xi) to study the studying role conflict of students as perceived by administrators and women teachers, and (xii) to study the total role conflict of the profession of

women teachers and administrators.

The investigator constructed a tool to measure the role commitment and conflicts. The statements were collected in four areas—(i) own profession, (ii) discipline, (iii) social, and (iv) personality. In the experimental form, 108 statements were included. The Likert form was used. On the basis of *t*-value and point biserial statements were selected for inclusion in the final form. The final form was administered to a sample of 249 subjects in the administrative category and 15 subjects selected at random from each female teacher's category—primary, secondary and college, making a total of 645 subjects in the women teachers category. The *t*-test was used for testing the significance of difference between means.

The major findings were: 1. There was a significant difference in the total role conflict experienced by administrators functioning at three different levels. The administrators functioning at the college level had less role conflict than those at primary and secondary levels. 2. There was a significant difference in the total conflict among teachers functioning at the three levels—primary, secondary and college. The teachers working at the secondary level had less total role conflict than those working at primary and college levels. 3. There was a significant difference in role conflict in one's own area among administrators at three different levels. The administrators functioning at the college level had a lower level of own-area role conflict than those at primary and secondary levels. The administrators functioning at primary and secondary levels did not differ much in own-area role conflict. 4. There was a significant difference in own-area role conflict among women teachers functioning at three levels. Women teachers working at the college level had a lower level of own-area role conflict than those working at the primary level. Women teachers working at college and secondary levels did not differ significantly in own-area role conflict. 5. There was a significant difference in perceiving the role conflict of teachers by administrators functioning at three different levels. The administrators functioning at the primary level had a lower level of the administrator's role conflict than those at secondary and college levels. The administrators functioning at the secondary level had the highest level of the administrator's role conflict. 6. There was a significant difference in the administrator's role conflict among women teachers functioning at three different levels. The women teachers working at the primary level felt a lower level of the administrator's role conflict than

those at secondary and college levels. Women teachers working at the college level felt the highest level of the administrator's role conflict. However, the women teachers working at secondary and college levels did not differ in level of administrator's role conflict. 7. There was a significant difference in feeling of students' role conflict among administrators functioning at the three different levels. The administrators functioning at the college level felt a lower level of the students' role conflict than those at secondary and primary levels. 8. There was a significant difference in realization of students' role conflict among the women teachers working at the three different levels. The women teachers working at the secondary level felt less of students' role conflict than those at primary and college levels. 9. There was a significant difference in teaching role conflict among the administrators functioning at the three different levels. The administrators functioning at college level perceived a lower level of the teaching role conflict of women teachers than those at secondary and primary levels. 10. The women teachers working at the college level felt a lower level of the teaching role conflict than those working at primary and secondary levels. 11. The administrators functioning at the secondary school level felt a lower level of discipline role conflict than those at primary and college levels. 12. The women teachers working at the primary level felt more discipline role conflict than those functioning at the secondary and college levels. 13. There was no significant difference in the social role conflict among the administrators functioning at the three levels. 14. There was no significant difference in perceiving social role conflict among women teachers working at the three different levels. 15. There was a significant difference in feeling the personality role conflict among administrators functioning at the three different levels. 16. There was a significant difference in the administrative role conflict of administrators functioning at the three levels. 17. There was a significant difference in the administrative role conflict among the women teachers working at the three different levels. 18. There was no significant difference in the discipline role conflict of administrators. 19. There was a significant difference in feeling the discipline role conflict among women teachers working at the three different levels. 20. The administrators functioning at secondary level felt a higher level of the social role conflict than those working at primary and college levels. 21. The women teachers working at college level felt more social role conflict than those working at primary and secondary levels. 22. The

administrators functioning at the college level felt more personality role conflict than those functioning at primary and secondary levels. 23. The administrators functioning at the secondary level experienced more studying role conflict of students than those functioning at primary and college levels. 24. The administrators functioning at the primary level perceived the highest level of the discipline role conflict of students. 25. The women teachers working at the primary level realized the highest level of the discipline role conflict of students. 26. It was realized that the administrators functioning at the secondary level perceived more social role conflict than those functioning at college and primary levels. 27. The administrators functioning at the college level perceived the lowest level of the personality role conflict of students and the highest level of the personality role conflict was perceived by administrators functioning at the secondary level. 28. The administrators functioning at the primary level realized the highest level of professional role conflict. 29. The women teachers working at the college level experienced more professional role conflict than those working at primary and secondary school levels.

266. SAMART, C., *An Evaluative Study of the Entrance Test to Diploma in Education Course at Surin Teachers College, Thailand*, Ph.D. Edu., MSU, 1983

The objectives of the study were (i) to examine the effectiveness of the entrance test consisting of a general ability test, major subject test, teachers' personality test and occupational interest test, and (ii) to study the factors underlying the entrance test.

For the first objective, the sample consisted of 491 students of Diploma in Education Course. For objective two, the sample included 3,000 students, 1,000 each for 1980, 1981, 1982. The entrance test marks and the Diploma in Education marks were collected from official records. The statistical techniques used for analysis of data for the first objective were coefficient of correlation, stepwise multiple regression analysis and analysis of variance. The principal component method of factor analysis was used for identifying common factors underlying the entrance tests. All the 13 papers of the Diploma in Education course were treated as criterion variables.

The following were the conclusions of the study:

1. The correlation coefficients between the total of

general ability tests and all the 13 criterion variables were significant at 0.01 level of significance and explained 1.69 per cent to 26.01 per cent of variance. 2. The coefficients of correlations between major subject test and seven criterion variables were significant at 0.01 level, and those with two criterion variables were significant at 0.05 level. 3. The correlation coefficient between teachers' personality test and six criterion variables were significant at 0.01 level and those with the three criterion variables were significant at 0.05 level. 4. The coefficients of correlations between occupational interest test and three criterion variables were significant at 0.01 level and those with two criterion variables were significant at 0.05 level. 5. The coefficients of correlations between grand total of entrance tests and all of the 13 criterion variables were significant at .01 level and explained 3.24 per cent to 19.36 per cent variability. 6. The factors underlying the entrance test for the year 1980 were verbal general ability to solve scientific and social problems, general ability to solve social problems, and verbal general ability to solve scientific and numerical problems. 7. The common factors of the entrance test of 1981 were general ability, numerical ability, and verbal general ability to solve scientific and social problems. 8. In 1982, only one factor of general ability was found to be significant.

267. SANGUAN SONGWIWAT, *Development and Tryout of Programmed Learning Material in the Subject of Educational Psychology for B.Ed. Students of Teachers' Colleges in North-East Region of Thailand*, Ph.D. Edu., SPU, 1984

The objectives of the study were (i) to develop and validate the programmed learning material in the topic of 'learning' for B.Ed. students, (ii) to find out the error rate of the constructed programme, (iii) to find out the achievement of the students learning through programmed learning material in relation to sex, (iv) to find out the achievement of students learning through programmed learning material (PLM) in relation to socio-economic status (SES), (v) to find out the achievement of the students learning through PLM in relation to their academic achievement which was determined by grade point average, (vi) to study various interactive effects of the independent variables on learning through PLM, and (vii) to compare the achievement of the experimental group who learnt through PLM with that of the control group who were taught by the traditional method.

The investigator developed a programme on the topic of 'learning' prescribed for the B.Ed. four-year course of teachers colleges of Thailand. A linear style of programming was preferred and the mode of responding was of the recall and recognition type. The experiment was carried out on the first-year students of the four-year degree course in education. The sample was drawn from five colleges at random. The SES scale prepared by Dev Mohan was translated into Thai. Entering behaviour tests and criterion tests were given to the students. The $2 \times 2 \times 2$ factorial design was used. Analysis of covariance was used for arriving at conclusions.

Some of the findings were: 1. There was no significant difference between the mean scores on the criterion test of the male and female students. They could study equally well through PLM. 2. There was no significant difference between the mean scores on the criterion test of students coming from high and low SES who learnt through PLM. The SES did not influence learning through PLM. 3. There was a significant difference between the mean scores on the criterion test of students having high and low grade point average when they learnt through PLM and it was in favour of high grade point average. 4. There was no significant interaction effect between sex and socio-economic status of students on the criterion test when they learnt through PLM. 5. There was no significant interaction effect between sex and grade point average of students on the criterion test when they learnt through PLM. 6. There was no significant interaction effect between socio-economic status and grade point average of students on the criterion test when they learnt through PLM. 7. There was no significant interaction effect among sex, socio-economic status and grade point average of students on criterion test when they learnt through programmed learning material. 8. There was better performance of B.Ed. students who learnt through PLM than those who were taught by traditional method.

The implication of this investigation is that the programmed learning material should be used where feasible.

268. SAOVALUK THONGNGAMKHOM, *A Study of Social Maturity as a Function of some Psycho-socio-Adjustment Factors of B.Ed. College Students of North-Central Region of Thailand*, Ph.D. Edu., SPU, 1983

The objectives of the study were (i) to prepare a reliable

and valid tool to measure social maturity, (ii) to study the social maturity of B.Ed. college students in the North-Central Region of Thailand, (iii) to study the social maturity of B.Ed. college students coming from single-sex schools and mixed schools, (iv) to compare the social maturity of B.Ed. college students of different sexes, (v) to study the social maturity of B.Ed. college students of different age groups, (vi) to study the social maturity of B.Ed. college students in relation to the level of study, (vii) to study social maturity of B.Ed. college students with regard to their socio-economic status, (viii) to study the social maturity of the college students in the context of selected personality traits, (ix) to study social maturity in relation to personal social adjustment, and (x) to study social maturity in relation to family adjustment.

The social maturity scale was prepared following the Likert method. The scale was standardized on a sample of 922 students, including boys and girls, from the North-Central Region. The reliability, validity and norms of the scale were established. For measuring SES and personality traits, A.S. Patel's SES scale and Personality Inventory were translated into English and Thai and were used for collecting the data. The $2 \times 2 \times 2$ factorial design and analysis of variance technique were used for arriving at conclusions. The reliability of the scale, as established by different methods, ranged between 0.84 and 0.92. The concurrent validity established by correlating the scores on the scale with teachers' opinion about social maturity was found to be 0.73.

Some of the findings were: 1. The B.Ed. college students with high SES background were found more socially matured than those coming from low socio-economic status strata. 2. The students having dominant personality trait were more socially matured than those of having submissive personality trait. 3. The students having high leadership personality trait were more socially matured than those of having low leadership personality trait. 4. The students having radicalism personality trait were more socially matured than those having conventionalism personality trait. 5. The students having low neuroticism were more socially matured than those having high neuroticism. 6. The students having high emotional maturity were more socially matured than those having low emotional stability. 7. The two groups of B.Ed. students having high suggestibility and low suggestibility trait did not differ on social maturity. 8. The students having good personal social adjustment were more socially matured than those having poor personal-social adjustment. 9. The

students having good family adjustment were found to be more socially matured than those with poor family adjustment.

269. SARKAR, S.C., *A Comparative Study of Role Perception and Job Satisfaction of Headmasters and Teachers in relation to Organisational Climate of Secondary School in Dacca City (Bangladesh)*, Ph.D. Edu., Pan. U., 1985

The objectives of the study were (i) to enquire if the secondary schools in Dacca City possessed different types of organizational climate, (ii) to compare the role perception of headmasters and teachers working under different organizational climates, (iii) to compare the job satisfaction of headmasters as well as teachers working under different organizational climates, (iv) to find out the relationship between organizational climate and role perception of headmasters as well as teachers working under open, autonomous, controlled, familiar, paternal or closed climate, (v) to find out the relationship between organizational climate and job satisfaction of headmasters as well as teachers working under open, autonomous, controlled, familiar, paternal or closed climate, and (vi) to find out the relationship between role perception and job satisfaction of headmasters as well as teachers working under open, autonomous, controlled, familiar, paternal or closed climate.

The procedure followed for sampling was a multi-staged randomized one. Two stages were followed for selection of the sample. In the first stage, 40 schools were randomly selected from both government and non-government schools of Dacca city. All headmasters and teachers of these schools responded to an organizational climate questionnaire. On the basis of this, the schools were classified into six types of organizational climate as open, autonomous, controlled, familiar, paternal and closed. The headmasters and teachers of these categorised schools formed the sample of study—40 headmasters and 594 teachers. The tools used in the study were: (i) the Halpin and Croft Organizational Climate Description Questionnaire (1986), (ii) the Role Perception Scale with its six areas—professional ethics, classroom teaching, educational environment, school administration, developmental activities and local politics, and (iii) the Chandel Job Satisfaction Scale (1978).

The findings of the study were: 1. There were significant differences in role perception in all areas collec-

tively among headmasters working in schools having different types of organizational climate. But there existed no significant differences regarding perception amongst the headmasters working under different organizational climates in relation to professional ethics, classroom teaching, educational environment, school administration, developmental activities and local politics. 2. Differences in job satisfaction experienced by headmasters working under different organizational climates were found to be significant. 3. There was no significant relationship between sub-tests of organizational climate and job satisfaction of headmasters. 4. There was no significant relationship between overall role perception and job satisfaction of headmasters in open, autonomous, controlled, familiar, paternal and closed climates. 5. There existed significant differences in role perception in all areas collectively among teachers working in schools having different types of climate. 6. There existed no significant differences in role perception of teachers working under different organizational climates, in the areas of professional ethics and classroom teaching. 7. There existed significant differences in job satisfaction of teachers working under different organizational climates. 8. In the open climate, disengagement, esprit, intimacy, thrust and consideration had a significant relationship with overall role perception of teachers. 9. In an autonomous climate, disengagement, intimacy and productive emphasis had a significant relationship with overall role perception of teachers. 10. In a controlled climate, all sub-tests of organizational climate except hindrance had a significant relationship with overall role perception of teachers. 11. In a familiar climate, disengagement and esprit had a significant relationship with overall role perception of teachers. 12. In a parental climate, disengagement, esprit, intimacy, thrust and consideration had a significant relationship with overall role perception of teachers. 13. In a closed climate, except the sub-test of production emphasis, all other sub-tests had a significant relationship with overall role perception of teachers. 14. In an open climate, autonomous climate, controlled climate, familiar climate, paternal climate or closed climate all sub-tests of organizational climate had significant relationship with job satisfaction of teachers. 15. There existed a significant relationship between the overall role perception and job satisfaction of teachers working under open, autonomous, controlled, familiar, paternal or closed climates.

270. SIDDIQUI, W.H., *Study of the Existing System of Education in Nepal—A Critical Study*, Ph.D. Edu., AMU, 1986

The objective of the investigation was to study the development of education in Nepal under the National Education System Plan (1971-76) which formed the basis of the system of education.

The data pertaining to the development of primary, secondary, tertiary (collegiate), adult and vocational education were collected from reports and documents available in the libraries and offices of the Government of Nepal, especially the Ministry of Education. Other sources of data for the study included literature like World Surveys, International Year Books, Unesco publications, journals and periodicals such as *Education Quarterly* of Nepal.

The major findings of the study were: 1. Before the introduction of the National Education System (NES) Plan in 1971, 86 per cent of the people were illiterate. For a total population of 1,18,58,705 in 1971, there were only 7,275 primary, 1,123 secondary and 49 higher educational institutions with 4,08,471, 1,20,537 and 16,627 students respectively. 2. After the introduction of the NES Plan (1971), the percentage of enrolment at primary level rose from 27.9 per cent to 90.4 per cent in 1981, the number of pupils at lower secondary and secondary stage increased by more than 100 per cent in 1980. By and large, the beneficiaries of the NES plan have been boys, the percentage of girls studying at different levels did not increase. 3. Attention to vocational education was also paid during the NES plan. In all, 115 vocational secondary schools were established in which 17 vocational subjects were taught. The supply of qualified teachers and necessary equipment was, however, not adequate. 4. In 1980, the percentage of trained teachers was 36.0, 39.2, and 62.3 at the primary, lower-secondary and secondary level respectively. 5. The number of higher educational institutions rose from 49 in 1971 to 88 in 1980. Steps were also taken to develop research work in various fields in the institutes of higher learning and in the three research centres that were established in the country. 6. The programme of adult education made only little headway during the NES plan as the percentage of illiterates dropped by only 04.0 per cent during the years 1975-81. 7. After the introduction of the NES plan, the government steadily raised the expenditure on education. During the decade 1970-79, the percentage of educational expenditure to total government expenditure increased from 6.7 to 8.3 per cent.

However, in this respect, Nepal lagged behind most of the underdeveloped countries.

271. SIRIRASSAMEE, B., *A Study of Adjustment among Different Groups of Students in Colleges of Education in Thailand*, Ph.D. Edu., MSU, 1983

The major objective of the study was to find out the adjustment problems of student-teachers in Thailand taking into consideration independent variables like sex, year of study, subject teaching, urban and rural background, residential background, attitude towards profession, and student-control ideology. The null hypothesis examined was that there was no significant difference in adjustment of student teachers between groups based on sex, level of study, stream, residence, attitude towards profession and student-control ideology.

The sample of the study included 500 student teachers drawn from four teachers colleges in Thailand. The four tools used for the study were: A Personal Proforma Questionnaire, an Adjustment Inventory (Pagedar and Gajjar, 1964), an Attitude Scale to measure attitude towards the teaching profession (Sakdivira-Vangsa, 1976) and a Student Control Ideology Scale (Willower *et al.*, 1967). The latter three scales were adapted into Thai versions by the investigator. The reliability coefficients of these adapted tools were 0.75, 0.88 and 0.83 respectively. The data were collected personally by the investigator. Descriptive statistical techniques were used for analysis of the data.

The major findings of the study were: 1. The most frequent problems of first and fourth-year students were related to educational aspects. 2. First-year female student-teachers had better adjustment than first-year male student-teachers. However, there was no sex difference in adjustment at the fourth-year stage. 3. The senior trainees had better adjustment than the junior ones. 4. Arts trainees had better adjustment than science trainees. 5. In the case of junior trainees, urbanites were better adjusted than ruralites. The result was the reverse in the case of senior trainees. 6. Senior trainees staying in college hostels were better adjusted socially in comparison with day-scholars. 7. In the case of both first-year and fourth-year groups, the trainees having a favourable attitude towards the teaching profession were well-adjusted in comparison with trainees who had no favourable attitude. 8. Junior trainees differed

in adjustment with regard to humanistic ideology and custodial ideology, whereas the senior trainees did not differ in adjustment in respect of ideologies. Among the juniors student-teachers with humanistic ideology were well adjusted in comparison with those with custodial one. 9. Individual guidance given to problem cases helped in solving their problems, bringing about a favourable attitude towards the teaching profession and moving them towards a humanistic ideology.

272. SOMRIT, I., *A Study of the Non-formal Education Needs of Slum Population in Bangkok Metropolitan Area of Thailand*, Ph.D. Edu., SGU, 1985

The major objectives of the study were (i) to investigate the surrounding status of slum areas in the Bangkok Metropolitan Area of Thailand, (ii) to study the non-formal education (NFE) programmes in slum areas, (iii) to gather general information about the NFE students in the slum areas, (iv) to know the educational needs of slum people to establish an effective NFE programmes, and (v) to find out the problems of NFE in the slum areas.

The non-formal education needs of slum people were identified partially on the basis of experience in various fields and in various capacities and partially through interviews. First, a stratified sample of slums was selected for study and then from these slums only samples of residents, students and organizations were selected. The number of families in a particular slum locality was the stratifying variable. There were 225 slums out of which 30 were covered under a 'door-to-door' survey. In all, 504 respondents from the residents who lived in the slum areas and who ranged between 15 and 49 years of age were chosen by systematic random sampling from the 30 slums. In all, 300 NFE students who got training between 1981 and 1983 were selected from 30 slums. Twenty-two government and private organizations working for non-formal education in slums were selected for the study.

The major findings were: 1. The number of females staying in slums was higher than males. The majority of the slum-dwellers were Buddhists having elementary education who had migrated from different parts of the country in search of jobs. Their income level was less than 3,900 bahts per month; 90 per cent of them needed general examination by physicians; a majority of the families had no drainage facility but all had electricity facilities. 2. There were 18 projects for providing occupations, three programmes for religion and language

teaching and few for imparting specialized knowledge. There were 12 governmental organizations, two foundations and eight associations and assemblies working for slum improvement. 3. The majority of students had finished elementary education. The monthly income of more than 60 per cent of the students ranged from 1000 to 1500 bahts per month. The majority of students had joined volunteer training and found the experiences of NFE useful for their occupation. 4. The slum dwellers needed training in sewing, cooking and baking for increasing their income. They were also interested in getting training for prevention of disasters like fire, etc. 5. Many training programmes were not found suitable due to lack of proper consideration of the goals, time, place and cost of the programmes. Organization heads were found facing problems concerning personnel, management, finance and cooperation of citizens.

*273. SOOKMAUNG, P.T., *A Comparative Study of the Perception of Problems by the Administrator of Formal and Non-formal Educational Institutions at the Secondary Stage in Bangkok Area of Thailand*, Ph.D. Edu., Pan. U., 1986

The main objective of the study was to investigate the seriousness of the administrative problems of administrators of formal and non-formal institutions at the secondary stage with respect to administrative personnel, teachers, students instructional programme, curriculum, security, morale, supervision, school and community relations and school finance.

The sample of the study consisted of 360 administrators of secondary schools (180 formal and 180 non-formal) of the Bangkok Area of Thailand. The sample subjects included 180 principals and 180 vice-principals of the 360 institutions. They were administered a questionnaire having 117 statements of administrative problems to be rated on a five-point scale. The administrative problems pertained to areas given in the objective of the study.

The findings of the study were: 1. The formal school administrators perceived various problems more seriously than the non-formal school administrators. 2. The administrators of formal institutions exhibited greater seriousness than their counterparts in non-formal education concerning problems pertaining to administrative personnel, teachers, students, curriculum and morale. 3. There was no difference in the formal and non-formal school administrators about problems per-

taining to instructional programmes, security, supervision, school and community and financial matters. 4. The seriousness of the problem was considered to be at the 'moderately serious level' in the case of financial problems in the opinion of formal school administrators. 5. The non-formal school administrators also put the seriousness of the problem at the 'moderately serious level' in the cases of financial matters. 6. The formal school administrators perceived administrative problems more seriously than their counterparts in the non-formal schools.

274. SRIRATNA, N., *The Problems of Educational Administration concerned with Community and Learning Environment of Primary Schools in the Educational Region II, Thailand*, Ph.D. Edu., Guj. U., 1983

The main purpose of the study was to identify and compare the problems of educational administration concerned with community and learning environment of primary schools in Educational Region II of Thailand. The hypotheses formulated were: 1. The policy and methods of school administration are very remiss. 2. The primary schools have many weak points in relation to the duties they have towards the community. 3. The primary schools have problems (i) of psychological environment and emotional climate in a school, (ii) related to materials and equipment to aid teaching-learning, (iii) concerned with their learning environment as affected by physical site, school building, and other buildings. 4. The primary schools are remiss in the promotion of safety, health, physical educational facilities and food service for pupils.

The study was based on a stratified proportionate sampling of principals (N = 285), teachers (N = 1443), pupils (N = 400) and people (N = 400) drawn from four provinces of the Educational Region II of Thailand. A questionnaire was prepared as a rating scale for principals and teachers and an interview schedule was prepared for pupils and people. Both these tools consisted of eight categories and, in total, 131 items. Scoring was done by assigning score values to five-point ranging from 1 to 5. For statistical analysis, the t-test and ANOVA were applied.

The findings of the study indicated that all the hypotheses (1 to 4 mentioned earlier) were justified. From the results of the study there appeared to be a very big gap between what the community should do for the

school and what they were actually doing.

The community should serve the school properly if it expected the school to serve them. Periodic discussions with principals and teachers, involving school staff in community functions, assisting schools in their functions, providing learning materials, giving donations, etc., inviting teachers for home visits, joint councils of school staff and community leaders, etc. are some mechanisms by which the gaps can be bridged.

275. SRISUCONDHARATANA, V., *Modernisation of College Teachers in a Developing Society: Thailand as a South East Asian Case Study*, Ph.D. Soc., Poona U., 1985

The main objectives of the study were (i) to study the personality traits of teachers vis-a-vis modernization in the educational, social, religious and political spheres, (ii) to study whether sex and the field of specialization of the college teachers were factors of independent significance, (iii) to study the extent to which the college teachers were effective agents of a modernizing society, and (iv) to study the changing aspects of the personality traits of the college teachers in the context of the process of modernization.

The sample of the study included 252 teachers working in North-eastern Teachers Colleges of Thailand. A questionnaire and an interview schedule prepared by the investigator were used for the purpose of data collection. Percentage analysis, mean, S.D. and t-test were used for treatment of data.

The main findings of the study were: 1. The teachers' community had not been monopolized by any specific group of people for social mobility. 2. The college teachers came from the families which had different levels of socio-economic status. 3. The personality traits of college teachers were not very congenial for modernization in three spheres, viz., educational, social and political. 4. The college teachers were somewhat committed to modernisation only in the case of the religious sphere. 5. The respondents' values of social relationship seemed to be superficially compatible with those found in modern society. 6. The sex differences among the college teachers did not appear to be highly significant, especially with respect to their academic role performance and awareness of the value of the status of women. 7. The college teachers were not yet eminently qualified to play the role of change agents for a modernizing society.

276. SRIVIHA, P., *Supervisory Role of Principals, Regional Education Division II of Thailand as Perceived by Self and Teachers*, Ph.D. Edu., Pan. U., 1986

The objectives of the study were (i) to critically examine the supervisory role of principals of Regional Education Division II of Thailand as perceived by self and teachers, (ii) to develop suitable criteria for the evaluation of the supervisory role of principals of Regional Education Division II, (iii) to know the expectation of teachers with regard to the supervisory role of principals.

The study was a survey of the issues concerning the supervisory role of principals of Regional Education Division II of Thailand as perceived by self and teachers. The sample of the study consisted of 40 secondary schools from Regional Education Division II of Thailand. These were government and aided private schools. From each school, 12 teachers were selected. Thus 480 teachers were selected for the study. They were mailed a questionnaire. Only 400 questionnaires were found complete. Thus the final sample of the study was 400 teachers. Apart from this, teachers and principals of 20 schools were interviewed for validation of information supplied.

The study revealed: 1. The government and aided private schools were rated low on three aspects, viz., physical facilities, principal-teacher relations and academic leadership, 2. There was a significant difference in the physical facilities provided in the government and aided private schools. The government schools were better than the aided private schools. 3. The aided private secondary schools were better placed than government secondary schools in respect of principal-teacher relations. 4. The government schools were favourably placed as compared to the aided private schools in academic leadership. 5. Greater emphasis was placed on the provision of those broad categories of physical facilities as were directly connected with the classroom instruction, laboratory, audio-visual aids and library. 6. The teachers felt that principals lacked a constructive approach, were ignorant of proper values, and lacked enthusiasm and resourcefulness. 7. Although most principals seemed to believe in democratic supervision, they appeared to find it difficult to put this belief into practice. 8. The principals, due to lack of their capacity to handle situations, created misunderstandings among teachers and they later indulged in various discouraging practices. 9. Principals gave more importance to such supervisory techniques as involved

checking. 10. Observation of classroom teaching and out-of-class activities also found an important place in the supervisory role of principals. 11. Staff meetings, and individual conferences as instruments of teacher growth, and specific in-service education techniques like action research, inter-class visitation, seminars, workshops, etc. found little place in school life. 12. Various cocurricular activities were generally run in schools as per departmental orders. 13. There existed some mutual distrust between the principals and the teachers in respect of purchase of instructional and other materials of the schools. 14. Guidance and health services of the schools were reported to be most ineffectively used. 15. There was wastage of teaching effort because the process of integration and coordination of various school experiences did not find due place in most of the schools. 16. Evaluation of teachers, in most cases, consisted in their rating themselves. Evaluation by students, fellow teachers and principals was not frequently used. 17. Most of the principals failed to play an effective leadership role in the academic field in the schools because of limitations of time and energy. 18. The principals neglected helping and guiding teachers in the areas of subject content and teaching methodology. 19. The principals did not specially encourage the teachers to attend inservice education programmes. 20. The observation of classroom teaching was more for inspecting teachers than helping them. 21. The follow-up of various supervisory activities was a weak process. The principals attributed this to non-availability of time and energy.

277. SULTANA, Q.A., *A Study of Some Factors in Adjustment Patterns of Adolescent Boys and Girls in Bangladesh*, Ph.D. Psy., MSU, 1983

The major objective of the study was to investigate the effect of sex, internal-external locus of control (I-E LC) and purpose-in-life (PIL) on the adjustment patterns (in five areas: home, health, society, emotion, education, as well as total adjustment) of Bangladesh adolescents.

The sample consisted of 631 adolescent girls and 669 adolescent boys of different colleges from all the four divisional headquarters of Bangladesh. The tools used for the study were Rotter's (1966) I-E Locus of Control Scale with a reliability coefficient of 0.70 and discriminant validity with intelligence of 0.03 to 0.22, Crumbaugh's (1968) PIL scale with split-half reliability coefficient of 0.85 and concurrent validity of 0.40 with Srole Amonia Scale, and Sinha and Sinha's (1977) Ad-

justment Inventory Scale (AKS) with construct validity of 0.58 and split-half reliability of 0.83 to 0.94 on different components. The data were collected through personal administration of tests. Further, 60 case histories were studied through the use of a case history interview schedule. The data were mostly analysed with the use of statistical techniques like F-test and chi-square test. The $2 \times 2 \times 4$ factorial designs were used in the study.

The findings of the study were: 1. The adolescents showed a trend towards internal locus of control (ILC). 2. They had low purpose in life (LPIL) and average level of adjustment. 3. Girls were better adjusted than boys with regard to home. 4. High purpose in life group students were better adjusted to their home than those having LPIL and other levels of PIL. 5. Adolescents with different PIL orientations differed in their health adjustment, adjustment to society, emotional adjustment, educational adjustment and overall adjustment. 6. The girls were educationally better adjusted than boys. 7. Compared to 'externals', 'internals' adolescents were emotionally better adjusted. 8. The girls were, on the whole, better adjusted than boys. 9. The interaction effect of sex and PIL was significant.

The educational implications of the study were: (1) The scope for the adolescents' health-related activities should be enhanced. (2) Their normal interest in sex should be appreciated. (3) Parents should acknowledge the adolescents' increased need for independence. Adequately free environment for the expression of their thoughts and emotions should be provided. (4) Curriculum should suit the adolescents' interest and aptitude.

278. SUWANNACHAIROP, U., *The Needed Competency to be Developed in the Teacher Training Programme for Primary School English Teachers in Thailand under the New Curriculum*, Ph.D. Edu., Pan. U., 1985.

The objectives of the study were (i) to investigate the competency of teachers in using the English language for communication, (ii) to study the English-teaching competency of teachers in using the integrated skills of English language for communication, (iii) to study the competency of teachers in implementing the new English syllabus, (iv) to study the attitude of teachers towards the teaching approach suggested in the new English syllabus, and (v) to study the opinions of teachers regarding the existing teacher training programme for presenting the new English syllabus.

The sample for the study consisted of 470 subjects belonging to six groups, viz., 64 experts, 90 teachers, 82 principals, 96 pre-service teacher trainees, 80 students and 58 parents. The experts were concerned with teaching of English in Thailand in university English departments or teacher educators, the teachers and principals belonged to primary schools where English was one of the elective subjects in grade five, pre-service teacher trainees had practised English teaching at primary school level, the students were those who studied English at fifth grade, and parents were parents of students who studied English at fifth grade. The tools used in the study were: (1) The English Proficiency Test for Teachers, (ii) The English Achievement Test for Students, (iii) The Questionnaire cum Opinionnaire for Teachers, (iv) The Structured Interview for Students, and (v) The Structured Interview for Parents.

The findings of the study were: 1. Every group of the sample considered that the English-language competency of the teachers needed to be developed. 2. Every group of the sample considered that English-teaching competency of the teachers needed to be developed. 3. Every group of the sample as well as the total group considered that the understanding of curriculum and implementation of the new English syllabus of the teachers needed to be developed. 4. Every group of the sample as well as the total group considered that a positive attitude of the teachers towards the new English syllabus needed to be developed. 5. Every group of the sample as well as the total group considered that the existing teacher-training programme needed to be modified. 6. Every group of the sample as well as the total group considered that the overall teaching competencies of the teachers needed to be developed. 7. The teachers did not have a clear concept of the new English syllabus. They did not have either insight into or appreciation of the teaching approach suggested in the syllabus. There was lack of texts and exercise books. There was lack of confidence in using the English language in and outside the classroom. 8. The problems, which all groups of the sample perceived in teaching English at the primary level were lack of comprehension on the part of administrators in administering an English teaching programme, insufficient guidelines regarding implementation of the teacher-education programme, insufficient guidance and supervision by provincial supervisors, lack of cooperation and effective educational administration in the upcountry-area schools.

279. SUWIMON, P., *A Study of Parents' Attitude towards the School Programmes in Central Thailand*, Ph.D. Edu., SGU, 1985

The major objectives were (i) to provide a reliable and valid tool to measure the attitude of parents towards the secondary school programme, (ii) to measure the attitude of parents of students studying in lower secondary schools towards the school programme, (iii) to study the significant difference in the attitudes of parents belonging to urban and rural areas, (iv) to study the sex differences in the attitudes of parents, (v) to study the difference in the attitudes of highly educated (graduate) parents and lowly educated (undergraduate) parents, and (vi) to study the attitudes of parents having high status occupation and those having low status occupation.

A total of 963 subjects formed the sample. Of this, 552 were males and 411 females, constituting 58 and 42 per cent of the population. Area-wise, 445 subjects, consisting of 237 males and 208 females, were drawn from the urban area, while 518 subjects, 315 males and 203 females, were drawn from the rural area of Central Thailand. An attitude scale was prepared and administered personally by the investigator with the help of her colleagues. The reliability and validity of the attitude scale were established. Analysis of variance was used to test the significance of difference between mean scores of parents' attitude towards the lower secondary schools programme.

The major findings were: 1. Sex, education and occupation were three dominant predictors of attitude score. 2. The sex of a parent contributed greatest variance to the attitude score. 3. The parents' education turned out to be the second-best contributor to the size of the attitude score. Those parents who had higher education were more favourable towards the lower secondary school programme. 4. The parents from urban area had more favourable attitudes towards the lower secondary school programme than those from rural area.

280. THONGPLEE, C., *A Study of Non-formal Vocational Education Programme in the Educational Region 5 of Thailand*, Ph.D. Edu., MSU, 1985

The objectives of the study were (i) to study the organizational and administrative aspects of the non-formal vocational education programme, (ii) to study the academic aspects of the programme, and (iii) to study the

relevance of the programme with reference to employment opportunities and professional growth of the products and their economic betterment.

The investigator made use of tools like questionnaires, checklists, observation schedules and interviews for data collection purposes. The 15 persons contacted for data collection for the study were all administrators, all 60 instructors and 350 sample graduates of the programme. The data were analysed in descriptive forms.

The study revealed: 1. A large number of administrators were trained graduates who had completed certificate courses on vocationalisation. 2. Around half of the instructors had completed primary and secondary education along with vocational certificates. 3. All the administrators insisted that all the instructors should undergo training programmes on non-formal education. 4. All of them complained about lack of appropriate funds for managing the programmes, 5. The physical facilities were not sufficient for conduct of programmes. 6. The majority of learners joined the courses for better utilization of their leisure, because of interest in the courses and to supplement their income. 7. Most of the learners were women and belonged to the 15-35 years age group. 8. The courses were in the areas of industry, home economics, business and agriculture. 9. Most of the administrators, teachers and learners stated that the training courses were relevant to their needs. 10. Different methods of teaching, like seminar-cum-workshop, lecture-cum-demonstration and lectures were followed in the training programmes. 11. It was noticed that most of the graduates had remained unemployed after completion of courses. 12. A significant increase was not witnessed in terms of income of the products.

281. THRASIA, E.C., *A Comparative Study of the National School System of the USA, UK and India with a view to Suggest Measures in Promoting a Better Pattern of Vocation Based Common System of Public Education to Suit the Needs and Aspirations of Indian Society*, Ph.D. Edu., Osm. U., 1983

The objectives of the study were (i) to identify school practices in the USA and UK after making a review of the literature on the educational patterns of these countries, (ii) to select a few school practices from the USA and UK on the basis of opinions received from the respondents with a view to suggesting a school pattern for India, (iii) to recommend ways and means for the intro-

duction of vocational and job-oriented courses at the +2 level in the light of experiences of the USA and UK, (iv) to establish priorities in the educational development of India which have got the support of the views of respondents, and (v) to recommend a curricular framework and guidelines suitable for a common school system.

This is an in-depth study of three systems of education together with select borrowing and adoption of feasible and desirable elements from the educational practices in the UK, USA and India. This is a comparative study, where information was collected from sources like, (i) the literature available on the education systems of the UK, USA and India, (ii) information gathered by interviewing a number of educationists, (iii) discussion with people who had spent years in or made long visits to the UK and USA, (iv) the opinionnaire-based data from various people like educationists, educational planners, teacher-educators and public men, and (v) information gathered from a number of British and US nationals living in India.

The study revealed that: 1. The educational growth in US had been mainly through three distinct periods—colonial, national and modern. In 1940, the emphasis was on child development at the expense of academic scholarship. The 1950s and 60s saw a growing interest in modern knowledge and technology. The latest concern of educationists and practising teachers is in confronting the needs of the present US society, including social inequality, minority problems, poverty, etc. The existing curriculum was being looked into in the context of social as well as individual phenomenon of US society. 2. The British school system upheld the teacher's freedom to teach, to choose his own subject matter and to organize it. Of late, the British school system had become wholly comprehensive. The change in the British school system was slow. It was the result of involvement of not just educationists but also others like jurists, technologists, behavioural scientists and politicians. The experts were of the opinion that movement from blackboard to computer-assisted instruction was a movement in degree rather than in kind. 3. Indian schools had been a place where information trading dominated. This had killed the joy of learning, reducing children's work to memorization. 4. The UGC in Britain had, of late, encouraged alignment between education and industry. There was a need for a closer tie between farms and individual enterprises and classroom learning. The schools in this connection had to change their curriculum, adjust their timings, adapt their man-

agement to suit the local needs. 5. There was a great diversity in the educational structure in India. Many of its states had not switched over to the new 10+2 pattern of education. The lack of uniformity had inhibited mobility of people. 6. In the USA and UK, school was not a place to impart literacy but to provide certain skills to the child at each stage of development. This is significant for the Indian set-up also. 7. The +2 curriculum in the Indian set-up had to be flexible. The period of attaining proficiency in vocational courses had to vary from two years to four years, depending upon the requirement of the vocation. The proficiency level had to be of the order which enabled students to enter the world of work with confidence either for service or for self-employment. 8. In England grammar schools primarily prepared the child for college education. Modern schools fulfilled the custodial responsibility under compulsory education law, and the technical high schools gave vocation-based courses. But there are comprehensive schools which are an amalgamation of all three systems under the same roof. In the USA, on the other hand, any neighbourhood built site is set apart for schooling purpose or is publicly provided and maintained as a school. 9. In India there is an urge for a common school system of public education. Such a system would have intense interest in character formation and a firm commitment to academic excellence. It would have four terminal stages of certification—class V, class VII, class X and class XII. Through close observation, guidance and counselling children would be directed to various practical courses according to their abilities and aptitudes as well as national requirements and immediate local needs. Courses in vocationalization and self-employment would be given in all classes. Streaming would be done at four levels to direct the students to various practical courses. Working days and holidays would be decided according to the local and climatic conditions. 10. The well-organized Common School System Public Education (CSSPE) institutions can offer training for middle-level workers in areas like salesmanship, marketing, advertising, secretarial practice, public administration and public relations. 11. In adopting the Common School System Public Education, the following type of subject-content could be included, viz., economics, agriculture, mathematics, science and technology. 12. The CSSPE institutions would conduct activities which might include drama, debate essay, music, drawing, painting, subject-wise clubs, sports, yoga, etc. 13. There would be a school council formed by student representatives. 14. The CSSPE institution

under the guidance of capable teachers would undertake a lot of inside and outside school activities. 15. The CSSPE would be responsible for providing moral values, discipline values, personal values and community values. It would make sure that qualities of character and mind were reflected in everything that the pupils did. 16. In CSSPE institutions, internal assessment would become dependable and students from pre-school to standard XII would be allowed to go to higher classes at their own pace. At the +2 level an examination will be conducted at the national level. Only 'A' level candidates would join various university courses. 'O' level grade candidates would undertake courses according to their aptitude and abilities. 17. There would be teaching aids and resource centres which would help the teachers in the teaching process.

282. UGAI, G.A., *A Cross Cultural Study of Modernity amongst Nigerian and Indian College Students in relation to Need Achievement, Intelligence and Certain Demographic Variables*, Ph.D. Psy., Pan. U., 1983

The objective of the study was to test the following hypotheses: (1) Those who are high on intelligence will also be high on modernity in both cultures. (2) Nigerian students will be higher on modernity than Indian students. (3) In both the cultures, the urbanites will be higher on modernity than ruralites. (4) Students from high-income backgrounds will be higher on modernity than those from low-income backgrounds. (5) Those from a nuclear family set-up will be higher on modernity than those from joint-family systems. (6) Students from high parental level of education will be higher on modernity than those from low parental education. (7) Male students will be higher on modernity than female students.

The study employed two factorial designs. One was three-way ($2 \times 2 \times 2$) factorial design and another was four-way ($2 \times 2 \times 2 \times 2$) factorial design. For both the designs, the same sample of 320 students was used. The first factorial design comprised culture \times intelligence \times n-Achievement with 40 students in each cell. The second factorial design comprised culture \times sex \times residence \times income with 20 students in each cell. Each of the three independent variables varied in two ways. The sample was from BA part II and III students. The sample consisted of 160 students from the University of Calabar (Nigeria) and 160 students from various

colleges of Chandigarh. The tools used in the study were: (i) The Inkles and Smith Overall Modernity Scale, (ii) The French Test of Insight to measure achievement motivation (n-Ach) and (iii) Raven's Progressive Matrices.

The findings of the study were: 1. Nigerians were higher on modernity than their Indian counterparts. 2. Culture \times Intelligence \times n-Ach interaction was significant, meaning thereby that Nigerian students from high intelligent group and having high n-Ach were more modern. 3. The high intelligent students were also high on the modernity scores in the two cultures. 4. The correlation between intelligence and modernity for the Nigerian as well as the Indian sample was significant. 5. Subjects high on n-achievement were also high on modernity. 6. There was a significant correlation between modernity and n-achievement in both Nigerian and Indian cultures. 7. The difference between multiple 'R' was significant when n-achievement was added to intelligence for predicting modernity. Intelligence and n-achievement contributed significantly to modernity in both the cultures. 8. Sex emerged as an important factor affecting modernity and the males were higher on modernity in both the cultures. 9. Those from high-income groups in both the cultures were also high on modernity. 10. Education of the father was a determinant of modernity in the Indian sample but not in the Nigerian sample. 11. Residence and mother's educational level were found to be insignificant for modernity in both the cultures. 12. In both the cultures, subjects belonging to nuclear families were higher on modernity as compared to subjects from joint families. 13. The subjects coming from small-size families were higher on modernity than subjects from larger/joint families.

283. VICHAO, P., *A Study of Organisational Climate and Teacher Morale in the Primary Schools in the Central Zone of Thailand*, Ph.D. Edu., MSU, 1983

The objectives of the study were (i) to construct tools on climate, morale and leadership behaviour suited to the educational scene in Thailand, (ii) to develop procedures to identify school climate appropriate to the tool on organizational climate, (iii) to study organizational climate of each of the sampled schools on a continuum with regard to openness, intermediate position, and closedness, (iv) to measure the morale of teachers of the sampled schools, and (v) to study the leadership behav-

our pattern of the principals in relation to some selected variables.

The sample of the study included 100 primary schools of Bangkok. In all 1000 teachers working in these schools were included as sample respondents. On the basis of Halpin's theories, the researcher constructed three tools in the Thai language for organizational climate, teacher morale and leadership behaviour respectively.

The final tools contained 120 items in the tool on climate, 93 items in the tool on teacher morale and 52 items in the tool on leadership behaviour. The statistical techniques used in the study were percentile norms, principal component factor analysis with varimax rotation.

The major findings of the study were: 1. In the central zone of Thailand, the majority of schools belonged to the intermediate type and only 16 per cent of schools had open climate. 2. The closed climate schools constituted 35 per cent of the total schools. 3. All the three categories of schools were distributed over all the four regions. 4. In the open-climate category, around one third of the principals had 10 to 29 years of service experience and around 13 per cent of them had 30 to 39 years experience. 5. Of the total sampled schools, 18 per cent had high teacher morale, 62 per cent had average teacher morale, and 20 per cent had low teacher morale. 6. In the high morale category of schools, 72 per cent of the schools were municipal-managed, among the average morale category, 60 per cent were municipal ones and 85 per cent schools of the low-morale category were municipal. 7. The dominant characteristic of high teacher morale and average teacher morale was seen in single-shift schools and low morale in double-shift schools. 8. Of the total number of principals of sample schools, 42.0 per cent of the HH pattern, 40.0 per cent of LL pattern, 10.0 per cent of HL pattern and 8.0 per cent of LH pattern. 9. The government school principals mostly belonged to the HH type and municipal school principals mostly to the LH type.

284. WERA CHAISRI SOOK, *A Study of the Attitude of Secondary Teachers of Thailand Region 10 towards Their Teaching Profession*, Ph.D. Edu., SPU, 1982

The objectives of the study were (i) to measure the attitudes of secondary school teachers towards the teaching profession, (ii) to compare the attitudinal differences

between (a) male and female teachers, (b) married and unmarried teachers, (c) teachers with different ages, (d) more and less experienced teachers, (e) teachers with different qualifications, science and liberal arts teachers, (f) government and private-school teachers, (g) urban and rural teachers, (iii) to compare the teachers' teaching efficiency as rated by students, co-teachers and principals with their attitudes, (iv) to compare the teachers' cocurricular input as rated by students, co-teachers and principal with their attitudes, (v) to compare the teachers' professional growth with their attitudes, and (vi) to compare the attitudinal difference between the teachers whose parents were teachers and those whose parents were not teachers.

For measuring attitudes of teachers towards the teaching profession, an attitude scale was developed using the Thurstone method; for measuring efficiency of teachers and cocurricular input, rating scales were developed. For measuring professional growth, a questionnaire was prepared. The attitude scale was administered to 400 male and 400 female teachers from 40 schools selected at random. The professional-growth questionnaire was answered by the teacher himself and the teaching-efficiency and cocurricular-input scale were administered to his three co-teachers, three students and the principal of his school. Analysis of variance and the chi-square test were used to test the significance of the difference between two means and to test the equal probability of answers given for professional growth. The $(2 \times 2 \times 2 \times 2)$ factorial design was adopted to study the attitudes.

The major findings were: 1. The professional attitude of urban teachers was more favourable than that of rural teachers. 2. The female teachers had more favourable attitude towards the teaching profession than male teachers. 3. The more experienced teachers had more favourable attitudes than less experienced teachers. 4. Teachers holding a degree and those holding a certificate did not differ in their attitude towards the teaching profession. 5. Area and sex interacted so far as the professional attitude of teachers was concerned. 6. There was no effect of interaction between area and experience upon the professional attitude of the teachers. 7. An area and qualification interaction effect was seen on the professional attitude of teachers. 8. The experience and qualification interaction influenced the professional attitude of teachers. 9. There was a significant influence of interaction between sex, experience and qualifications on teachers' attitude. 10. The professional attitude of teachers of government schools was more fa-

vourable than that of private schools. 11. The favourable attitude towards teaching increased with increase in age. 12. The attitude of arts teachers was found to be more favourable than that of science teachers. 13. The attitude was found to be dependent on type of school and age of the teachers. 14. It was found that the men whose profession was teaching had no influence upon the professional attitude of their children working in the teaching profession. The women whose profession was teaching had an influence on the professional attitude of their children working in the teaching profession. 15. Married teachers had a more favourable attitude towards the teaching profession than those who were unmarried. 16. There was a positive relationship between teaching efficiency and attitude towards the teaching profession. 17. There was a negative relationship between cocurricular input and attitude towards the profession. 18. There was a positive relationship between teachers' professional attitudes and their professional growth.

ALSO SEE

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