DOCUMENT RESUME

ED 076 485   SO 005 910

AUTHOR   Joseph, A., Ed.
TITLE   Indian Educational Material. Annotated Quarterly
                Bibliography. Volume 7, Number 2, (Period Covered
                April-June 1972).
INSTITUTION   Indian National Scientific Documentation Centre,
                Delhi.
SPONS AGENCY   Office of Education (DHEW), Washington, D.C.
REPORT NO   TT-72-51009-02
PUB DATE   Jun 72
NOTE   85p.

EDRS PRICE   MF-$0.65 HC-$3.29
DESCRIPTORS   Adult Education; *Annotated Bibliographies;
                Bibliographies; *Comparative Education; Educational
                Administration; Educational Development; Educational
                Practice; Educational Problems; Educational Research;
                Educational Strategies; Evaluation Methods; *Foreign
                Countries; Indexes (Locaters); *Public Education;
                Teacher Education; Teaching Methods; Technical
                Education; Vocational Education; Womens Education
IDENTIFIERS   *India

ABSTRACT
        One hundred and forty nine abstracts of articles
appearing in periodicals and newspapers make up this quarterly
publications on education in India. Many topics are covered, some of
which are: adult education, finance, guidance and counselling, moral
education, physical education, and history. A second longer section
is on technical education. The document is alphabetically arranged
first by subject then by author. Some related documents are: ED 041
683, ED 043 437, ED 049 989, ED 067 334, and SO 005 474. (OPH)

ED 076485

TT 72-51009/02

INDIAN EDUCATIONAL MATERIAL

[Period Covered April-June 1972]

Vol 7 No 2

June 1972

INDIAN NATIONAL SCIENTIFIC DOCUMENTATION CENTRE,
DELHI-12

INDIAN   EDUCATIONAL   MATERIAL

annotated quarterly bibliography

Vol 7 No 2 June 1972

/ Period Covered: April-June 1972 /

(Abstract Nos. 168 - 317)

Contains a Special Section

TECHNICAL EDUCATION - II

(Abstract Nos. A27 - A59)

Editor

A. JOSEPH

Associate editors

V.N. KUSUMA
R.S. SHEDHA
V. SUJATA

Assisted by

B.K. SEN

CONTENTS

ACADEMIC ACHIEVEMENT

168   AGYA JIT SINGH: Academic achievement and body measurement —
a study of correlates. Journal of Educational Research and
Extension 1972, 8(3), 166-70. 14 ref.

The purpose of the study is to determine the degree of relation-
ship between the physical measurements and academic achievement.
Information about the percentage of marks in matriculation
examination, percentage of marks in B.A./B.Sc. degree examination
and physical measurements such as weight, height, and measures
of chest was collected from 200 male students (age range
20-28 years) studying in postgraduate classes. Intercorrelations
between the variables were computed. The findings are as
follows: 1) there is no relationship between academic achievement
and body measures; 2) correlation exists between the body
measurements themselves; and 3) a positive correlation exists
between the marks of matriculation and B.A.

169   DEB M: Interest pattern of high achievers in natural
science course. Indian Journal of Psychology 1967, 42(1-4),
97-100.

The sample for the study consisted of 395 students who passed the
higher secondary examination of the Board of Secondary Education,
West Bengal with physics, chemistry and mathematics. The Strong's
Vocational Interest Blank was modified by the author in 1962, and
the same modified form was administered to the students for
analysing their interest pattern. The high achievers were found
to be interested in occupations and activities that require
scientific knowledge and some proficiency in mechanical manipulation.
They also seemed to be extroverts and independent.

170   DEO P, GUPTA A K: Comparison of the criteria for identi-
fying over- and under-achievers. Indian Educational
Review 1972, 7(1), 153-67. 15 ref.

Fifty nine students of VIII class, of whom 17 were girls,
were chosen for the study. The aggregate of marks obtained
by them in three previous examinations in academic subjects
was taken as achievement scores. Intelligence test standard-
ised by Prayag Mehta was administered for verbal intelligence
scores. Raven's Standard Progressive Matrices test was used
to obtain non-verbal intelligence scores. The various
statistical and other methods used to identify the over-,
average and under-achievers were: i) T-score ratio, ii) regression
equation, iii) stanine difference, iv) percentiles, v) teachers'
ratings, vi) identification by teachers. The results obtained
were in terms of frequencies falling into the three categories
by each method separately for verbal and nonverbal intelligence
scores. The data were analysed and the following conclusions
arrived at: 1) the different criteria using the same measures
of achievement and intelligence do not show a very high
correspondence for classification of students into the three
categories; 2) different classifications may be obtained for
the same subjects if non-verbal intelligence scores are used
as the basis instead of verbal ones; 3) teachers' ratings or
identification by teachers correspond well with each other but
lack the support of statistical methods; teachers' methods may
be supplemented by other methods to make them more valid and
accurate.

171   HUNDAL P S, JSRATH J.M: Correlates of projective measure
of achievement motivation and their factorial structure. Indian
Journal of Psychology 1972, 47(1), 15-27. 42 ref.

The study was undertaken to investigate the structural relation-
ship of n-Ach with personality factors, dominant interests,
intelligence, and academic success. Besides, the structural
relationship of academic achievement with intelligence and personality,
the structures of second order personality factors and their
relationship with dominant interests were also studied. Two
hundred and two postgraduate students were administered 1) adapted
version of McClelland's Thematic Apperception Test of n-Ach
(SIET Institute, 1964), 2) IPAT 16PF Questionnaire, Form A
(Cattell, 1962), 3) IPAT Culture Fair Intelligence Test, (CFT)
Scale, 3, Form B (Cattell, 1959), 4) adapted version of
Allport-Vernon-Lindzey Study of Values (Chowdhary, 1959).
The marks obtained in matriculation and B.A./B.Sc. were taken as
the measure of academic achievement. Intercorrelations were made.
The following are the findings of the study: 1) the projective
measure of n-Ach seems to be a compound measure, its major
variance is associated with verbal and non-verbal measures of
intelligence and factor A of 16PF while the two separable small

fractions of variance are associated with factors L, Q1, E and N of 16PF; 2) the academic achievement is positively related with intelligence and negatively with personality factors of Q3; 3) three second-order personality factors - anxiety, extraversion and neuroticism - reported by Cattell are replicated; 4) personality characteristics of persons with dominant, theoretical, religious, social, and aesthetic interests are also described.

172   JEYARAMAN V, VISVESVARAN H: Pronunciation of sounds of English by pupils studying in primary classes. Journal of Educational Research and Extension 1972, 8(3), 183-7.

The pronunciation of pupils of standard V was investigated by administering a few tests in pronunciation devised on the basis of the vocabulary studied by pupils. A differential study of the pupils was made with regard to sex, locality and the management of schools. The correlational study was made with respect to socio-economic condition, occupational status of the parents and the pupils traits as rated by their teachers. The following findings have been listed: 1) the difference of achievement in English pronunciation between girls and boys is insignificant; 2) pupils in urban areas are significantly superior to those of rural areas; 3) the pupils studying in private schools are significantly superior to pupils studying under public management; 4) the factors viz. general intelligence, interest, work habit, attendance etc. have a direct relationship with the achievement of pupils in English speech; 5) a significant correlation exists between the academic achievement scores and teachers' rating of pupils' habit and between the speaking ability and the achievement in test; 6) only 46% of the teachers handling English listen to the radio programmes in English arranged by the Regional Institutes of English; 7) a majority of pupils are unable to pronounce sounds and consonant clusters which have no equivalent sounds available in Tamil. It has been recommended that teachers should make the lessons attractive, recognise the importance of habit formation in English pronunciation, provide oral practice of speaking English in the classroom, and give special attention to the pronunciation of consonant clusters in the classroom.

173   KAKKAR S B: Can I.Q. predict academic success? Indian Journal of Psychology 1967, 42(1-4), 64-7. 3 ref.

The Intelligence Test Scores often used to predict academic success may give erroneous predictions when considering the individual. The Scattergram, showing relationship between arithmetic achievement and intelligence that the author gave in his study of a random

sample of Junior Model School, Jullundur in 1967, has been cited as an example. When coefficients of correlation and equations are used to predict a pupil's academic success, the two assumptions are that the nature of the individual's past is constant and will continue into the future, and that academic success depends solely on intelligence as shown, through I.Q. However, this deterministic approach seems to be faulty and should give place to realistic approach in which individual differences may be measured on a more feasible assumption that a pupil is highly dynamic, his past nature may not continue into the future, and his achievement may be influenced by known and unknown factors.

174   PADMANABHAN NAYAR P: Role of numerical ability on science achievement. Kerala Journal of Education 1971, 3(1,2), 36-41. 8 ref.

The Numerical Ability subtest Form A of the Differential Aptitude Tests (D.A.T.) was administered to a sample of 345 boys and 315 girls studying in Standard X in the secondary schools of Trivandrum Revenue District, Kerala. The average marks obtained in the three terminal examinations in Science constituted the criterion of Science achievement. Two extreme groups in numerical ability (NA) were compared with their science achievement (SA). Similarly, two extreme groups in SA were compared with their NA. The data obtained were analysed and the following conclusions drawn: 1) numerical ability can be considered an important determinant of science achievement at the secondary school stage; there is no significant difference between boys and girls; urban students are superior to rural students; 2) high numerical ability would help pupils to have a better performance in school science and low numerical ability would result in low science achievement; and 3) high achievers in science tend to secure high scores and low achievers low scores on NA.

175   SIVADASAN PILLAI K: Rural-urban difference in Hindi comprehension of high school entrants in Kerala. Kerala Journal of Education 1971, 3(1,2),   42-5. 5 ref.

A test of comprehension in Hindi for pupils of Standard VIII was administered to a sample of 750 rural and urban   students studying in standard VIII in Trivandrum District. Analysis of the data revealed that rural and urban pupils differed significantly in relation to their comprehension ability in Hindi. The rural areas were at a disadvantage because of lack of facilities and motivation.

176   VISANTHA RAMKUMAR: Ordinal position in family, self concept
and achievement of college students. Journal of Educational
Research and Extension 1972, 8(4), 211-16. 10 ref.

The present study has been made to find the relationship among
the birth order, self concept and achievement of college pupils.
A sample of 312 girls and 282 boys studying in Pre-Degree
classes in seven colleges in Trivandrum was administered a self-
concept measure and Nafde's Non-verbal Test of Intelligence.
The ordinal position of the subjects was fixed by administering
a Personal Data Sheet. The average of the total marks obtained
in all the subjects for two term examinations constituted the
achievement index. The findings are given as follows: 1) though
there is significant relationship between ordinal position and
self concept, ordinal position has no relationship with achievement;
2) when intelligence is controlled there is significant relationship
between ordinal position and self concept or achievement.

ADMINISTRATION AND ORGANIZATION

177   ABDUL RAHIM: Teachers taught to teach - collegiate
administration, Osmania University's first programme. Education
Quarterly 1972, 23(4), 35, 36.

The Principals and Heads of departments were given instruction
in some basic elements of management and managerial skills of
college administration under a project which was jointly sponsored
by the Osmania University, the Ford Foundation, the University
Grants Commission, and the Administrative Staff College of India,
Hyderabad. The objectives of the 14-day workshop-cum-training
project were to provide a) required knowledge of core subjects
related to higher educational administration, b) specific
functional skills needed for effective college administration,
and c) new attitudes towards a dynamic purposive and creative
university education in India. It was ascertained from the
participants that the project was a worthwhile experience.

178   AGGARWAL J C: Vidyālaya praśāsan tathā swāsthya śikgā
(= school administration and health education). ⎡Hindi_⎤.
New Delhi, Arya Book Depot, 1972. viii, 290p.

Contains discussion on the following topics: 1) definition,
objectives and scope of educational administration; 2) school
building and   equipment; 3) institutional planning; 4) the

head of the school; 5) the teacher; 6) co-curricular activities;
7) time-table; 8) discipline; 9) self-government in schools;
10) punishment and rewards; 11) school and community;
12) examination and evaluation; 13) school library; 14) health
education; 15) physical education.

179   ARUMUGAM K, NARAYANASWAMY N S: Study of the educational
facilities needed in primary schools in Perianaickenpalayam
Panchayat Union. Journal of Educational Research and Extension
1972, 8(3), 179-82.

The needs of 48 schools in Perianaickenpalayam Panchayat Union
were studied with the aid of responses obtained to a questionnaire
supplied to the headmasters of the schools. The main findings
are as follows: 1) the schools were found to have inadequate
teaching staff; a significant relationship exists between adequacy
of teachers in schools and good results; 2) only 25% of schools
arrange for periodical health check-ups for pupils, and 83.3% of
the schools do not possess first aid kits; 3) more than 40% of
the schools need teaching aids in Science, History, Geography, and
50% need teaching aids in Tamil, English and Mathematics; 4) all
the 48 schools are poorly equipped with sports and games material,
and many schools require gardening equipment etc. Based on these
findings, appointing adequate teachers, arranging for periodical
health check up of pupils through the primary health centre,
supplying first aid kits to all primary schools, offering practical
training through workshops to teachers in the preparation of
teaching aids, and conducting periodic school improvement conferences
have been recommended.

180   Autonomous colleges /_Editorial_/. Hindu 27 May 1972,
p. 6, col. 2. 450 words.

Setting up of autonomous colleges for talented students has
been favoured by educationists. These colleges are being
allowed to frame the rules of admissions, examinations etc.
The Education Commission was also in favour of such autonomy,
provided the privilege was conferred on the basis of periodic
review of the colleges' performance. Andhra Pradesh has a
proposal to develop a few such colleges in the State. When
this experiment succeeds and other States follow suit, autonomous
status might be granted to selected colleges on an All-India
basis as suggested by the UGC. The experiment of establishing
autonomous institutions for the talented which could display
initiative and greater competence should be encouraged.

181   CONFERENCE OF SOUTH INDIAN VICE-CHANCELLORS, THIRD, ANNAMALAI,
1972:   Report.   University News 1972, 10(5), 15, 16.

The proposals approved by the Conference are: 1) merging the
Senate and Academic Council into a single advisory body and
making the Syndicate more compact by restricting its strength
to a maximum of twelve; 2) adopting the principle of student
participation as recommended by the special committee of the
University Grants Commission; 3) introducing the semester
system and course work at the Masters' level in Science,
Humanities and Commerce and at the undergraduate level in
professional courses.   The other suggestions are: 1) introducing
a five-day, six-hour week with 180 working days, holidays
being cut down to the minimum; 2) bringing about periodical
exchange of ideas between the universities; 3) including in
all Master's degree examinations a viva of 50 marks;
4) adopting the 10+2+3 formula regarding the years of study
at school and college.

182   GURUGE A W P: Towards better educational management.
New Delhi, Asian Institute of Educational Planning and
Administration, 1970.   xii, 156p.

The book is a collection of four papers written by the author:
1) 'Modern management techniques applicable to educational
administration' gives a glimpse of the new management techniques
that have been adopted in recent years in the fields of
industry and commerce; 2) 'Educational finance and administration'
raises some questions which fall into five categories –
a) functional, b) organizational, c) legal, d) informational,
e) attitudinal, and for all these the suggested solution is
adoption in a suitably modified form a modern budgeting system
such as planning-programming-budgeting system (PPBS);
3) 'Functional analysis of educational planning – internal
division of functions and administrative organization' points
out that the Ministry of Education is the most desirable
administrative organization to undertake educational planning,
and that the ideal machinery for planning is an Educational
Planning Commission headed by the Minister himself; 4) 'The
concept of life-long integrated education' highlights the
plethora of activities which can legitimately be brought within
the purview of life-long education and the diversity of
approaches which have to be adopted to meet the requirements of
an ever-widening clientele.

183   Ills of universities /̅ Editorial̅_/. Mail 12 May 1972,
p. 4, cols. 1, 2. 600 words.

The Government's apathy in dealing with the ills of universities
has been deplored. The following remedial measures have been
suggested: 1) enabling the students to concentrate on their
studies and resist the glamour of politics; 2) disbanding the
youth and student wings of various political parties;
3) introducing some sort of selective admission to provide
higher education mainly to the deserving students; 4) appointing
an effective vice-chancellor, who must be a person of outstanding
ability and scholarship, enjoying enough powers to put down
irregularities and protect the university autonomy.

184   . MATHAI S: Power politics in universities - new constitution
needed to remove maladies. Mail 11 May 1972, p. 4, cols. 3-7.
2000 words.

Suppression can only be a temporary means to control the
maladies of universities. Some of the remedial measures
suggested are: 1) appointing an academic and a non-partisan
vice-chancellor and giving him real power to deal with the
university affairs; 2) abolishing the senates and instead,
the Government creating an autonomous supreme council for
each university, with financial powers vested in it;
3) evolving a suitable machinery for selection of the Vice-
chancellor who should be appointed by the supreme council;
4) empowering the supreme council to create vacancies and
posts in the university and authorizing an executive council
headed by the vice-chancellor with the power of veto to make
appointments; 5) creating autonomous colleges; 6) making
teaching, learning and testing less complex and more manageable
in size, and creating a more personal and humane atmosphere
in the classrooms and in examination halls; 7) providing job
opportunities to non-degree holders and introducing job-
oriented courses at the pre-university level.

185   Quality in education /̅ Editorial̅_/. Hindustan Times
24 June 1972, p. 5, cols. 1, 2. 700 words.

The ordinance amending certain sections of the Delhi University
Act viz. 1) conferring powers on Delhi University to declare
colleges conducting courses in Medicine, Technology, Music and
Fine Arts as autonomous, and 2) enabling the Executive Council
of the University to set up one or more college councils which
would in effect run a number of arts, science and commerce
colleges on behalf of the university with discretionary powers
of their own, has been welcomed. Thus, the university would

engage itself with postgraduate teaching and research activities. As the college councils will have to deal with increasing number of students, they should be manned by able people to make the innovation a success. These changes would enable the maintenance of proper educational standards. In order to raise the quality in education, the Vice-Chancellor of the Delhi University pleaded for the right of the university to restrict admissions to colleges and offer those who get low percentage pass marks, admission to correspondence courses. However, if this stand of the Vice-Chancellor is not accepted, then it would affect the quality of education.

186   REGIONAL SEMINAR ON THE APPLICATION OF MODERN MANAGEMENT TECHNIQUES TO EDUCATIONAL ADMINISTRATION, NEW DELHI, 2-12 NOVEMBER 1970. Report. New Delhi, Asian Institute of Educational Planning and Administration 1971. iii, 542p. 98 ref.

The main objectives of the Seminar were to acquaint the educational planners and administrators with the theory and concepts of modern management and to make them aware of the application of some of the modern management techniques to administration in general and educational administration in particular. The report is divided into two parts. Part one presents details regarding the organization of the seminar, summaries of discussion papers presented at the seminar, a resume of discussions held on each paper, and major recommendations. Part two contains the full text of all discussion papers and a select bibliography on the subject.

187   SARAVAN KUMAR: Indian educational service. NIE Journal 1971, 6(1), 41-7.

A short account of how the Indian Educational Service (IES) that was created in 1886-87 fizzled out in 1924 has been given. It is observed that the tremendous expansion of education in the post-Independence period call for the creation of IES. The Kothari Commission (1964-66) has also welcomed the idea. Presently the members of the Indian Administrative Service (IAS) are involved in development of education in most of the States. Slowly and steadily the programmed educational administration, like programmed instruction is coming into vogue. This position demands a specially recruited staff. It is felt that the provincial educational service cannot deliver the goods and that there is a need for creating an IES. The following suggestions are given: 1) creation of IES should be a phased programme; a beginning may be made in one State or a Centrally administered area; 2) the IES should be looked upon as a means of implementing the Centre's advisory role as well as the States' educational programmes; 3) there should be special training and education for the IES candidates on the pattern of the IAS training; 4) the encadrement of the IES should include some selected posts of headmasters, district education officers, officers in the directorate and the secretariat, educational advisors in the Centre, some posts in the departments of education of universities, teaching staff in the proposed staff college for educational administrators, etc.

188   SHARMA M.L: Organizational climate of schools, a comparative
study. Naya Shikshak (Teacher Today) 1972, 14(3), 74-86. 11 ref.

The sample consisted of 56 headmasters and 570 teachers from
56 boys' as well as girls' schools. Out of 56 schools 34 were
government schools. The organizational climate of the schools
was studied by using the tool OCDQ developed by Halpin and Croft.
The hypothesis sought to be tested was that the government
secondary schools differ from private secondary schools in their
organizational climate. The following are the main findings:
1) no significant differences were found to exist in the organiza-
tional climates of government and   private schools; 2) staff
members of a larger number of girls' secondary schools perceived
the climate of their schools as 'controlled' as compared to boys'
schools; 3) 'Closed' climate was most frequently perceived climate;
this was followed by 'open' and then 'controlled' climate types;
4) no significant difference was found in all the three dimension
(except 'Esprit!) means associated with group behaviour; mean scores
on 'Esprit' were high for government schools; 5) no significant
difference was found to exist in all the four dimension means
associated with leader behaviour between government and private
schools; 6) disengagement associated with group behaviour was found
to be high in the private boys' schools compared to private girls'
schools; 7) intensity of   'thrust' associated with leader behaviour
was found to be significantly high in girls' schools.

Student Participation

189   ABRAHAM A S: Student participation – dangers of hasty
reform. Times of India 17 May 1972, p.8, cols. 3-5. 1200 words.

The unthoughtful manner in which the Western idea of student
participation is being accepted by politicians and administrators
alike has been criticised. Unlike in the West, student leaders
in India, are politicians on the make, striving for personal gains
rather than for the interests of their fellow students. Moreover,
the average student in the West is older, better informed and
emotionally more mature than his Indian counterpart who is most
worried about security via a degree. He is not motivated by a desire
to change the system but merely to bend it to selfish purposes.
Hence, it has been urged that the advisability of student participa-
tion should be considered seriously before its introduction.

190   BIR SINGH: Who says students should not participate?
NIE Journal 1972, 6(4), 27-31.

It is argued that students should be allowed to participate in
all aspects of educational management including selection and
promotion of teachers. Students' active participation should,
in the long run, not only establish administrative and academic
reforms in the educational system, but should contribute to
mould national leadership in different fields. Student participa-
tion should not be merely in the form of a consultative machinery.
It is noted with gratification that many of the Indian
universities have already taken steps for student participation in
the academic and administrative affairs.

191   MISHRA N C: Student participation in varsity affairs.
Free Press Journal 8 April 1972, p. 4, cols. 3-5. 1500 words.

The demand for student representation in the academic and
governing bodies of universities is made both by teachers and
students. Young students are confident of managing the
affairs of their institutions efficiently. The student-teacher
consultative committee could be formed with student representa-
tives selected on the basis of one or two from each class
including postgraduate classes, professors in the departments
and teachers to match the strength of student representatives.
This committee could discuss all academic and administrative
matters at regular intervals. Dr. T. Sen suggested that a
committee consisting of three-student representatives from each
faculty, the Vice-Chancellor, the Registrar, the Controller of
Examinations and the Dean of students should meet once in three
months to keep the students informed about the background of
administrative measures and to seek their suggestions about
other measures to be taken. He also urged the formation of a
student affairs committee to coordinate various student
activities, a library committee and a finance committee and a
placement and training committee to help pupils looking for work
to finance their studies. The finance committee would discuss
the university finances and present the student's point of
view at the finance body. However, in India, the student
participation is being acceded to under pressure. The
Universities should be opened to new ideas and bring about
fellow-feeling in the campuses by allowing students to
participate.

192   RAJAGOPALAN K R: Restricted scope for student participation.
Mail 18 April 1972, p.4, cols. 3-5. 1100 words.

The Senate and the Academic Council being fairly large, even if
students are given about 20 to 25 seats, their voice may not be
effectively heard and are likely to be more frustrated than before.
Similarly, in the smaller bodies like the Boards of Studies where
the maximum number is only 12, lack of adequate subject knowledge
would be a handicap to the student in his effective participation.
Moreover, the tenure of students is not long enough to be able to
get well acquainted with the rules and regulations prescribed for
smooth functioning of the university bodies, and to use them to
further one's field of interest. Hence, a deeper study of the problem
should be made with only a healthy and fruitful participation in view.

193   Student participation / Editorial_/. Hitavada 6 April 1972,
p.4, cols. 1-2. 800 words.

Favouring the participation of students in the control of
universities, it has been urged that the students be represented
from post-graduate teaching departments. Such students would
be able to put forth their suggestions with maturity. The
students are not clear about what they expect to achieve by
participation. Therefore, they should draw out clear proposals
and objectives for pressing their demands and provide a guideline
to enable authorities to support the measure. An understanding
is absolutely essential that the student representatives would
concede to the verdict of the committee or to vice-chancellor's
ruling. The elders and the students should work in a spirit
of reciprocation. The students should respond to the opportunity
given to them for participating in University affairs and work
wholeheartedly for the achievement of success.

194   VINAYAK J P: University administration - should students
participate? Hindustan Times 1 April 1972, p.7, cols. 3-6.
1200 words.

In view of the rapid growth of the academic institutions and the
resultant communication gap, involvement of students in the decision-
making bodies like Senate, Academic Council, Boards of Studies, and
Executive Council has been recommended. The proposal has been
justified on the grounds that it will help teachers to teach better
and students to learn better and that it has educational value.
However, decision-making in certain areas like admission, appointment,
promotion, examinations, etc. should be left to teachers, students
having a right to offer comments and criticism. It has been under-
lined that the university authorities should have no fears that the
student representatives will act irresponsibly.

195   BHADRIAH M: Functional literacy. Indian Journal of Adult
Education 1972, 33(4), 11, 12.

The concept of functional literacy means that the adults must
acquire an ability to read and write which is truly functional
and that the literacy programmes must be linked with technical,
agricultural, industrial, health, and home-making training, so
that all dimensions of life-economic, scientific, health, vocational,
social, etc. are developed in them. Due importance must be given
to follow-up programmes and reading materials for neo-literates so
that they maintain and improve their reading ability.

196   BUTT H: Population education for young adults. Social
Action 1972, 22(2), 99-110.

There is need for population control. It is therefore necessary.
to consider how best to impart population education to out-of-
school young adults. The approach so far to control population
has been exclusively clinical and the major burden of selling the
idea has been thrust on medical profession. The non-medical
approach has been emphasised in this article. In pressing for
population control, it will not be effective to aim at changing
basic values. The economic, health and social advantages of
having a small family have to be stressed. The educational
programme has to employ the microcosmic approach which permits
the use of concrete examples of immediate relevance easily
grasped by the target population. People are not sufficiently
altruistic to understand the global or national implications of
population explosion. Having presented the case for the desirability
of the small family, it remains to show that the means of controlling
the size of the family are available, medically safe and also religi-
ously and socially acceptable. The population education can be
imparted by non-medical persons. For this, there should be a properly
conceived organizational structure. Besides, the mass media can also
be employed effectively. It is better to incorporate population
education into the various socio-economic and learning situations for
which there is popular demand.

197   CONFERENCE ON CONTINUING EDUCATION AND UNIVERSITIES IN THE
ASIAN AND SOUTH PACIFIC REGION 1970, MADRAS: Continuing education
and universities. New Delhi, Indian University Association for
Continuing Education and University of Madras 1971, ii, 227p.

This publication contains papers discussed and the addresses
delivered at the Conference. The Conference agreed upon to

make the following broad recommendations to the universities:
a) a department of continuing education should be established
within each university; b) as programmes are launched, the
university would ascertain the needs of community; c) each
department of continuing education should be advised by a
committee, consisting of the Vice-Chancellor as Chairman and with
a broad based membership consisting of persons belonging to the
academic community as well as representative citizens residing
within the area served by the university; d) the physical
facilities of the university, such as the libraries, laboratories,
halls of residence etc., should be readily made available for
use in connection with programmes of continuing education;
e) community involvement should be sought both in the planning and
conduct of programmes of continuing education, and community
resources in the form of personnel and phycical facilities should
be utilised whenever possible.

198   GUPTA L N: Linking   adult education with life. Naya Shikshak
(Teacher Today) 1972, 14(3), 14-19.

Adult literacy has to play a major role in bringing about a
more harmonious and just social order, apart from its need
for general economic development. The most important factor
in adult literacy is motivation. It is in this regard that
functional literacy assumes importance. The programme has to
be devised in such a way as to suit the peculiar needs of a
particular area. To start with, 20% of the illiterates in an
area chosen should be concentrated upon instead of attempting
100% coverage. The teaching should be made interesting.
Audio-visual aids should be made use of. Special programmes
should be devised for the children who accompany adult
illiterates, particularly women. Adult literacy programmes
should be coordinated with developmental projects such as
canal project. Care should be taken to see that functional
literacy does not become merely utilitarian programme without
adequate emphasis on basic virtues which go to make good citizens.

COURSES OF STUDY

199   MATHIAS T A: Modernising the curriculum. New Frontiers
in Education 1972, 2(1), 28-39.

The drawbacks of the system and methods of education in use in
Indian universities have been pointed out as
follows: 1) the syllabus prescribed is in great minute detail
thus indicating the extent of the knowledge that a student need
to possess in order to graduate; thus, the purpose of the
university course has been taken to cram information into the

students in a limited time; owing to the stress laid on word-perfect information, tendency of using memory is encouraged; 2) the type and number of questions set at the examinations are descriptive in nature requiring almost a reproduction of text-book material; 3) the use of English as the medium of instruction and examination makes slavish dependence on memory; 4) the capacity for independent thought has been curbed in all the universities; 5) curricula is purely theoretical and have no relation to the actual problems of life in India; 6) the courses of study in rural colleges are also not related either to rural life or to programmes of rural development; 7) the curricula.in Indian Universities are outdated. The remedial measures have been suggested as follows: 1) the syllabus should give in broad outline the areas of study with which students should be familiar; 2) no textbooks should be prescribed; only a list of reference books which cover the syllabus should be prescribed; 3) each Board of Studies should revise the syllabus at least once in three years to exclude outdated matters and to include the latest research and discoveries in the field; for this purpose the Boards of Studies should have qualified young men and women and one or two members outside the university who are competent and aware of advancing knowledge; 4) the structure of the courses should be changed to provide a large choice and combinations of subjects to students; 5) while the syllabus is to be constantly revised opportunities be provided for the teachers to keep up with advancing knowledge through attendance at seminars and special refresher courses; 6) the outdated methods of teaching should be replaced by seminars, problem-solving sessions, library sessions and other well-known pedagogical devices; 7) the examination system should be reformed by continuous assessment of pupils; 8) colleges should not be subsidised by the State through grants-in-aid. They should charge fees to run the institutions; 9) the first degree should be separated from the university and placed under an autonomous college Board. Only Master's degree should remain in the university and its level be raised to international standards.

CURRICULUM

200   AGGARWAL, L N:. Teaching economics in secondary schools — a point of view for developing curriculum. Educational Forum 1971, 16(2), 1-4.

The teaching of economics at the secondary level should encourage reasoned judgment and rational analysis of economic problems. A basic framework on which the syllabus in economics for the higher secondary classes could be evolved, has been

suggested as under: 1) information as to how an economy works,
the various flaws in the economy; 2) various patterns of economics
functioning in the world; 3) Indian economy; 4) basic concepts
and simple principles of economics derived from the above three;
5) application of these principles for analysing practical
economic problems facing India; 6) economic planning - as
solution for economic ailments.

201   AIYA S V C: School science project of India. Delhi,
National Council of Educational Research and Training, 1971.
13p.

The NCERT, which is the agency most concerned with the
organization and execution of a school science project, and
the Indian educational pattern have been described. The
objectives of a major school science project are that the
teaching of science at the elementary stage should be
integrated with the environment in which the child grows,
and towards the end of the middle school and, more particularly,
at the secondary stage, considerable stress be   laid on the
applications of science and use of tools and gadgets. The
implementation of such a programme requires pre-service of
teachers as well as instructional material like teachers'
handbooks, textbooks, demonstration kits and pupils' kits.
A pilot project already launched with the assistance of the
UNESCO and the UNICEF to realize the above has been described.

202   BAIRATHI M P: Vanijya siksan yuganukul kaise ho? (= Commerce
teaching - the question of keeping pace with time) / Hindi /.
Naya Shikshak .(Teacher Today) 1972, 14(3), 108-115.

Some of the drawbacks of the Commerce syllabus of the
Rajasthan Board of Secondary Education are: 1) lack of
relationship between theory and practice; 2) outmoded
textbooks of Book-keeping, Business Methods, Banking and
Commercial Geography; 3) defective system of teaching;
4) ill-equipped classes; 5) lack of orientation programmes
for in-service Commerce teachers. Some suggestions for
improvement are: 1) revising the syllabus and rewriting the
textbooks; 2) the Board and the Department of Education
providing opportunities for seminars and group discussions
where the services of experts can be availed of; 3) starting
in-service training programmes for Commerce teachers;
4) providing funds to equip Commerce classes with latest
Commercial devices;   5) including practical examinations
to test application of knowledge.

203   BLANDOW D: Need for and requirements of work-experience.
NIE Journal 1971, 6(1), 18-22.

All the sciences are eventually related to the production
process as a source of social wealth and this will form the
basis of evaluation of all scientific activities. Therefore,
work-experience must be a subject for all children without
exception and an integral part of general education. It is
imperative to prepare basically the pupils for their future
occupations during their schooling. In all professions more
advanced techniques and tools are to be used and so the
citizens should be trained in such techniques and tools. The
development of the child's social relations is an important
task for work-experience. From the pedagogical point of view,
linking the students' training with productive work is
necessary for the unity of the mental, moral and physical
development of the child. An overview of the need for and
place of work-experience is given diagramatically. Linking
the productive work with the idea of general education means
that work-experience has ramifications and similarly other
subjects have ramifications with the area of work-experience.

204   DEV INDER SINGH: Education for proper social behaviour.
Educational Forum 1971, 16(3-4), 1-6.

Next to home, school is the formal agency to look after the
social development of the child. The school should socialise
the child in the following manner: 1) the curriculum having
sociological approach; 2) the subject matter being an effective
instrument of social control; 3) laying primary emphasis on
the social behaviour outside the classroom; 4) providing
socially desirable knowledge, skills and experiences;
5) providing social interaction in various social situations;
6) making available opportunities for social and group learning
such as games, dramatics, projects, debates and other
activities; 7) enforcing social discipline and social control
through a body of rules, regulations, moral and social values;
8) developing pupils into good citizens, increasing their
judgement, initiative, independence and social competence;
9) the content of education being determined by social
environment of the pupils.

205   KRISHNAN V S: Population education. Hitavada 19 April
1972, p.4, cols. 4-7. 1080 words.

Population education should create in the minds of youth
and children, a rational, scientific and realistic attitude
towards the demographic problem. Broad concepts of health
and economics of family as a social unit and elementary ideas

on dynamics of population growth, the inter-relationship
between total population and the resources of the nation
should be taught in graded stages at primary, middle, and
secondary schools and at university classes. The subject
should integrated with social science, geography and
other similar subjects and form a part of comprehensive
educational programme. Teachers of high calibre, specially
trained in the method of teaching this subject should be
provided to introduce the subject in logical and scientific
manner. The programme of population education should also
cover the out-of-school youth through extension work or through
various media of audio-visual instruction. A course of
training should be given to population educators working as
multi-purpose workers engaged in a school system and working
among rural youth groups, etc. Population education would
develop in youth the right attitudes for establishing social
equality and economic justice.

206   New course [Editorial /. Times of India 28 April 1972, p.6,
col. 1. 500 words.

The Government's decision to teach Marathi compulsorily for
three years from standard six to eight in non-Marathi-medium
schools but   exclude it in the examinations will not serve
the Government's aim that all non-Marathi students should gain
a working knowledge of the language. The Government's
purpose can be served only if students' promotions from one
standard to the other are based on passing the Marathi in
paper in the final examinations. It has been suggested that
a further deterioration in standards can be avoided by not
including an optional subject in the minimum five papers in
which a student must pass in order to get through the SSC
examination and by raising the minimum percentage required to
pass in these papers from 35 to 40, while the minimum for the
remaining two or three papers should not be less than 35.
The Government's decision to scrap its own earlier proposal to
have a public examination in two subjects at the end of
standard IX in favour of one mammoth test in standard X has
been regretted.

207   PAL B N: Family life education in Indian schools. NIE
Journal 1971, 6(1), 29-33.

The family life education (FLE) to be useful and functional
must conform to the cultural norms and the social and private
needs of the society. Important objectives of FLE are:
1) preparing students for better performance in family living;
2) promoting cooperative living among family members;
3) inculcating among students a sense of community and integrated

living so that the family does not stand in the way of the
realisation of the accepted objectives before the community;
4) creating a more progressive and sympathetic outlook on na-
- .tional problems. FLE need not be confirmed to school stage
alone, it should form an important part of adult education also.
The general content of FLE should include education about food,
consumption, home living, dress, sex, culture, religion,
morals, ethics, etc. FLE has to be a phased one spread out for
the entire schooling period. FLE for primary, middle and
secondary school stages has been proposed.

208   SRIVASTAVA P L: Objectives of home science at secondary
level; NIE Journal 1971, 6(2), 29-33.

The broad objectives of home science have been cited as -
1) developing an appreciation of and the basic abilities and
skills necessary for family living; 2) development of knowledge
and abilities fundamental for entering college studies in home
science; 3) knowledge of various professions or vocational
training open to high school home science students. The
specific objectives have been described and grouped under the
following subject headings: 1) food and nutrition; 2) housing
and home management; 3) clothing - personal and family;
4) child development and family relationships; 5) family
relations.

ECONOMICS OF EDUCATION

209   DATT R: Institutional cost and efficiency of education in
colleges of the Panjab University. Manpower Journal 1972,
7(4), 56-86.

The purpose of the study is to analyse the factors affecting
unit cost of college education and then to examine if there
exists any correlation between cost factors and efficiency of
the educational institution. The study covers 67 colleges of
the Panjab University. The officiency index has been defined
as the ratio of total students passed to total students admitted.
The variables included in the analysis of unit costs and
efficiency are: enrolment, age of the college, average pay of
the teacher, teacher-pupil ratio, and percentage of arts to
science students admitted. The influence of these variables on
cost of education per student admitted, percentage of students
passed to students admitted and cost of education per student
passed has been examined. The type of management - government/
non-government - has been included as a dummy variable. The
important conclusions arrived at on the basis of findings are

as follows: 1) It is very necessary to minimise cost per student passed by reducing the margin between students admitted and students passed. 2) Higher education in Panjab is operating at about 52% efficiency level. 3) The crucial factors affecting cost per student passed are enrolment, ratio of arts to science students admitted, pupil-teacher ratio and average pay of the teacher. 4) The efficiency of the institution is not linked to the teachers' level of wages. 5) The teacher-pupil ratio is a variable which increases unit costs, but being directly associated with efficiency, it tends to reduce cost per student passed. The principle of selectivity should be applied in admissions to science courses. 6) Cost per student admitted as well as cost per student passed are inversely related to enrolment.

210   PADMANABHAN C B: Economics of educational planning in India. New Delhi, Arya Book Depot, 1971. viii, 176p.

The book is an attempt to provide the techniques of economic analysis to the educational administrators to enable them to formulate a comprehensive and purposeful educational planning. The contents of the book include: 1) evolution of modern approaches to educational planning; 2) basic concepts in economics relevant to educational planning; 3) economic growth and techniques of projecting the national accounts; 4) setting up targets for enrolment on the basis of the manpower requirement for economic growth; 5) financing and costing of our educational plan; 6) an alternative approach to planning of education; 7) efficiency and productivity of education; 8) cost benefit analysis in educational planning; 9) systems analysis and other management techniques for educational planning and administration; 10) educational planning and budgeting; 11) economic analysis and new educational techniques; 12) economic analysis and vocational and technical education; 13) recent trends in economics of education and economics of educational planning.

EDUCATION : GENERAL

211   ASRANI J: Schools or penitentiaries? Hindustan Times, Sunday World 16 April 1972, p.1, cols. 1-5; p. 2, col. 6. 2500 words.

It is regretted that expansion of education is being achieved at the cost of the teacher-pupil ratio and relationship, and that undue amount of money is being spent on school buildings. It has been suggested that everybody connected with school education must recognize a) that a school must always remain

a small unit of not more than 600 pupils, with small classes and a manageable teacher-pupil ratio, b) that the school income must be spent on the educational needs of the children on the rolls, c) that the cost-burden of expansion should not be placed on these children but should be a charge upon society as a whole. The following measures have been recommended to improve the present situation: 1) levying specific .education cess at the State level, and taking loans from the banks; 2) designing school buildings in such a manner that a part could be rented out to commercial establishments; 3) modernizing teacher-training colleges.

212   CENTRAL ADVISORY BOARD OF EDUCATION, COMMITTEE ON SCHOOL BUILDINGS. Report. New Delhi, Ministry of Education and Social Welfare, 1971. 65p.

The Central Advisory Board of Education in its 35th meeting on May 2-3, 1970 passed a resolution emphasising the urgent need to provide buildings to educational institutions especially at the primary stage. The Union Education Minister appointed a Committee on School Buildings in order to examine the problem and to prepare concrete proposals for action. Brief summary of the recommendations of the committee are given below: 1) the committee urges the Government of India to set apart Rs.10 crores per annum for the next ten years as grants to the State Governments specifically for construction of school buildings. If necessary, half of the amount may be given as loan and the rest as grant; 2) a revolving fund of at least Rs.10 crores may be set up from which loans could be given to the State for the construction of school buildings; 3) in order to mobilise local resources for school buildings following steps are recommended - a) funds may be collected through lotteries, b) local people may be asked to donate one or two rooms at the time of birthdays, marriages etc, c) religious institutions may be encouraged to donate buildings as part of their programme, d) other avenues like staging plays, organising exhibitions should be explored for raising funds for school buildings, e) contributions in kind such as cement, food for paying for labour etc. may be collected; 4) the cost of school buildings may be reduced by adopting the designs and suggestions of the Central Building Research Institute; 5) priorities may be assigned for construction of new buildings, highest priority being given for schools now being held in open and for completing incomplete buildings followed by schools conducted in tents, and those having rented accommodation.

213   GOVINDARAJAN S R: Purposeful education in Tamil Nadu.
Hindu 2 June 1972, p.6, cols. 4-8. 1200 words.

In the context of the conflicting views regarding the duration
of school and college education, the following compromise has
been suggested: A ten-year school course should be followed by
a one-year PUC (Pre-Tech., Pre-Med or HSC) into which admission
will be on the basis of merit and much restricted. The Pre-
Tech will be in engineering colleges, the Pre-Med in medical
colleges and the HSC in some selected schools. Students who
fail to get into medical or engineering colleges after passing
the Pre-Tech or Pre-Med courses will go for diploma courses
in the respective fields. The degree course will be of three
years' duration and those that get into it from the PUC must
have reached a definite level of proficiency. In the alternate
structure meant for weak students, there will be a two-year
course with an academic stream and a vocational stream catering
to the majority. The two-year course should be entrusted to a
State board. Junior colleges conducting the two-year course
may be called as Institutes and affiliated to the State board.
Three-year degree colleges need not be run in remote villages
and the colleges offering only a few degree courses may be
converted into Institutes with several vocational streams. The
proposed schemes can succeed only if the Government give up:
a) the present system of free education at all levels upto the
PUC and b) the prescription of a degree as a minimum qualifica-
tion for public services (except the first cadre executives).
The three-year degree course must be very specialized and
vigorous and the overall economic and industrial planning must
be such as to create many more jobs.

214   MAHAPATRA H: Our education at a glance. Educational
Forum 1971, 16(3-4), 7-11.

The moral, cultural and spiritual degeneration of teachers and
students, exploitation of students by politicians, parental
apathy, increase in the number of experiments in education,
lack of justice and impartiality at higher levels have been
underlined as the major defects of the present educational
system. Some of the remedial measures suggested are: 1) selecting
the right type of teachers; 2) raising the financial and
social status of teachers; 3) standardising and centralising
education at all levels; 4) imparting moral instruction to
students; 5) forming democratic institutions in schools and
colleges like student unions, parliaments and clubs, and
increasing the number of curricular and co-curricular activities;
6) prohibiting political interference in educational institutions;
7) forming Parents Associations and giving them adequate
representation in educational administration and management;
8) formulating educational reforms only after due deliberation
and ensuring their irrevocability once implemented.

215   MUKERJI Ṣ N, OAD L K: Bhāratīya śiksā – sthiti-vislesạn·
tathā sambhāvanāeṁ (=_Indian_education – analysis and probabilities
of the situation). / Hindi_/. Arga, Vinod Pustak Mandir, 1972.
ii, 213p. 30 ref.

Contains essays by various authors on different aspects of Indian
educational problems. Chapter headings are as under: 1) historical
background of modern Indian education; 2) organisation of Indian
education; 3) pre-primary education in India; 4) primary education
in India; 5) secondary education in India; 6) higher education in
India; 7) teacher education in India; 8) technical education in India;
9) woman's education in India; 10) adult education in India;
11) education and language problem; 12) some experiment in Indian
education; 13) progress·and problem of education in Rajasthan;
14) conclusions.

216   SHENOY G L: Is higher education spurious? University
News 1972, 10(5), 18-20.

The unprecedented expansion of higher education has been under-
lined as responsible for the problem of educated unemployment.
The following remedial measures have been suggested: 1) paying
more attention to elementary education; 2) diversifying education
at the high school stage; 3) affiliating colleges to a college
Board under the overall supervision of the university;
4) higher education must support itself from the fee collected
from students; 5) offering scholarships on a large scale to the
deserving students; 6) using regional languages as the media of
instruction at all levels with a provision for link language;
7) granting sufficient autonomy to colleges in the matter of
syllabi and examinations.

217   TANEJA V R: Educational thought and practice. New Delhi,
Sterling Publishers, 1971. 380p.

Discussion on the subject has been divided into five parts: 1) edu-
cation – meaning, function and aims; 2) impact of philosophical
thought on education; 3) inspiration from educational philosophers;
4) education for what? 5) current thought and practice.

218   VEPA R K: Education for economic growth. Hindustan Times
9 May 1972, p.5, cols. 3-6, 8. 1500 words.

It is pointed out that China has adopted work oriented education
in the university stage and that it imparts skills to pupils in
accordance with the needs of the country. In India, Gandhiji's
Wardha Scheme did not get a fair trial and perhaps the reform should

have started at the university level instead of at the primary
level as has been done in China. Moreover, the basic structure
of education in India has remained unchanged since pre-independence
period. The government and its agencies are now providing various
incentives and organising special orientation programmes at a
number of centres to assist educated unemployed to set up their own
small production units. The technological and other educational
institutions are not inducing pupils to assimilate a sense of
achievement essential for successful entrepreneur. The colleges
and technical institutions should build into their curriculum a
sense of realism and practical knowledge to familiarise students
with the problems of society and make education productive in the
real sense.

219   YECLE B B, SARASWATHY P.R: On estimating the school-age
population for compulsory education in some ECAFE Countries.
Indian Educational Review 1972, 7(1), 114-22.

An attempt has been made to estimate the population in the
compulsory (first level) school-going age groups for most of
the countries in the ECAFE region by interpolation from the
available population projections by age.

EDUCATIONAL PSYCHOLOGY

220   ANANT S S: Social pressures towards learning and performance.
Indian Educational Review 1972, 7(1), 177-86. 19 ref.

A brief summary of the research in the area of social influences
on group functioning has been presented. The following are the
factors which contribute to the acceptance of social pressures and
influences: 1) group cohesiveness or the attraction of the group; 2) status
of the person   exerting influence; 3) environmental factor;
4) nature of the atmosphere, that is whether democratic or authorita-
rian. The social pressures on the child making him learn and perform
usually come from his family, the peer group, the community, the teacher,
etc. Investigations should be conducted to find out the relative
emphasis on scholastic performance by various socio-economic classes;
the varying influences of persuasive pressures and commands;
the effect of the status of the person exerting pressure; and other
related factors. The planning and organization of group activities
in the school should be such that these activities become the
focal point of learning. Emphasis should be laid on the social
aspect of learning.

221   BASUMALLIK T, BANERJEE D: On the relationship between
achievement motivation and risk taking. Indian Journal of
Psychology 1967, 42(1-4), 93-6. 11 ref.

The present study was made to see whether the predicted
curvilinear relationship between achievement motivation and
risk taking behaviour holds between an objective measure of
nAch and risk taking under hypothetical situations. Seventy
five male graduates, coming from all parts of India and
studying at an institute of public health education and
research, were administered the nAch scale of the Edwards
Personal Preference Schedule and the Choice Dilemmas Procedure
Instrument. A chi-square test was made comparing the high
and low nAch groups in relation to risk-categories. The chi-
square ($x^2 = .27$) was found to be non-significant, showing that
the high nAch group did not differ significantly from the low
nAch group in the selection of intermediate levels of subjective
probability. Thus, the expected curvilinear relationship was
not obtained in this study.

......

222   BIR SINGH: Review of research in classroom group behaviour.
Indian Educational Review, 1972, 7(1), 195-208. 32 ref.

A review of research in classroom group behaviour has been made,
considering   significant studies conducted between 1939 and
1965, under the following heads: nature of groups, cohesiveness,
communication, structure, norms, goals, group composition,
instructional leadership and frustration. Major techniques
such as the following for changing group behaviour have been
devised: 1) group-decision techniques; 2) problem-solving
methods; and 3) techniques for studying groups. To understand
children's group behaviour — in order to change it — various
techniques such as the following are used by educational
investigators: 1) observation, 2) sociometric techniques,
3) questionnaires, 4) cumulative records, 45) anecdotal
records, 6) time sampling, 7) group biography, and 8) guide
to group characteristics. It is advocated that teachers
should attempt to make some studies of their own classroom
groups after gaining the knowledge needed to conduct experiments.

223   BOSE S: Effect of group processing on MMPI scores of a
group of tribal adolescents. Indian Educational Review 1972,
7(1), 141-52. 22 ref.

The study aims to evaluate the efficacy of group processing to
change attitude and improve adjustment status of a group of
tribal adolescents of Darjeeling Hills as detected by comparing
their pre- and post-programme participation MMPI scores. The
physical education programme selected for the study consisted of

a list of highly organised group activity aimed at developing
the following qualities : i) self-responsibility; ii) self-
assessment capacity; iii) group belongingness and loyalty;
iv) understanding others and sharing with others. The subjects
selected were 70 tribal willing adolescents who were eager to
participate in the programme, and 70 who were unwilling. All
were subjected to the group processing programme for two years.
Their pre and post-programme scores on MMPI were compared. The
results proved the efficacy of group processing in physical
education programme for a limited period on the experimental
group in improving the morale and family relations aspects.
An obvious fact in the field of educational processing is to
expect and wait for an emerging effect. The said expectation
had been fulfilled also in the social adjustment aspect of the
experimental group. The effect of group processing to improve
the motivational status of an unwilling group by becoming willing
one due to acquirement of basic democratic qualities had also
been observed.

224 . BRAHMANAND JHA 'SUMAN': Similarity of operations and
retroactive inhibition. Indian Journal of Psychology 1967,
42(1-4), 44-7. 6 ref.

The purpose of this experiment was to investigate the difference
between retroactive inhibition resulting from i) learning both
the original and interpolated tasks by the complete presentation
method, and ii) learning the original task by complete presentation
method and the interpolated task by the anticipation method. It
was found that a) retroactive inhibition took place in both the
conditions, b) the amount of inhibition from learning both the
original and interpolated tasks by complete presentation method
was greater than the amount of inhibition from learning the original
task by complete presentation method and interpolated task by
anticipation method. It has been pointed out that learning both
the original and interpolated tasks by similar method produces more
inhibition than learning it by different methods.

225 CHOUDHURI A: Emotionality and parent-child relationship.
Indian Journal of Psychology 1967, 42(1-4), 89-92. 12 ref.

It was hypothesized that a significant relationship exists between
emotionality of children and their perception of their parents'
behaviour as punishing. To verify the hypothesis, one hundred male
school students (in the age range 15-17 years) of Calcutta were
administered a personality inventory constructed by the author, to
assess their emotionality, and the adapted form of the Parent-child
Relations Questionnaire (Roe-Siegelman, 1963) to have their assessment
of their parents' behaviour as punishing. The coefficients of
correlation between the two factors, as calculated by the Pearson
Product Moment Correlation Method (Guilford, 1956) were significant,
and thus, the hypothesis was proved correct.

226   . **DE B, JAISWAL M P:** Sex differences in value patterns of
adolescent students. Indian Educational Review 1972, 7(1),
187-94. 13 ref.

In this study on the value patterns of Indian adolescents, the
sex differences in the expressed values among members of the
same socio-economic group have been investigated. The Allport-
Vernon-Lindzey Values Inventory was administered to 100 arts and
science high school students (50 boys and 50 girls), selected
from the middle socio-economic group by means of Kuppuswami's
(1962) socio-economic status scale. Other variables like
academic achievement, mothertongue and religion were also
controlled. The findings generally lead to the conclusion that
sex differences in values do exist on the aesthetic and social
scales. Girls have higher aesthetic appreciation whereas boys
have shown more sociability than the girls. Boys also have
higher theoretical scores. No significant sex difference is
observed in the religious, political and economic life of
adolescents.

....

227   **DE B, SHAMBHOO PRIYA:** Some personal and academic correlates
of achievement motivation. Indian Journal of Psychology 1972,
47(1), 55-64. 17 ref.

An attempt is made to explore the relationship of some of the
personal correlates - birth order, parent's economic status and
parent's education level - with achievement motivation. One
hundred and forty postgraduate students of science, arts and
commerce faculties were administered 1) Mukerjee's Sentence
Completion Test (Hindi version) and the 2) personal information
schedule. The results supported the hypothesis that students
of these faculties differed significantly with each other on
academic motivation. There was significant relationship between
achievement motivation scores on the one hand and birth-
order, economic status and educational level on the other.

.....

228   **DUTT N K:** Study of the escapist attitudes in postgraduate
students. Indian Journal of Psychology 1967, 42(1-4), 58-63.
10 ref.

A preliminary attitude scale with 60 items covering both the ·
areas of other worldliness and self-surrender was prepared
adopting the Likert's method of summated ratings and administered
to a random sample of 90 post-graduate students of the Punjab
University. The uppermost 25 statements with higher Index of
Discrimination were selected for the final form, which was
administered to 200 post-graduate students of the Punjab University.
They were in four groups: boys-arts (50) , boys-science (50),
girls-arts (50), girls-science (50). The split-half reliability

(corrected by Spearman Brown Formula) was .95, and the reliability coefficient calculated by K.R. formula 21 was .96. The expert opinion on the scale also established its validity. The findings are: 1) the distribution of the attitudes in all the groups was normal; 2) the girls had significantly stronger escapist attitudes than boys; 3) there were no differences in escapist attitudes between Arts and Science groups; 4) all the groups were equally variable.

...

229   GOKULNATHAN P P, MEHTA P: Achievement motive in tribal and non-tribal Assamese secondary school adolescents. Indian Educational Review 1972, 7(1), 67-90. 34 ref.

The relationship of achievement motivation with variables relating to the racial, socio-cultural, educational and economic background studied. A sample of 383 secondary students (294 boys and 89 girls) were given the TAT test prepared by Mehta (1969) to measure n-Achievement. There were 68 tribals and the rest were non-tribals in the sample. The following are the salient findings: 1) the tribal pupils had higher n-Achievement than the non-tribals; 2) there were significant sex differences in the n-Achievement levels, girls showing superior achievement motivation; 3) socio-economic status did not show any regular and definite relationship with n-Achievement; 4) significantly greater n-Achievement level was found among tribals, girls and rural residents.

..

230   JARNAIL SINGH, MALKIAT SINGH: Study into the relationship of job values and vocational choices of final year higher secondary school students. Journal of Educational Research and Extension 1972, 8(3), 160-5. 5 ref.

The vocational choices of 150 boys and girls from 20 higher secondary schools of Hoshangabad district were elicited through a questionnaire. The vocational choices of both the sexes and their job values were determined using the technique of inverse weighting. The main findings are as follows: 1) majority of the students have decided their future by the time they reached the final year of higher secondary schools; 2) engineering, medicine, military service, teaching and executive jobs were preferred by boys, whereas medicine, engineering, law and military service were the most liked vocations for the girls, clerical job, business, police and librarianship were least preferred professions; 3) courses of study and economic status of the families have a definite effect on the vocational choices; 4) rural boys studying science preferred military service while their urban counterparts preferred engineering; among the arts students the urban boys preferred agriculture while the rural, the business; 5) rural girls studying arts desired the clerical jobs whereas urban girls

preferred teaching; both rural and urban girls studying
science preferred medicine; 6) hilly and non-hilly area girls showed
their preference to medicine; 7) majority of boys and girls
preferring engineering or medicine belonged to higher income group;
8) interesting work and high pay were the two job values of both
the sexes; 9) interesting work and motive of national and social
service were ranked second and third by boys, and high pay and
greater scope of promotion by girls; 10) parents have influenced
their children in their vocational choices and teachers have no
influence in this respect; 11) interests and aptitudes of students
have a definite bearing on the choice of their vocations.

231   KANUNGO R: Role of meaning in verbal learning and recall, an
overview. Indian Journal of Psychology 1972, 47(1), 1-13.   48 ref.

Presents an overview of the psychological approaches that have led
to a good deal of research and theory in the area of verbal learning
and memory processes. In a specific sense, the concept 'meaning'
refers to any single measurable aspect of the verbal symbol character-
ising its referent function, such as its communicative effectiveness,
its connotations, associations, or imageries. These specific
meanings represent different independent dimensions on which meaning
of any verbal unit can be measured. Each of these specific meanings —
i) connotative meaning, ii) associative meaning, iii) imaginal
meaning has been considered as a potent variable influencing verbal
learning and memory processes.

232   KOSHY PANICKKER M, VISVESVARAN H: Attitude of college
students towards moral values. Journal of Educational Research
and Extension 1972, 8(4), 238-40.

A questionnaire seeking personal information and socio-economic
status of the parents and an attitude scale covering the areas
viz., personal and academic factors, cocurricular activities
and relationship with the public were administered to 360 college
students from the three classes PUC, B.A., and B.Sc. The
findings are: 1) girls have more favourable attitude towards moral
values than boys; 2) there is no significant difference among the
various religious groups with regard to moral values; 3) students
of higher academic achievement have a more favourable attitude
towards moral values than those of lower academic achievement;
4) students studying in private colleges have a better attitude
towards moral values than those in government colleges; 5) a
significant relation exists between the daily prayer habits of
pupils and their attitude towards moral values; 6) visits to
temples, mosques etc. have a significant relation with the attitude
scores of pupils.

233   MANGAMMAL S K: Place of emotion in educative process.
Educational Forum 1971, 16(3-4), 50-7. 5 ref.

The need for proper emotional development in children and the
role of education in effecting this have been underlined and
illustrated with a case study. Education in schools and primary
schools in particular should satisfy the following characteristics
to bring about emotional integration among children: 1) development
of right type of emotions such as anger or enthusiasm for a noble
or national cause; 2) inducement of proper companionship and healthy
competitions among students; 3) provision of right type of
incentives; 4) creation of proper type of substitute emotions to
eliminate inhibitions among children.

234   MERCY ABRAHAM: Relation between intelligence and adjustment
of secondary school pupils. Kerala Journal of Education 1971,
3(1,2), 26-30. 6 ref.

A sample of 820 secondary school pupils of Trivandrum District
(429 boys and 391 girls) was selected from 8 schools classified
as good, average and poor on the basis of the average of the
percentage of pass in the SSLC examination during the three years
preceding the study. Progressive Matrices Test and the Kerala
University Personality Scale were administered to the sample for
measuring intelligence and personal adjustment. On the basis of
the data, the pupils were identified as belonging to high
intelligence, low intelligence, average intelligence, high
adjustment, low adjustment and average adjustment levels.
Correlation between the variables revealed that adjustment on
the whole did not exercise any important influence on intelligence
test performance except for the high adjustment group.

235   MOHAN MATHEW, MATHEW GEORGE: Relationship between authoritarian
tendency and anxiety in teachers. Kerala Journal of Education 1971,
3(1,2), 31-5. 11 ref.

A sample of sixty teachers teaching in the VI and VII standards in
the schools of Muvattupuzha Educational District in Kerala was
selected and each teacher was observed continuously for 45 minutes
while teaching the class to measure authoritarian tendency. Anxiety
was measured by administering IPAT Anxiety test to a sample of
200 teachers belonging to the same District. Analysis of the data
lead to the following conclusions: 1) the authoritarian trait in
teachers is a measurable personality variable; the authoritarian
tendency in teachers even though environmentally conditioned, is
normally distributed; 2) teachers will be more authoritarian in the
absence of an outside observer; 3) men teachers are more authorita-
rian than women teachers; 4) less experienced teachers are more

authoritarian than more experienced teachers; 5) male teachers
manifest more covert anxiety whereas female teachers reveal
more overt anxiety; however, women are more anxious than men;
and 6) a positive relationship exists between authoritarian
tendency and anxiety.

236   NAGARAJAN V, FEROZE M: Concept of 'happiness' among
primary school children. Journal of Educational Research and
Extension 1972, 8(4), 234-7.

To investigate the concept of happiness, a sample of 136 boys
and 130 girls from rural and urban schools and studying in III,
IV and V standards was asked to judge six concepts viz., self,
teacher, school, money, study and play against a series of six
descriptive semantic differential scales. Thirty pupils
were also given the Q-sort test. The children were asked to
sort 60 cards each containing a stimulus statement. The
findings are: 1) the statements - study, going to school,
prayer, going to temple, speaking truth, mother etc. emerged
as causing happiness in children; 2) though adults
considered that children would derive happiness through
play and travel, the children considered the factors such as
study and school as their main source of happiness; 3) all
students gave a low value to the self concept when compared
with the values on other concepts; 4) students of 10 years of
age gave the highest value to the concept 'study'; 5) students
of III standard gave a high value to school and play concepts,
and lesser value to study, while IV and V standard students
gave highest value to the concept 'study; and 6) urban student
valued the concept 'teacher' most, while the rural, the concept
'study'.

237   PURUSHOTHAMAN S, VENKATESWARA RAO T: Study of the
personality and mental health of V grade children of Coimbatore
District. Journal of Educational Research and Extension 1972,
8(4), 226-33. 7 ref.

Four variables of personality and mental health viz., adjustment,
dependency, class-room trust and initiative levels of the pre-
adolescents were surveyed. A sample of 486 children of V grade
drawn from 13 schools in Coimbatore District was administered:
1) Pre-Adolescent Adjustment Scale of 40 items to measure adjustment
towards home, school, teacher and peers; 2) Pre-Adolescent
Dependency level; 3) Pre-Adolescent Class-room Trust Scale comprising
8 items to measure the classroom trust in children; and 4) Pre-
Adolescent Initiative questionnaire of 6 items to measure initiative.
These tests constructed in English by the Indian Council of Medical
Research were translated into Tamil for the study. The results are:
1) the children have significant, but low degree adjustment towards

home, peers and in general; however, adjustment towards school and teacher is not adequately high, there is neither dependence nor independence in the pupils; 2) the pupils are average in their interpersonal competence level with regard to class-room trust; 3) the children are average in their initiative level. Based on these findings a few general recommendations have been made.

238   RABINDRADAS B, NARAYANAN S: Study of level of aspiration among the acoustically handicapped and normal. Psychological Studies 1972, 17(1), 57-63. 29 ref.

An attempt has been made to investigate the level of aspiration behaviour among acoustically handicapped and normal adolescent students. Rotter's level of aspiration.board was individually administered to 50 normal and 50 deaf and hard of hearing students. The findings showed that the acoustically handicapped presented a level of aspiration similar to normal with regard to setting up and maintaining their aspiration in an experimental condition while no difference was found between the two groups in shifting the level of aspiration in keeping with the previous performance, significant difference in favour of normal was found in shifting the level of aspiration in a direction opposite to that of the past performance. Finally, the handicapped were found to have low level performance and aspiration as compared to the normal. The findings suggest that the differences found between the acoustically handicapped and normal students may be due to the stressful condition of the handicapped than due to any personality differences between them.

239   SHANTHAMANI V S: Relationship between intelligence and certain other variables. Indian Journal of Psychology 1967, 42(1-4), 9-18. 8 ref.

The Alexander's Battery of Performance Test of Intelligence was administered to 300 girls of the three grades of high school, 100 in each grade. The obtained results were statistically treated. The conclusions are: 1) there seemed to be some influence of optional subject on mean performance; 2) order of birth had no influence on intelligence; 3) educational qualification of the father had no effect on the child's intelligence; 4) children whose parents were in the professional, agricultural and managerial occupations tended to be superior in intelligence as compared to children whose parents were in other occupations; 5) positive relationship existed between the economic status of the parents and intelligence of their children; 6) the single or joint family pattern had no effect on intelligence of children; 7) rural and urban environment had no considerable effect on intelligence; and 8) caste had an influence on intelligence of students.

240   SHARMA K N: Creativity as a function of intelligence.
Psychological Studies 1972, 17(1), 64-7. 18 ref.

A sample of 204 tenth class and intermediate class students of
Arga city were administered Jalota's Test of General Mental
Abilities, and two creativity tests - a) Srajanatmakta Pariksha
and b) Varn Viparyas Pariksha. The IQ distribution of the sample
was tested for normalcy and was found to be normal. The low and
the high IQs were compared on their creativity performances. The
high intelligent subjects performed better on creativity tests.
The inter-level variances were studied between the creativity
scores at different IQ levels. It has been found that the rise
in creativity moved along with rise in intelligence upto a certain
level, and thereafter rise in intelligence was not very helpful in
causing rise in creativity scores.

241   SINGRU M: Role of acquiescence in two measures of achievement
motivation. Psychological Studies 1972, 17(1), 41-4. 5 ref.

Two samples of 9-11 grade students from two cities were administered
1) Mukherjee's Sentence Completion Test (SCT), 2) Myer's Personal
Reaction Inventory (PRI), and 3) Couch and Keniston's Agreement Scale
(C-K A). Product moment correlations between the three types of
scores were calculated. No relationship was found between acquiescence
scores and SCT. The general negative relationship between Myer's PRI
and C-K A scale suggests that the agreeing tendency as evaluated by
C-K A scale is absent while responding to Myer's PRI.

242   SINDWANI M: Learning and discipline. NIE Journal 1971,
6(1), 11-17.

The meaning and importance of discipline have been stated. The
modern trend in discipline respects children for their efforts
to act independently and suggests that the opportunity should be
provided for expressing their independence in acceptable ways.
How to prevent discipline problems before they occur, how to nurture
effective discipline, misbehaviour and ways of correcting them, how
to use punishment and what punishment to give have all been detailed.

243   SINHA D, VARMA M: Knowledge of moral values in children.
Psychological Studies 1972, 17(1), 1-6. 8 ref.

A child with the help of conscience builds more or less definite
standards and principles by means of which he judges others and
directs his own action. The study was conducted on 300 boys and
girls ranging from 6 to 11 years of age studying in missionary
and vernacular schools. Fourteen moral values were selected to

know the pattern and developmental trend of moral knowledge.
Knowledge for moral values was found to be increasing with
increase in age. Only in the youngest age group (6-7 years),
significant differential trend between boys and girls for their
moral knowledge was observed. Children of first two age groups
(6-7 and 8-9 years) presented differential in their knowledge
as a result of schooling effect.

244   SRIVASTAVA D N: Substitution learning as a function of drive.
Psychological Studies 1972, 17(1)), 68-71. 8 ref.

Thirty female postgraduate students (age, 19-23 years) were
selected for the study. These subjects were divided into three
groups - high drive group, low drive group and control group.
Different instructions were given for producing low and high
drive level but instructions for performance on substitution test
were the same. The Substitution Test was administered to all the
subjects. The results showed that 1) high drive level group was
superior in learning performance than control group; 2) high drive
level group and low drive level group did not differ significantly;
3) low drive level group was significantly superior in learning
performance than control group. Results showed that drive plays an
important role in learning performance.

245   VENKATESWARA RAO T, PAREEK U, PURUSHOTHAMAN S, GANGJEE Z:
Patterns of adjustment of fifth grade children from Delhi,
Coimbatore and Calcutta. Indian Educational Review 1972, 7(1),
91-113. 9 ref.

The sample comprised 1427 fifth grade children from Delhi, 558 children
from South Delhi, 418 from Calcutta and 486 from Coimbatore. The tool
used was the pre-Adolescent Adjustment Scale (Pareek et al, 1970).
Significant differences were found between the adjustment patterns of
the children from these cities. Although a general trend of moderately
high adjustment was found among all subjects, children from Calcutta
showed better adjustment than the children from Delhi, followed by the
children from Coimbatore.

246   VIDU MOHAN, GUPTA V K: Effect of personality, induced
motivation and frequency of K R on acquisition of efficiency in
weight estimation. Indian Journal of Psychology 1972, 47(1),
29-37. 25 ref.

The effect of three variables, personality in terms of Eysenck's
neuroticism and extraversion/introversion, induced motivation
and two frequencies of KR, was observed on the task of estimating
40 gms of weight. Eighty school boys acted as the subjects.

A factorial design of 4x2x2 included 4 personality groups --
neurotic extraverts, neurotic introverts, stable extraverts, and
stable introverts, two levels of motivation, high and low, and
two frequencies of KR, 50% and 100%. The results indicated a
significant difference when frequency of KR was varied. The
100% group did better than 50% group; induced motivation did not
yield any significant differences though high motivation group
was consistently doing better. This low difference was explained
as due to motivational effect of KR and interaction of induced
motivation with neuroticism. Personality variables too failed to
yield any significant difference. However, the combined effect
of the three variables did produce significant difference. Thus
the stable introverts with high motivation and with 100% KR
performed the best.

EDUCATIONAL RESEARCH

247   SINGH R P: Areas of research in education and the question
of fixing priorities. Education Quarterly 1971, 23(3), 14-18.

The need for research in education had been stressed. In
fixing of priorities, the following criteria have to be kept
in view: 1) maximum social advantage; 2) those topics of
research and results of which will satisfy the maximal needs
within particular areas; 3) taking into consideration the
cultural ethos in which the research is going to be conducted;
4) examining the causes which motivate undertaking of a
particular research; 5) the resources available for the research.
It is pointed out that education cannot have areas of research
independent of other disciplines. The following areas of
research in education have been enumerated: a) educational theory,
b) planning, c) curriculum, d) evaluation, e) administration,
f) practical classroom problems. Research can be enumerated
topic-wise also.

EDUCATIONAL SOCIOLOGY

248   ANANT S S: Education and social change, a study of educational
differences in inter-caste attitudes. Indian Journal of Psychology
1972, 47(1), 65-75.

A random and stratified sample of 745 males was drawn from urban
and rural areas in and around Delhi, Agra, and Varanasi. A multiple-
choice questionnaire dealing with attitudes towards caste system,
interaction with Harijans, and the privileges for scheduled castes
was individually administered. The background information, i.e.

ago, marital status, caste, education, occupation, income, etc. was obtained. The analysis of the data revealed significant educational differences. In general a positive relationship between liberalism and educational level was found. Among the educated, the majority belonged to the higher castes. Education, it appears, has a liberalising effect on attitudes except those concerning situations of deep personal involvement. Caste Hindus tended to differentiate between peripheral and core areas of inter-caste interaction conforming more to the law in the case of the former and to the traditional caste ideology in the latter case.

EXAMINATION AND EVALUATION

249   Better exams. /¯Editorial_/.   Amrita Bazar Patrika 14 June 1972, p.6, col. 1.   625 words.

Although many reforms have been suggested regarding examinations, no action has been taken by administrators to implement them. However, the West Bengal College and University Teachers' Association took action to create awareness in the public mind of the malpractices, corruption and incapacity associated with university examinations. The Association also appealed to the State Government to set up a Commission on Examination Reforms for all universities in the State with representatives of the Association and the UGC and other distinguished educationists as members. Instead of waiting for the Commission to publish its report, the Association could itself prepare a memorandum proposing reforms with the cooperation of educationists nominated by itself. This memorandum could be placed before the State Government and prompt decision and effective implementation be insisted upon.

250   HARPER Jr A E: Examinations — some practical hints. New Frontiers in Education 1972, 2(1), 50-67. 10 ref.

Suggestions for improving the examinations include the following points: 1) students should be informed about the advantages of the new tests and examinations and given practice in answering the questions before the final test is administered; 2) before framing a final question paper, an outline of the paper should be prepared keeping in view the objectives to be tested in relation to each curriculum item and an approximate weightage be assigned to each part of the outline; 3) the objectives should also determine the number of items to be included in a question paper; 4) the questions should indicate to the student what is clearly required to answer; 5) the answer sheet

could be marked by separating the concepts of raw scores and final marks; 6) short-answer tests should frequently be given in classrooms as they form an effective means of two way communication between teachers and students; 7) a file of test questions could be maintained by the examiner on small cards; 8) all the questions should be framed with a great deal of thought; 9) short-answer questions should consist of the questions of average difficulty; 10) more questions than required should be prepared and only the best selected for final test; 11) the traditional type questions should also be framed keeping in view the objectives of the course; 12) the essay answers could be corrected using a checklist indicating to each student his major faults.

251   HILL W H: Assessment and examinations. New Frontiers in Education 1972, 2(1), 40-9. 5 ref.

The major criticisms levelled against the traditional question papers have been listed as follows: 1) they concentrate heavily on testing the ability of students to reproduce memorised information; 2) the question paper for any subject covers only a small part of the subject; 3) very often the questions are not clearly stated; 4) the valuation of answer sheets is defective. The suggested improvements include the following points: 1) the objectives of teaching each subject should be decided and the questions be planned to test the achievement of the objectives; 2) the number of questions in a paper be increased to cover the subject and greater emphasis be laid on short answer objective questions; 3) paper setters be trained to write good essay type questions; 4) to achieve uniform valuation, the paper-setters should provide answers to short-answer questions and an outline of answers to essay type; 5) options in questions be reduced by permitting pupils to choose within pairs of questions of approximately equal difficulty; 6) the University should establish an examination unit, staffed by experts and conduct research on examinations; 7) the practice of distributing answer sheets to examiners by post be stopped and the examiners be asked to work together and value the papers at the university centre; 8) examinations be spaced to lead them on to more sustained study; 9) internal assessment should also find a place in the examination system; and 10) the marks assessed by internal and university examinations be scaled to a common standard before the final valuation is made.

252   MISRA V S: Follow-up study of examination reforms in the Gauhati University. Indian Educational Review 1972, 7(1), 53-66. 10 ref.

The Gauhati University introduced certain reforms in its examination system. An attempt is made to find out to what extent these measures have improved the accuracy of examination marks. This has been investigated under two heads: chance errors, and constant errors. The study suggests that the chance errors are smaller in the reformed examination. Under the head 'constant errors' the influence of scaling has been studied and it is inferred that the examination reforms in the Gauhati University have improved the accuracy of marks. The limitations faced by researchers who attempt to investigate the influence of the examination reforms have also been discussed.

EXTRA-CURRICULAR ACTIVITIES

253   SINGH R P, SINGH B S P, MISHRA A P: Leisure-time activities of school going boys. Journal of Educational Research and Extension 1972, 8(3), 152-9. 6 ref.

The leisure-time activities of 150 students studying in classes VIII-XI, and belonging to three high schools of special Extension Block, Sabour in the State of Bihar were determined by asking them to check the activities applicable to them from a comprehensive list of different leisure-time activities. The parental socio-economic status and occupation were measured by the socio-economic scale developed by Trivedi and Pareek. The findings are listed below: 1) out of the respondents 45.3% had 1-2 hours, 32.6 per cent 3-4 hours and 10 per cent 7-8 hours of leisure available with them on each working day; 2) the availability of leisure-time did not depend upon the socio-economic status of the respondents; 3) as compared to high and medium socio-economic status groups, relatively larger percentage of the respondents from lower socio-economic group had more than 5 hours of leisure-time daily on working days; 4) both farming and non-farming boys had less than 4 hours leisure-time; however, the students of non-farming families had comparatively more leisure hours available with them; 5) reading course books, domestic work and playing were the three activities reported by the majority; 6) relatively a larger percentage of respondents from non-farming families devoted their time to domestic work, reading newspapers and talking with their friends.

254   BLESSED SINGH Y W: Are UGC grants usefully spent? Hindu
7 April 1972, p.8, cols. 4-8. 1600 words.

Some of the suggestions offered are: 1) retaining the present
practice of the disbursal of UGC grants directly to the colleges;
2) removing the present anomaly in programmes like COSIP (Colleges
Science Improvement Programme); 3) stepping up the provisions of
academic and scholastic amenities and facilities, if necessary at
the expense of further provision of physical amenities;
4) increasing the grants for games and sports and making
sanctioning of the grants more flexible; 5) sanctioning more
grants for women's colleges for humanities, social sciences and
languages and restricting the grants for advanced science
courses in women's colleges; 6) setting up a separate follow-up
and tracing department to see that the grants are   properly
utilised; 7) coordinating the three sources of assistance to
colleges, namely State grants, fee collections and UGC grants
so that real needs are met with and schemes that do not merit
the grant are not given effect to; 8) making selective admission
at the lower levels of higher education and directing UGC grants
mostly for advanced, doctoral and post-doctoral realms..

FORMS OF EDUCATION

255   Children out of school / Editorial /. Hindu 14 June 1972,
p.8, col. 2. 400 words.

In keeping with the present tradition-ridden economic situation,
the Union Educat... Ministry has proposed a new scheme of 'part-
time' and 'own time' education as a temporary measure to tackle
the problem of wastage at school. Under part-time education,
mobile schools staffed by roving teachers and mobile laboratories
equipped with films and radio instruction will educate children
who cannot afford full time schooling under the own education
scheme; provision will be made for self-instruction of rural
girls at home through specilized workbooks. Apart from this,
'subschools' run by literate adults in the village are sought
to be organized to cover hamlets with less than 300 population.
However, it is pointed out that even such temporary arrangements
cannot be put into practice immediately as they call for trained
skills and sophisticated equipment.

256   Open university / Editorial /. Economic Times 15 May 1972,
p. 7, cols. 1, 2. 500 words.

Introduction of open university system in India has not been
favoured in view of the vastness of the country and the absence
of necessary material equipment and facilities. Instead,
expansion and improvement of the already existent correspondence
education, may be more realistic.

257   PANT N K: Correspondence education in India. Indian
Journal of Adult Education 1972, 33(4), 13, 14, 16.

The success of correspondence courses in Delhi led to their
establishment in various other universities also. The popularity
of correspondence education in India is mainly due to the fact
that it extends educational opportunities to all persons regardless
of age, income and employment status. However, an obvious dis-
advantage is the absence of campus life and personal contact. In
order to minimise this disadvantage, the School of Correspondence
Courses, Delhi organizes contact classes every year through its
Personal Contact Programme in Delhi, Madras, Trivandrum, Jaipur and
Chandigarh, and also a regular programme of radio talks, as
recommended by the Expert Committee on Correspondence Courses.

GUIDANCE AND COUNSELLING

258   SURJIT KAUR: Foundations of counselling and guidance.
New Delhi, Sterling Publications, 1971. 151p. 247 ref.

Drawing upon the cultural heritage and ancient literature of
India, a modern theory of counselling based upon Indian philosophy
is put forward. The study seeks to identify and analyse philosophical,
social, economic and educational factors for developing educational
and vocational guidance services in keeping with the needs and
resources of India. The study also aims at providing the needed
background and theoretical frame-work to the educational planners and
administrators. Guidance and counselling goals which can be achieved
have been indicated. A review has been made of the relevant literature
in the field.

259   THOMAS M: College counselling services, self-understanding
and career choice. Social Action 1972, 22(2), 127-36.

It is shown how various types of counselling could be adapted
to the needs of college students and also used by teachers as
effective pedagogical tools. The emphasis is on vocational
guidance which has a two-fold aim; to help the student form an
accurate self-concept and to enlarge his knowledge of the
occupational structure so that he may make his choice of a
career realistically. The importance of vocational guidance
is underlined because most of the students who come from the
lower social strata and are unlikely to find 'work models' in
their own families, tend to restrict their aspirations to narrow
range of occupations. The author also offers some practical
suggestions, based on experience for setting up a guidance and
information service in educational institutions.

HEALTH CARE

260   Health of school children / Editorial_/. Hindu 20 April 1972,
p.6, col   2. 400 words.

The importance of medical check up of school children at
regular intervals has been emphasised and a reference has
been made to the health study conducted by a team of
doctors in 36 schools near Stanley Hospital in Madras.
It has been suggested that the mobile hospitals should
tour the city schools and treat school children against
epidemic diseases. A health card could also be maintained
for each child indicating the record of treatment.
The teeth, eyes and ears of children and their general
condition should also be examined and malnutrition be
compensated by including vitamin biscuits, milk, cod liver
oil and fruit in mid-day meal programmes. The existing
hospitals and dispensaries should cater to all primary
children in the country. The health centres in Tamil Nadu
covering only a few rural schools should include all the
rural school children in the State under their system of
inspection and treatment.

261   JOSHI K L: Need for junior colleges in India. Hitavada
2 April 1972, p. A, cols. 1-3; p. C, cols. 3-5. 2200 words.

The establishment of junior colleges in India has been favoured
to deal with large masses of adolescent students who have left
high school and who are not prepared for colleges and universities.
These colleges would form a preparatory stage between high school
and college/university education and provide a meaningful occupa-
tion to pupils according to their aptitudes. The heavy rush to
university enrolments could also be avoided with the establishment
of junior colleges. If the structure of education recommended by
the Education Commission i.e. 10 plus 2 plus 3 years is to be
adopted in India, the middle two years could be made junior college
period. However, the Commission did not mention this device and
made the higher secondary school a twelve year institution. Thus,
the failure of higher secondary system has been due to inadequate
facilities and unqualified teachers for the course of 11th year.
Only 25% of the secondary schools in the country were converted into
higher secondary pattern at the end of the III plan. Many of these
conversions are purely national since adequate teachers, library and
laboratory facilities were not provided to three-year integrated
course in classes IX, X and XI. Besides, the intermediate colleges
were converted to degree courses involving a great deal of
expenditure and fall of standards. The junior college concept is
now present in teacher's training institutes for primary school
teachers, industrial trade schools, agricultural polytechnics,
polytechnics etc., and the programme of these institutions could
be brought under junior college pattern. The establishment of
junior colleges between high school and the college in Indian
educational structure would secure facilities for training manpower
and overcome the problems of requirement of a large number of
schools at the middle level.

262   NAIK J P: Higher education in India - some suggestions for
reorganization. New Frontiers in Education 1972, 2(1), 6-21.

The vast expansion of university education has led to administrative
problems in the university, deterioration of standards, student
unrest and educated unemployment. The following programmes have
been put forth to remedy the situation of high demand for and access
to higher education: 1) the institutions such as university
departments, colleges of agriculture, engineering and medicine and
all colleges of arts, science, commerce and law which are
functioning already on selective basis should be further
strengthened to enable them to function in peace and to grow in
a better manner; however, the interests of under-privileged social
groups must be protected and a programme of scholarships be

developed to help the needy; 2) in the non-selective sectors, the economic incentives which artificially heighten the demand for higher education should be reduced; 3) standards in undergraduate affiliated colleges should be maintained through prescription of proper conditions of affiliation and their rigorous enforcement, and through development of correspondence courses on a large scale; 4) the compulsory subsidy be delinked from public funds to mere expansion of facilities at the undergraduate stage and fee-grants be provided to students on principles of merit and social justice. The following suggestions have been given for reorganising the structure of higher education: a) the universities should restrict their work mainly to post-graduate teaching and research; however, for the purpose of producing top level talent needed for universities, research etc., Centres of Advanced Study should have an undergraduate section of annual intake of not more than 20-30, selected on a national basis and supported by scholarships; b) Boards of Collegiate Education for metropolitan cities and separately for each State, created by Acts of State/ Central Legislature, and consisting of representatives of all universities in a State, the affiliated colleges, and the State Government, be established to assume responsibility for affiliated colleges; these Boards should be empowered to grant affiliation to colleges, to prescribe curricula, and to hold the first Degree examination; c) Autonomous colleges should be created on a large and effective scale; these colleges should be given an option to affiliate to a university or to remain with the Boards; d) research institutes devoted to research and having doctoral programmes of high selectivity should be established. The suggestions for improving the content and techniques of teaching of higher education are mentioned below: 1) the curricula should be revised and upgraded on principles of relevance and significance, and dynamic methods of teaching and evaluation should be adopted; ii) the UGC programmes of summer, institutes should be stepped up and an intensive large-scale teacher preparation programme be launched; special programmes of student aid such as textbook libraries, guidance and health services, games, sports and national services be promoted.

263   Problems of numbers /_Editorial_/. National Herald 3 June 1972, p. 5, cols. 1, 2.   1000 words.

The UGC report for 1970-71 records that the enrolment in colleges during 1970-71 has exceeded 3 million and that there has been a rapid expansion of colleges and teaching staff. This only suggests that the glamour of higher education has remained unaffected by the frustration caused due to educated unemployment. The Education Commission favoured selective admissions so as to relate enrolments to facilities available and to prospects of manpower needs. Though admissions to colleges have been restricted to certain extent they are not justified as the students who could pay for higher education

have got it and the talented have been barred by social or
economic handicaps. So, special efforts are to be made to
draw able students into colleges and leave out those who can
pay for higher education but cannot profit by it. The
numbers in each college or university are important, as smaller
the university or university department, the better is education
provided in it and the better also is the functioning of the
self administration system. Thus, the planners in Western
countries prefer building new universities instead of expanding
old ones.

HIGHER TECHNICAL AND VOCATIONAL EDUCATION

264   ARGLE P D: Training in computer programming. Indian
Educational Review 1972, 7(1), 209-18.

Highlights the important features of the course in programming
at the Government of India Computer Centre, New Delhi, such as
the syllabus, methods of teaching, the place of quizzes and tests
in training and practical computer operations. The utility of a
constant dialogue in effecting improvements in educational
standards is also brought out.

265   MONTEIRO L, KUMARAIAH V, SHARMA K N, ADISESHAIAH W T V:
Opportunities for the development of medical skills, a study in
retrospect. New Frontiers in Education 1971, 1(3), 326-33.

A study was conducted among 103 final year medical students of
St. John's Medical College, Bangalore in order to find out the
opportunities provided to students for the development of
necessary skills. The findings of the study are: 1) hardly any
opportunity was provided for the performance of complex and
delicate tasks; 2) clinical experience in the hospital was not
adequate; there is need for closer link-up between students and
hospital staff; 3) students' personal contact with patients is
very important and this should be provided right from the first
year; 4) facilities should be afforded to students to accompany
experienced medical practitioners when they visit patients in
their homes; 5) students should have some experience of the
techniques of fact-finding for which scope should be provided by
research projects in areas such as social and preventive medicine;
6) there is need for tutorial assistance and counselling
facilities.

266   JOEL B S: Development of education in British India 1905-1929.
New Delhi, Central Institute of Education, National Council of
Educational Research and Training, 1969. v, 108p. 38 ref.

This work was accepted for the Degree of Ph.D. of the University
of Delhi, 1968. This is an attempt to survey   the development
of education in British India in the context of socio-economio
movements in the country. Topics dealt with are as under:
1) political events; 2) economic order and education; 3) socio-
cultural changes and education; 4) primary education; 5) secondary
education; 6) university education, The following are some of
the conclusions drawn: 1) whenever some conflicts occurred between.
nationalist elements and the Government in which education was
also involved directly a) there arose tendencies for new
experiments in education, b) the educational aspirations of the
people received a fillip; 2) during this period, political
communalism influenood education increasingly replacing cultural
and religious communalism of the earlier period; 3) the main
hurdles in the expansion of education were poor enrolment figures
and wastage and not lack of finance and non-provision of schools;
4) formal education had little connection with industry or agricul-
ture of the country; 5) as a result of increasing tempo of social
changes, people of all castes were showing distinct progress in
education; 6) there was a growing tendency in universities to
become autonomous.

INSTRUCTIONAL MATERIAL AND AIDS

267   ADISESHIAH M S: Books for all, their function as pioneers
for national action. Education Quarterly 1972, 23(4), 1-4.

The following functions of books have been discussed and
appropriate suggestions made: 1) the book is the means and the
tool of education at all levels; hence, the authorities at all
levels from the Centre to the Panchayat should provide adequate
funds in every education budget for the purchase of books for
students and adults; 2) the book serves the special interests
of children, becoming an essential part of their life and
existence; the development of children's books in the country
calls for active promotional programmes to develop the
creativity of authors and artists and constitutes a major field
for international cooperation; 3) the book is the instrument for
the economic growth of the country; there should be a crash programme
during the seventies for increasing rapidly the supply and
availability of scientific and technical books; this will involve

increasing local production in this area from 10 to 30 per cent
and doubling the volume imported; 4) the book is a repository
and means of preservation and dissemination of the Indian
pluralistic cultural heritage. Efforts should be made to
return to the great cultural tradition which Indian books
represent and to promote in every way the publication of books
embodying and explaining that tradition.

268   DUA M R: University level books. Education Quarterly 1972,
23(4), 8-10.

Being one of the largest educational systems in the world, it
is a phenomenal task to make available textbooks needed in all
disciplines at a reasonable cost. The task is made more difficult
by the decision (a right one) to replace English, as the medium of
instruction, by regional languages. The scheme of producing
university level books in Indian languages, initiated in 1968-69,
has taken rapid strides. To begin with, the Union Ministry of
Education provided guidelines for the formulation of the
State programmes for the production of university level books in
various Indian languages. A number of States have instituted
autonomous organizations for the purpose. Translation of works
in various disciplines is handled by various universities. The
national programme of core books, which envisages production of
core books written by eminent Indian writers on various subjects,
has been launched. The Indian Government has also entered into an
arrangement with a number of foreign countries for translation of
university level books. Another scheme of subsidised publication
of university level books is in English.

269   GUPTA M D: Literacy and the publishing house. Education
Quarterly 1972, 23(4), 20-4.

Books are essential to spread literacy and to sustain it. Side by
side the book publishing will flourish with the . spread of
literacy. Publishing industry in any developing country should
align itself with the objectives and national aspirations of that
country. Book production to help achieve universal literacy should
take into account the multilingual character of India and secondly
the cost of production should be kept to the minimum. A single
national-level publishing organization can be set up to produce
literature for literacy in all major languages. That such an
organization can work successfully from the point of view of sheer
economic returns has been explained. The programmes that should
be undertaken by the publishing organization, the anticipated
demand for the literacy books in the country, and the economics of
the programme have been detailed.

270   Textbook muddle $\overline{/}$ Editorial $\overline{/}$. Mail 21 June 1972, p.4, cols. 1, 2. 450 words.

The undue haste with which some universities switched over to the regional language as the medium of instruction at the instance of politicians without adequate preparation has been criticised. In spite of the Centre's grant of about Rs.8 crores for the production of college books in regional languages, shortage of textbooks has been the main problem the students face throughout the year. Some States are already having second thoughts about the whole scheme. The Union Education Ministry has therefore rightly called for an open discussion on the subject. Unless the educational pattern acquires stability, the centrally financed textbook production will suffer a set back. The problem of textbooks cannot be eased without liberalizing the rules for printing foreign books in India even if it conflicts with the policy of encouraging Indian industry and talent.

MORAL EDUCATION

271   SUBRAMANYAM G: Religious and moral instruction. Educational Forum 1971, 16(3-4), 31-6.

A formal religious and moral instruction in schools would help students develop a healthy attitude towards truth, beauty and goodness in their absolute form. It is again only the school with its cosmopolitan character that can give a scientific and objective view of things and help the young people to become conscious of the religious interpretation of life. Every school and college should create an atmosphere of religious devotion to duty so that religion is lived at school and not merely talked about. The subject should also be given an important place in the curriculum and examination as well. Teacher training colleges should offer this subject at the degree level as one of the branches of special study.

PHYSICAL EDUCATION

272   GOVINDAN T S, PAVANASAM R: Study of physical efficiency of some highschool students. Journal of Educational Research and Extension 1972, 8(3), 176-8.

The study is aimed at finding out the physical efficiency of 200 boys and 200 girls (age group 14-17), belonging to rural, urban, mixed and separate high schools in and around Coimbatore city. Tests of speed, strength, agility, endurance, and

neuromuscular bodily coordination were given to the sample.
The findings revealed that 73.25% of the sample had no
encouragement from their parents for sports and only 46% played
games daily. The recommendations include: 1) planning of
syllabus on physical education and methods of testing physical
efficiency of pupils once in a quarter; 2) providing play
ground facilities to rural schools; 3) supplying books and
magazines on sports to pupils; 4) raising the physical education
teacher pupil ratio; and 5) prescribing physical efficiency tests
as examination subjects. The tests adopted in this study have
also been recommended for total adoption in schools.

273   GUPTA V P: Performance in physical education, physical
fitness and personality characteristics as measured by 16 PFI.
Journal of Educational Research and Extension 1972, 8(4),
217-21. 7 ref.

The aim of the study was to find out the effect of personality
characteristics and physical fitness on achievement. A group
of 100 male students of age group 21-23, studying in different
courses of physical education in Punjab Government College of
Physical Education, Patiala formed the sample. Sixteen
Personality Factor Inventory of Cattel et al which was adopted
in Hindi and standardized by Jalota and Kapoor, Basic Fitness
Battery of Edwin A Fleishman were administered to the sample
to find out the personality characteristics and physical fitness
respectively. The marks obtained by the subjects in the
training courses of physical education examinations were taken
as the index of achievement. Analysis of the data revealed the
following findings: 1) the subjects who were more cooperative,
adaptable, sociable, cultured, intellectual, dominant, competitive,
self-assured, independent minded, introverted, self-absorbed,
imaginative, creative, cheerful, exact, emotionally disciplined,
possibly insecure, controlled, exacting will power and physically
fit showed better achievement than those who were less on the above
characteristics; 2) subjects who were less adventurous, overt,
interested in opposite sex, carefree, sensitive, anxious,
imaginative in inner life and in conversation, jealous, suspicious,
brooding, irritable, informed, inclined to experiment with
problem solutions, tense and excitable had more achievement than
those who were high on the above mentioned characteristics; and
3) non-intellectual characteristics and environmental conditions
have influence on the academic performance of individuals.

274   Education for all children /‾Editorial‾/.   Hindu 17 May 1972,
p.6, col. 2.   600 words.

It has been pleaded that efforts should be made to reduce the
number of drop outs in primary and secondary schools for the
successful implementation of free and compulsory education for
all children of age group 11-14 years. Thus, education should
be oriented towards vocations and   made suitable to local
environment. The Union Minister, Mr. Nurul Hasan proposed the
following: 1) community schools should be established and quality
of education improved; 2) part-time education be imparted to
children (age group 11-14)·   who are unable to afford full
time education; 3) the extra staff needed for teaching be made
available by enlisting the services of volunteers from social
welfare and youth clubs; 4) vocational skills be imparted by
village artisans without insisting on a certificate for a
particular type of teaching. However, on reviewing the above
proposals, it has been contended that there would not be
sufficient volunteers to undertake the task, and that unskilled
workers would also be appointed by alleging that they have
requisite working knowledge.

275   Education policy adrift /‾Editorial‾/.   Hindustan Times
11 April 1972, p.7, cols. 1, 2. 400 words.

The Government's decision against the establishment of a
separate university in South Delhi has been criticised.
Though Jawaharlal Nehru University has been established in
South Delhi it is not the kind of university envisaged when
the idea of second campus was mooted. The Ministry should
not plead the impossibility of instituting a second University
at South Delhi and an alternative should be arranged to cater
to large enrolments in Delhi University. At present, a
policy on higher education related to economic and social
perspectives need be taken. Suggestions have been made to
vocationalise courses for school leavers in order to reduce
university enrolments. Further there is need to waive the
Bachelor's degree as a minimum requirement for employment
in areas where such a degree is not needed and where technical
and professional competence would prove more useful. These
schemes should be tried and the present drift should be
altered.

276   MEHROTRA S N: Institutional planning at college level.
New Frontiers in Education 1972, 2(1), 68-78. 7 ref.

The main defect in the Indian educational planning is that it
is top-based and the major reform needed is to broad-base and
decentralise it through the preparation of plans at the
institutional level and supplement them at the district,
university, state and national levels. Such a system would
encourage initiative, freedom, and creativity of the
individual teacher, make good teachers effective, secure their
participation in the educational planning process and ensure
maximum utilisation of available facilities and resources of
educational institutions. Thus, each institution need to
formulate its plan of development to meet its own specific
needs and requirements. The planning group of each
institution should consist of the principal as the chairman;
heads of departments, teachers, parents, alumni, students,
librarian etc. should be nominated by the principal from the
committee. The main functions of the group are: 1) stating
the institutional objectives in specific terms and
formulating a detailed and a comprehensive plan that projects
the growth of the institution into future years; 2) organising
the institution keeping in view the specific objectives;
3) considering the estimated enrolment predictions for the
present and future years; 4) formulating an admission policy
and setting up educational standards; 5) analysing the sources
and uses of the funds critically in terms of projects,
programmes and activities to be implemented; 6) stating the
policies regarding the selection. and appointment of
teaching staff, their conditions of service, provision of
facilities for raising their professional competence;
7) planning and organising a library keeping in view the
resources, the use of those resources by teachers and students;
8) planning student welfare committees, guidance and
counselling bureaux; 9) inquiring if the courses of post-
graduate instruction in the institution is supporting research
activities; 10) reviewing the maintenance of the physical plant
of the institution; and 11) evaluating the effectiveness of the plan.

277   _ Primary, secondary education pattern to be overhauled.
/ News Item /. Hindustan Times 6 May 1972, p.1, cols. 7, 8;
p.10, col. 2. 600 words.

Inaugurating the Education Secretaries Conference at Delhi in May,
Mr. Nurul Hasan, the Union Minister of Education stressed the need
for changing the pattern of education in primary and secondary
schools and eradicating illiteracy. The new educational pattern
would secure 100% enrolment of children in the 6-14 age group,
combine manual work with academic training and establish one model
community school in each development block and one model
comprehensive secondary school in each district to act as

demonstration centres and to set the pattern for other schools. The proposed community schools would provide for multiple entries at several points and also part time education as well as private study. The distinctive features of these community schools are the expansion of student body, expansion of staff and transformation of content. The model school would also provide extension services to neighbouring schools and offer circulating library and mobile laboratory services. The Minister also pointed out that the training institutions should be reoriented to meet the new programmes.

PRE-PRIMARY EDUCATION

278   RAJAMMAL DEVADAS: Development of pre-school children. Journal of Educational Research and Extension 1972, 8(4), 206-10.

Describes the recommendations of the report of the Study Group set up under the Chairmanship of Smt. Mina Swaminathan, by the Ministry of Education and Social Welfare, Department of Social Welfare on the recommendation of the Central Advisory Board of Education. The major recommendations are given as follows: 1) the integrated service covering education, health, nutrition and welfare to the pre-school child, now covering about one million children should be rapidly expanded to cover 2 million by the end of the Fourth Plan, and 5 million children of age group 3-5 by 1981; 2) a variety of operational models should be developed to suit local conditions; 3) workers of different categories required for the programme should be trained; 4) teaching material and other necessary material should be manufactured on an adequate scale and the needed guidance and supervisory services should be created; and 5) the resources of local communities in personnel, materials and funds should be fully harnessed.

PRIMARY EDUCATION

279   Primary education and literacy / Editorial /. National Herald 11 April 1972, p.5, cols. 1,2.   700 words.

Though the enrolment to primary and middle schools has grown in rapid pace during 1947-72, the percentage of literacy has increased only by 15. The number of illiterates is growing faster than the number of literates. Many who leave primary schools and the dropouts lapse into illiteracy fairly soon. Modernising the primary school curriculum and bringing education

closer to the realities of rural life have been suggested for
sustaining interest towards literacy among primary school children.
Mr. Nurul Hasan, the Union Minister of Education has suggested
the work oriented primary education and the association of
practitioners of local or regional arts and crafts with primary
schools so as to enable children to accept schools as an extension
of home and not an alien imposition. He advocated that colleges
and universities could adopt a few elementary and middle schools
in their neighbourhood and allow the college and university
students to teach. The Minister also recommended a multi-point
entry to pupils of age group 6-17 for joining primary schools and
getting formal education at any point of time. They would be
admitted even as part-time students and be helped to learn the
basic skills and become functionally literate. This system
combined with adult education programmes could reduce mass
illiteracy considerably.

280   Speeding up primary education /¯Editorial¯/. Searchlight
        9 June 1972, p.4, cols. 2, 3. 600 words.

The new educational strategy of the Government for expansion of
primary education lays emphasis on 'part-time, own time education '
and use of radio and television. However, these new tools and
techniques. cannot reduce the importance of the traditional teacher
instruction to the pupils on a personal level. A cent per cent
enrolment of children in effective school education can be envisaged
only if a really impressive investment is made in education and
many more schools are opened.

281   UNIVERSITY OF DELHI, AGRICULTURAL ECONOMICS RESEARCH CENTRE.
        Primary education in rural India - participation and wastage.
        Bombay, Tata McGraw-Hill, 1971. 86p. 29 ref.

Contains findings of research undertaken at the Agricultural Economics
Research Centre at Delhi University, for one year beginning, May
1967. Chapter I studies the general problem of information on rural
elementary education in India, especially in the light of conflicting
evidence from different sources. An attempt is made to judge the
relative worth of different sources of information as well as to
identify the nature of the problem of backwardness in elementary
education in the Indian rural economy. One of the important
aspects of this backwardness is the question of drop-outs and
wastage in rural schools. This problem is stated in Chapter II and
analysed, in terms of different hypotheses, in Chapters II-V.
Chapter VI presents the conclusion and the Appendix clarifies the
use of the retention index in cross-section and time-series data.
Some clear-cut policy recommendations are summarized in Chapter VI
along with the major conclusions.

282   BAGGA Q L: Importance of reading skills. NIE Journal
1971, 6(2), 16-20.

In view of the rapid change and expansion in knowledge, it has
been pointed out that the three aims in teaching reading should
be - self-reliance in study, a desire for information and the
establishing of a life-long zest for learning. The importance
of correct eye movements in increasing reading speed has been
underlined. The teacher should first ensure the elimination of
the common bad habits which interfere with fluency in reading
like using extrabody movements in the reading process, pointing
to the words with a finger or pencil, moving the head from
side to side, vocalizing, and inspecting each word syllable by
syllable or even letter by letter. Then only the reader gets
ready for the practice aimed at speeding up his reading.

SCHOOL FORMS

283   CHILANA M R: Primary school without grade or class
distinctions. Quest in Education 1972, 9(2); 91-107.

A critical analysis is made of some   major issues involved in
trying out an ungraded pattern. The objectives of 'ungraded
pattern' as envisaged by the Kothari Commission, include not .
only checking wastage and stagnation, but also   providing
individual attention to the child and making provision for his
continuous and uninterrupted growth. Conceptually, the system
seeks to abolish artificiality of class system, lessons,
problems arising from failure of children, caters to individual
differences and advocates flexibility in instructional programme. '
The introduction of the system requires curriculum adjustments,
preparation of teachers, and , diagnostic and remedial material
to facilitate grouping and periodic evaluation. Strategically,
the Commission recommends its first try out in classes I and II to
be extended to classes III and IV later on. The concept of the
'ungraded system' as understood by foreign educators has been
discussed. Why 'ungraded pattern', its significant features, the
requirements for introduction of the programme, and the strategy
to be adopted have been explained.

284   Community schools _/ Editorial_/. Tribune 6 May 1972, p.4,
cols. 1, 2. 800 words.

Conversion of all primary and middle schools in the country into
community schools which will provide multiple entries at several
points has been suggested by Mr Nurul Hasan, Union Minister of
Education to meet the stupendous challenge of raising the enrolment
in the age-groups 6-11 and 11-14 to 10 crores and 5 crores
respectively, by 1981. The Minister also suggested the following_
introduction of work-experience, social service and better teaching
of languages, mathematics and science, establishment of at least
one-model primary school in each community block and one model
comprehensive secondary school in each district, to begin with,
and introduction of the double shift system everywhere as in Kerala.
The type of educational explosion visualized by Mr Hasan
could give rise to unpredictable social and political tension,
but there is no other alternative as the dangers of not
educating the illiterates are far more serious.

285   JUNGLEE: Public schools or private preserves? Patriot
12 April 1972, p.2, cols. 4-7. 1300 words.

The continued existence of public schools which are out of date
and exclusive institutions of the rich has been contended as
anachronistic in the present educational system. The Government's
decision to send Government of India Merit Scholars to these
institutions has been characterized as a vain bid to silence the
public criticism.

SECONDARY EDUCATION

286   LOUIS M J, SOUNDARARAJA RAO T R: Evaluation of the
educational programme in the technical high schools and the
secondary schools. Journal of Educational Research and
Extension 1972, 8(4), 241-5.

The evaluation was based on the study of the curricula and the
programme of work of two technical high schools and two secondary
schools in Tamil Nadu. Case study method was adopted and a
comparative study of the curriculum, school plant, teacher and
pupil development was made to study the similarities and the
differences between the two programmes. The main findings and
recommendations have been presented as follows: 1) the excellent
libraries of the technical high schools are not made proper use of;
a library work period in the time table would enable pupils to
make better use of the library; 2) the very good laboratories of
the technical high schools are not made proper use of; provision

for a separate laboratory for the technical schools within the premises would induce pupils and teachers to benefit by the laboratories; 3) technical high school educational programme should provide for physical and moral education within the curriculum; 4) the aims and objectives of the secondary school programmes are not clear and specific; so, the curriculum should be changed and based on specific aims and objectives related to life; 5) work experience is not provided to the secondary school pupils; productive work experience provided for diversified courses should be made available for all pupils entering the secondary school; craft work should be enriched and extended to all classes.

SOCIAL EDUCATION

287   DHAR N: Fundamentals of social education. Calcutta, Minerva Associates, 1971, viii, 198p.

Discusses principles and practices of social education as applicable in Indian society. The book is divided into four parts: 1) concepts; 2) content; 3) agencies; 4) methods and techniques. Appendices contain a) social education in ancient Greece; b) social education in Rome; c) approved syllabus for People's College, West Bengal.

STUDENT INDISCIPLINE

288   SHAMSUDDIN: Student indiscipline. NIE Journal 1971, 6(2), 21-4.

The following suggestions have been made for eradicating student indiscipline: 1) improving the social status of teachers and the academic atmosphere, and increasing the emoluments of teachers at all levels; 2) making adequate arrangements for refresher courses and inservice education for all teachers; 3) improving the economic conditions of students by offering merit scholarships and providing tiffin and school uniforms, free of cost; 4) establishing residential institutions where each teacher should be in charge of a set of pupils; 5) restructuring secondary education in the light of suggestions made by the Kothari Commission, the University Grants Commission and the Secondary Education Commission; 6) introducing dynamic methods of teaching, tutorials, seminars etc.; 7) discouraging the emphasis on degree as a qualification for securing employment.

289   SHIPSTONE E I: Educating the Indian adolescent. Social
Action 1972, 22(1), 26-38.

The problems and tensions experienced by the adolescents in
urban society have been attributed to the changes taking place
in the traditional structure of the Indian family. The need
for 1) establishing proper home environment; 2) conducting
guidance sessions between the adolescents, parents, a '
teachers; 3) establishing counselling bureaus in schools;
4) providing value-oriented education to youth; 5) training
teachers in guidance techniques through short-term condensed
courses-cum-workshops; 6) offering health education and
marriage counselling to youth through youth services;
7) encouraging student welfare service in schools and colleges
has been stressed to help the adolescent to adjust to the
demands, and for personal and social maturity.

290   UMAMAHESAN P: Student welfare work in higher education.
Kerala Journal of Education 1971, 3(1,2), 19-21.

The need for student personnel services in higher education for
facilitating an environment that would aid the all-round growth
of students has been stressed. Various activities of student
personnel work and the important problems existing in Indian
higher education have been listed. An organised student personnel
programme would help the students to solve many of their problems.
Trained personnel and educated workers committed to the improvement
of student welfare, educators trained in the art and science of
student personnel work, cooperation of parents and teachers in the
activities are essential to organise the student welfare work.
Psychological tests for clinical counselling and guidance should be
developed by the university departments of psychology and education.

TEACHER EDUCATION

291   BHATT C S: Qualitative improvement in elementary education and
refresher training centres in Rajasthan. Naya Shikshak (Teacher
Today) 1972, 14(3), 62-73. 4 ref.

In-service education of teachers is one of the most important ways
to improve the quality of education. The efforts in this regard
made by the Rajasthan State Government have been detailed. The
working of the refresher training centres established in the State
has been described.

292   DEVARAJ O K, PAVANASAM R: Inservice educational needs of
secondary school teachers in Coimbatore District. Journal of
Educational Research and Extension 1972, 8(4), 246-8.

Responses of 384 teachers of 53 schools in Coimbatore District to
a questionnaire and checklists designed to elicit personal data,
the period of inservice training undergone, the views on the aims
and objectives of inservice training, reactions to various types
of programmes and suggestions for the future inservice programmes
were obtained and analysed. The findings are as follows: 1) of
384 teachers, 145 had not attended inservice training courses,
99 attended only once and 140, more than once; 2) the first seven
inservice activities preferred were seminar, workshop, courses,
audio-visual services, conference, examination reform and educational
and vocational guidance and the least preferred activities were
library institute, language teaching, adult literacy education, etc.;
3) extension and education departments, training colleges, the
NCERT and the UGC, the National Educational Development Council and
Literacy House were the agencies which conducted the inservice training;
4) most of the teachers   preferred seminars as the means of
inservice training programme for teachers; 5) summer holidays were
considered as the best period for the inservice education;
6) professors and lecturers from training colleges were preferred as
suitable staff to conduct the training; 7) headmasters were preferred
for supervising the follow-up work undertaken by the teachers who
had undergone the inservice training; 8) for the follow-up work, the
majority preferred changing the methods according to the classroom
situation and facilities available in the schools; 9) issue of merit
certificates at the end of the programme and linking inservice
education with promotion to higher positions were preferred;
10) highest priority was given by a majority for the inservice
education in the teaching of languages.

293   GOSWAMI H G: Prasiksan mem abhyas adhyapan (= practice
teaching in teacher training) / Hindi 7. Naya Shikshak
(Teacher Today) 1972, 14(3), 29-37. 6 ref.

The theory part of training, which ought to subserve the interests
of practice-teaching, continues to enjoy an undue importance. The
need is to so re-model and arrange the two components of training as
to make theory contribute to the professional efficiency of the
teacher who is above all a practical field worker. To realise this,
there has to be perfect coordination among the different factors of
training: the mode of practice-teaching, the University, Training
Colleges, trainees and the practicing schools. Trainees should
function like full-fledged staff-members and participate in all
activities of the practicing school. The training college should
strike deeper roots in the school soil. Full participation in school
life may begin in July and end by October or November so as to leave
ample time for other syllabus-items. During this period a trainee
should teach for four periods daily. Homework should be taken

seriously and not as a formal training routine. If adopted, the system will benefit the trainees, the school teachers and the students alike. There will be plenty of scope for experiment and action research, which can instil a new life in teaching and training and inform them with a new purpose.

294   HARIDAS M: Teacher educators in a changing society. Kerala Journal of Education 1972, 4(1), 25-8.

The role of teacher-educators in the present Indian society has been described as follows: 1) the teacher educator and school teacher should possess a capacity for adjustment to the new trends of the changing society; he should encourage collective thinking and cooperative working in place of hierarchy and individual competitions; 2) the teacher-educators and administrators should frame the curriculum keeping in view the sharing of responsibilities between teachers and pupils in the learning process and the individual initiative of pupils in accordance with their needs and abilities; 3) the teacher educators should locate the talented teachers among the trainees and refer them to the State Institute of Education and the NCERT for recognition and necessary encouragement.

295   MAITREE KRISHNARAJ: How trainee-teachers reacted to programme in Gandhi Shikshan Bhavan - an assessment. Quest in Education 1972, 9(2), 67-84.

A questionnaire consisting of open-ended as well as closed items was administered to 64 B.Ed. students of 1971-72 session at the end of their course. A detailed analysis of the responses has been presented. The human relations aspect, training received in teaching techniques, the study of educational psychology, and lectures by eminent men impressed a good number of students. The value of discussions and practice-teaching was also realized by a large number of students. Most of the students developed interest in the profession and in their own professional growth. They also developed a positive and progressive outlook to school education. The importance of moral values in personal and professional life was realized by the majority. The usefulness of current educational journals was, however, not realized. The programmes like work-experience and social service which needed improvement did not create much enthusiasm.

296   MATHUR V S: Kurukshetra experiment. NIE Journal 1971, 6(1), 38-40.

The integrated courses in education (preparing teachers in content matter and methodology simultaneously) have been first

started in India by the Kurukshetra University in July 1960.
The four Regional Colleges of Education started by the NCERT
are also giving such courses. From various studies it has been
observed that these courses were found to be successful. The
following suggestions are given: 1) the integrated courses
should be continued; 2) while the duration of the course may
be four years for higher secondary passed candidates, it should
be of five years for matriculates; 3) there should be more
opportunity for seminars, library and discussion activities;
4) scholarship amount should be increased to Rs.50/- per month;
5) students should be exposed to the subject of education in an
informal way in the first two years; in the third year
'principles of education may be introduced; educational psychology
may be introduced in the fourth year; 6) the fifth year should be
devoted to educational work including practical work and teaching
practice.

297   PILLAĪ N P: Education of the teacher as a professional.
Kerala Journal of Education 1971, 3(1,2), 5-9.

The education of a teacher for effective teaching involves his
preparation as a person, a professional, a community leader and
an agent in promoting social change. The education of the teacher
as a good man should be accomplished through the general or
liberal education courses he undertakes at school and college.
As a professional the teacher should possess subject matter
competency and communication competency. He should also possess
a knowledge of i) the psychology of child development and human
behaviour, ii) the theories of learning, the techniques and
procedures of instruction, class organisation and management, the
use of instructional aids and media etc., iii) the motivations and
constraints in the field of education in the country, and iv) the
methods of educational research and school organizations.

298   RAGHURAM SINGH M: Collegiate faculty development.
Education Quarterly 1971, 23(3), 23-6.

It is suggested that collegiate and university teachers,
especially those handling undergraduate teaching need to take
up a teacher-preparation course to be considered professionals.
When they are appointed on a faculty they should dedicate
themselves to the six obligations of an educator: a) continuing
education for self, b) communication with students, c) advancement
of knowledge, d) maintenance of professional stature,
e) helping administration, f) display of competence. The teachers
should be alive to the concept of faculty development and should
fight against obsolescence in teaching as they grow in age,
The six dimensions of teaching fall into three categories:
1) objectives, 2) achievement of objectives, 3) research and
development functions. The teachers should be familiar with these.

They should prepare themselves to be assessed for professional
competence by course students, faculty colleagues and educational
administrators. They should aspire to go up in the professional
ladder purely on the basis of the measurable evidence they have
built regarding their worth. Teacher-evaluation techniques should
be developed as feed-back devices for the collegiate faculty.
development programme.

299   SADASIVAN NAIR V, KULANDAIVEL K: Evaluation of the B.T.
programme by trained graduate teachers. Journal of Educational
Research and Extension 1972, 8(3), 188-90.

A sample of 200 trained graduate teachers working in rural and
urban high schools in Coimbatore Educational District was
administered a questionnaire containing 113 questions for eliciting
personal data, opinions on general aspects of B.T. programme,
teaching of theoretical subjects and practical work. The findings
are as follows: 1) out of the sample, 11% and 8.5% reported lack of
well equipped library and laboratory facilities in the training
colleges; 2) M.Ed. degree was considered essential for all staff
members of training colleges by 74.5% of the sample; 3) that
teacher educators should take aptitude tests before joining the
profession was felt by 20.5%; 4) about 38% considered that
experiments should be conducted in educational psychology;
5) guidance service wing attached to the department of psychology
was desired by 80%; 6) demonstration lessons were found useful
by 92% in their work; 7) the entire sample stated that each trainee
should be asked to give criticism lessons. Appropriate recommenda-
tions based on the above-mentioned findings have been made.

300   SIVADASAN PILLAI K: First Asian Conference on teacher education.
Kerala Journal of Education 1971, 3(1,2), 10-12.

The conference held at Bangalore from 14th to 19th of June 1971
under the auspices of the International Council on Education for
Teaching, the Indian Association of Teacher Educators, the
Bangalore Association of Teacher Educators, and the Bangalore University,
adopted the following resolutions: 1) a survey of teacher education
institutions in various countries be undertaken; 2) effective steps
be taken by the Government and professional organisations to provide
suitable emoluments to teachers and to improve their working conditions
so that only suitable persons are attracted to the teaching
professions; 3) an expert committee be appointed for making suitable
recommendations, suggesting reforms in teacher education in regard to
curricula, instructional methods, evaluation etc.; 4) greater stress
be laid on functional and developmental research in teacher education;
5)   Summer Institute and inservice courses be organised for teacher
educators.

301   SUKUMARAN NAIR A: New challenge to teacher education -
modern mathematics. Kerala Journal of Education 1972, 4(1),
60-3. 5 ref.

Describes the concept of modern Mathematics and stresses the
importance of including modern Mathematics in the school
curricula. A suggestion has been made that the demonstration
schools attached to teacher training institutions should
start experimenting with modern Mathematics and evolve
suitable curricula. Resource persons for training teacher-
trainees should be secured and theory and practice of modern
Mathematics should be included in the methodology courses of
teacher training institutions.

TEACHERS

302   BRAR J S,...OM ADHAR: Socio-economic problems of primary
school teachers. Journal of Educational Research and Extension
1972, 8(4), 222-5. 2 ref.

The socio-economic problems of 60 male and 19 female teachers
belonging to 33 primary schools in Pachmarhi range were studied
through a questionnaire and an interview schedule. The
findings are: 1) the maximum expansion of primary schools and
teacher recruitment have taken place after independence;
2) 79% of the teachers are undergraduates and 65% are trained;
3) the percentage of women teachers joining the profession
forced by circumstances is larger than the men teachers;
4) a sizable majority are Hindus followed by Muslims;
5) half of the teachers (56.5%) have small families; 50% of
the married teachers are forced by circumstances to live
separate from their families and female married teachers have
more domestic problems than the rest; 6) the low salary of
teachers has created a general apathy of teachers towards the
people; 7) many of the teachers do not enjoy good housing,
quality clothing, educational travels and recreation;
8) barely 15% of the teachers have insurance policies; 9) uncon-
firmed   teachers do not have the benefit of provident fund
and this adds to their economic difficulties; 10) very few have
a liking for the profession and most have joined because they
were forced by circumstances; and 11) bleak chances of promotion have
led to the professional inefficiency.

303   JAIN . A K: . Adhyāpan kārya kī svamulyānkan vidhi
    (= self-evaluation of a teacher's work) / Hindi /. Naya
Shikshak (Teacher Today) 1972, 14(3), 24-8.

Evaluation has its own importance in the field of education as
it is the only dependable means of knowing the failure or success
of a teacher's work. According to the tradition, confidential
reports were drawn on the basis of a teacher's exam results;
but of late such items as a teacher's participation in extra-,
co-curricular activities and social work also began to find a
place in them. In advanced countries students express their
views and give their judgements on the work of their teachers.
A few universities have adopted this method in India also.
This method unquestionably helps in the promotion of democratic
values. Since its working demands special responsibility on
the part of students, its introduction in India must take place
after full thought. There is yet another method; the so-called
'self-evaluation' method. As the name shows, here evaluation
is done by the teachers themselves through suitable questionnaire,
interviews and the like. Various aspects of a teacher's
professional·life and work - quality of his teaching and
reading, his qualifications, participation in various activities,
research work, publications etc. can be evaluated through these
devices. This method can create a sense of self-confidence in
teachers and enable them to improve the quality of their work.
Such a questionnaire has been devised.

304   SHAMSUDDIN: Socio-economic conditions of teachers, their
impact on choice of career. Education Quarterly 1971, 23(3), 1-4.

The following conclusions were arrived at after analysing
the returns to a questionnaire from 200 Madhya Pradesh secondary
school teachers (64 of them being women): 1) the majority of
men teachers belonged to lower middle/middle class families,
and the women teachers to upper middle/high class
families; 2) most of the men teachers were married and having
children, women teachers were single or were having less
liabilities; 3) the majority of teachers were of age between
25 and 30 years, half of the women teachers were below 25 years
of age; 4) the parents of teachers were not highly educated;
5) the parents of teachers belonged to middle class occupational
status. It is suggested that the economic status of teachers
should be raised and their working conditions improved.

305   BUCH M.B, SANTHANAM M R: Teacher initiation-response
nexus in different subject-matter areas.   Indian Educational
Review 1972, 7(1), 168-76.   4 ref.

This investigation was undertaken to find out the type of
association between the 'drill' and 'creative inquiry' patterns
in classroom communication episodes in six subject-matter
areas: Tamil, English, mathematics, history, geography and
science.   The sample consisted of 32 upper primary teachers
(16 male and 16 female).   Flanders' System of Interaction
Analysis of ten categories was used for the investigation.
Although the association between 'drill' and 'creative inquiry'
was not found statistically significant in all subject areas,
association was found to be positive in the case of Tamil and
History and negative in the case of other four subjects.

306   GARG V P: Teaching of economics in secondary schools.
Educational Forum 1971, 16(2), 39-41.

The teaching of economics should be such as to help students
make a rational analysis of the economic problems.   The following
suggestions have been made for economics teachers: 1) providing to
students an insight into the chosen topic in the class; 2) relating
the subject matter with real-life situations and presenting the
matter in accordance with the standard of the class and in
keeping with individual differences; 3) treating the subject
matter in such a way that it may not be isolated and deprived of
its link with other social and pure sciences.

307   NIGAM B K: Involvement of students in teaching of economics.
Educational Forum 1971, 16(2), 34-8.

The following techniques have been suggested for effecting student
involvement: 1) using the following methods of teaching - questions,
project, problem solving, and discussion; 2) adopting certain topics
for dramatics and role play; 3) using audio-visual aids;
4) introducing semi-circular seating arrangement and reducing the
number of rows to two; 5) giving assignments to students keeping in
view their individual differences; 6) organising co-curricular
activities; 7) framing examination questions in such a manner that
they require application of knowledge, reasoning and thinking;
8) providing good reading material in the school library; 9) offering
proper educational and vocational guidance to students.

308   ROY B: Teacher behaviour patterns in teaching different materials. Indian Educational Review 1972, 7(1), 219-26.

The investigation was undertaken to analyse differences in teacher behaviour while teaching different materials, namely, general science, social studies, mathematics, and the languages. Sex is another variable studied. The subjects were 32 male and 11 female middle school teachers. Flanders' Classroom Interaction Schedule was used. The findings reveal that teaching materials as well as sex play a definite role in creating variations in teacher behaviour. Male teachers may teach general science and social studies better than female teachers who may teach mathematics and the languages better than the male teachers. High lecturing, direct influence and lesser student participation were prominent features with the subjects general science and social studies.

309   SUBRAMANIAN R, PALANISAMI M: Study of factors influencing students' preference for the medium of instruction at the P.U.C. level in Madurai colleges in Tamil Nadu. Interdiscipline 1971, 8(1), 1-6.

The sample consisted of 50 Tamil medium and 537 English medium students of pre-university classes. They were contacted by a research team from the Rural Institute, Gandhigram. This study was concerned with two dependent variables, viz., i) choice of English medium and ii) choice of Tamil medium. The independent variables were caste, age, their rural/urban background, marks at the SSLC, parents' occupation, parents' educational status, parents income, etc. The Chi-square was used to test the influence of independent variables on the dependent variables. It is found that the age of the students and the marks they had scored in the SSLC examinations are the linchpins in their decision on the choice of the medium. It is concluded that a vast majority of them are for English medium and they probably may go in for Tamil medium if all the career courses which they prefer are available in the Tamil medium.

TESTS AND MEASUREMENTS

310   AHUJA P: Study into the element of speed and power in a group test of intelligence. Quest in Education 1972, 9(2), 115-19.

An investigation was undertaken to study the element of speed and power in a group test of intelligence. A group test of intelligence devised by the author was administered to 246 pupils (V-VIII classes) of two secondary schools. Pupils were given

the specified time for each sub-test. When the allotted time
was over, the pupils were asked to draw a line to indicate the
number of items already attempted by them. Then they were
given additional time equal to the specified time to complete
the test. The range of difficulty value of the 100 items in
the test was also studied. The same test was administered to
another 93 students (V-VIII classes). They were given the
specified time for each sub-test. When the time was over, the
papers were collected. The numbers of right and wrong scores,
the number of unattempted items were calculated. The results
indicated that the test in question is inbetween a speed and a
power one. It is concluded that all intellectual performances
cannot be measured in the same dimension. Some need to be
measured largely in terms of power, others in terms of speed,
and still others in terms of a combination of both. Differences
in speed are partly due to differences in power.

311   BHATT M C: Adaptation and standardization of the Wechsler
Intelligence Scale for Gujarati children. Indian Educational
Review 1972, 7(1), 31-52. 16 ref.

Wechsler's Intelligence Scale has been translated, adapted and
standardized for Gujarati children. For standardization a sample
of 440 children (220 boys and 220 girls) was taken from 12 schools
of Ahmedabad City. The split-half and test-retest reliabilities
were calculated and the test validated against other standardized
tests of intelligence in Gujarati. Factual validation, age-wise
and sex-wise inter-test correlations were also determined.

312   CHATTERJI S, MUKERJEE M, CHAKRABORTY S N: Use of wrong
score to increase the predictive validity of aptitude tests.
Psychological Studies 1972, 17(1), 15-23. 2 ref.

In an objective type test, usually the right scores and the number
of omissions are taken into consideration. However, an attempt has
been made to explore the possibility of using the wrong scores to
improve the predictive validity of objective type test. The sample
consisted of three groups of students of Business management in an
institution in the years 1965, 1966 and 1967. The admission test
battery consisted of five tests: 1) breadth of knowledge,
2) general ability, 3) mathematics, 4) English comprehension,
5) Data interpretation. The purpose of the admission test was to
predict the criterion, i.e. the cumulative grade point average
obtained by the students at the end of the course. The right scores
and the wrong scores were considered and means, standard deviations
and intercorrelations were calculated. With the specific criterion
used, the predictive ability of the tests could not be increased by
considering both right and wrong scores. However, it is observed
that there is the possibility of profitably using the wrong scores
to predict some other criterion.

313   NARAYANA RAO. S, VENKATARAMA REDDY A: Can Raven's
Progressive Matrices Test be shortened? Psychological Studies
1972, 17(1), 7-10.

Realizing the practical difficulty involved in finding
sufficient time to administer the Raven's Progressive Matrices
Test to subjects in schools without seriously interfering
with their class work, a procedure to economise on the time
required for administering the test was tried out. Random
samples of subjects drawn from a number of schools were
divided into 9 equal groups and the groups were assigned to
the 9 different conditions of testing randomly. The
obtained correlations between the performance in two sessions
under different conditions of testing were all found to be
high when the test was administered as a power test without
any time limitations. On the other hand, administering the
test with time limitations as a speed test yielded significantly
lower correlations when compared to the above. The following
conclusions have been drawn: 1) the Raven's Standard
Progressive Matrices Test may not be administered as a speed
test with time limitations if the results were to be
dependable; 2) either the odd - or the even-half of the test
could be administered as a power test instead of the full test
without any disadvantage; 3) administering half of the test
provides a speedy method of assessing subject's mental
ability.

314   SHARMA T R: Measuring intelligence through bicycle drawings.
Indian Educational Review 1972, 7(1), 1-30. 37 ref.

Discussing the Goodenough's method of measuring children's
intelligence through drawing, it is felt that in drawing a man,
the element of sex adversely affects the equality of familiarity
with the subject. The author has, therefore, endeavoured to
construct a draw-a-bicycle test. From preliminary studies on
417 and 673 children, a 75-point scale has been constructed. For
standardization, the test was administered to 2863 children
(age, 11-16 years) from 30 schools. The test is found to be
reliable and valid and can be used as an intelligence test. The
method of standardization and calculation of reliability and
validity have been described. The scoring scale is given.

315   SUKUMARAN NAIR A: Raven's test given with three time limits -
comparative study of the performance of two sexes. Kerala Journal
of Education 1971, 3(1,2), 22-5. 7 ref.

The study was undertaken to test the hypothesis that varying
the time limits for the progressive matrices test (PMT) would
have differential effects on the two sex groups. 180 boys and

girls studying in VIII, IX and X standards of various secondary
schools were administered the standard form of PMT with varying
time intervals. Analysis of the data did not substantiate the
hypothesis. The performance of the two sexes was almost identical
and there was no differential effect on the sexes because of
varied time limits.

WOMEN'S EDUCATION

316   YWCA OF INDIA. The educated woman in Indian society to-day.
Bombay, Tata MacGraw-Hill 1971, 237p. 46 ref.

The Indian YWCA sponsored a planned study on the subject of
the educated womanpower of India. This study is divided into
two parts. The first part consists of documentation based on
available facts in order to obtain a reliable picture of the
present status, while in the second part an attempt has been
made to consider the position and formulate tentative
judgements. The following suggestions have been offered:
1) compilation of fuller information about educated woman;
2) effective influence by the Governments in all aspects of
women's education; 3) enlarging area for employment of women
primary school teachers; 4) inducement to professionally
trained women to go for the profession even after marriage;
5) demarcation of areas of professionals and volunteers in
social work; 6) closer coordination of voluntary
organisations engaged in similar work; 7) selective
training of volunteers; 8) improvement in women's higher
education; 9) proper guidance for choice of professional
education; 10) crash programme to mobilise women power
to reduce illiteracy.

WORKERS' EDUCATION

317   JADHAV B G: Workers education for workers participation in
management. Workers Education April 1972, p. 17-20, 22.

Workers participation in industry has been favoured for
building up industrial democracy. Increased industrial
production is possible through good administration, free
from prejudices and through industrial peace which could
be preserved by means of trade unionism, collective bargaining,
removing the union rivalry and providing acceptable returns

for labour. The ideal concept would be to activate workers'
participation in the management and to make worker-directors
bring home to the workers the realisation of various managerial
problems. However, the worker-director needs to possess
certain skills and qualities to participate in the organisation.
Thus, the workmen should be trained with a view to produce
among themselves the necessary managerial talents. The
trade unions should, therefore, educate the working class and
train the talented persons to take up greater and problematic
responsibilities in the interest of the industry and their
own welfare. The workers' education programmes should also
be intensified in the right perspective by the Central Board
for Workers Education.

List of Periodicals Abstracted

Education Quarterly 1971: V 23, No 3; 1972: V 23, No 4
Educational Forum 1971: V 16, Nos 2-4
Indian Educational Review 1972: V 7, No 1
Indian Journal of Adult Education 1972: V 33, No 4
Indian Journal of Psychology 1967: V 42, No 1-4; 1972: V 47, No 1
Interdiscipline 1971: V 8, No 1
Journal of Educational Research and Extension 1972: V 8, Nos 3,4
Kerala Journal of Education 1971: V 3, Nos 1, 2; 1972: V 4, No 1
Manpower Journal 1972: V 7, No 4
NIE Journal 1971: V 6, Nos 1,2,4
Naya Shikshak (Teacher.Today) 1972: V 14, No 3
New Frontiers in Education 1971: V 1, No 3; 1972: V 2, No 1
Psychological Studies 1972: V 7, No 1
Quest in Education 1972: V 9, No 2
Social Action 1972: V 22, Nos 1,2
University News 1972: V 10, No 5
Workers Education 1972: April

Newspapers:

Amrita Bazar Patrika: 14 June 1972
Economic Times: 15 May 1972
Free Press Journal: 3 April 1972
Hindu: 7,20 April; 17,27 May; 2, 14 June 1972
Hindustan Times: 1, 11 April; 5, 9 May; 24 June 1972
Hindustan Times, Sunday World: 16 April 1972
Hitavada: 2, 6, 19 April 1972
Mail: 18 April; 11, 12 May; 21 June 1972
National Herald: 11 April; 3 June 1972
Patriot: 12 April 1972
Searchlight: 9 June 1972
Times of India: 28 April; 17 May 1972
Tribune: 6 May 1972

SPECIAL SECTION

TECHNICAL EDUCATION - II

A27   ABDUR RAHIM: Engineering education in India. Hindustan Times, Sunday
World. 11 June 1972, p. 7, cols. 1-3. 1400 words.

The need for revision of engineering education within the
framework of changing environment has been stressed. Indian
students are less mechanically inclined and they accept the
prescribed curriculum as best suited to their needs. Lacking
in creative ability and possessing a weak theoretical back-
ground, the engineering graduates find the employment
irrelevant to their education. The faculty members are also
primarily theoretically oriented and train pupils to be research
scholars. Thus an average student, who is not desirous of
pursuing a research career is left in an insecure position.
The small scale industries made available to engineers have
not . ... progressed due to lack of patronage. The curriculum
should therefore be made interesting to average students. The
choice of engineering courses should enable pupils to reduce
their subject load and train them to concentrate on a few.
Project-type courses should be emphasised in theory and practicals
from first year onwards. Building devices and systems should
be stressed in laboratories. The postgraduate and research courses could
be confined to Indian Institutes of Technology. A research
institute supported by the university should be attached to
engineering departments to aid communication between the industry,
research and engineering colleges. These institutes could feed
the local industry and provide internship to students. Keeping in
view the changing needs of the society, efforts should be made to
provide broad-based engineering education.

A28   ALL INDIA BOARD OF TECHNICAL STUDIES IN MANAGEMENT COMMITTEE ON
MANAGERIAL PERSONNEL / MUDALIAR COMMITTEE 1964 /: Report.
New Delhi, the Ministry of Education, 1966. 76p.

The Committee was appointed to assess the requirements of managerial
personnel for the country's development programme in the private
and public sectors. The recommendations of the Committee include:
1) persuading industry to organise training for the lower cadres of
supervisory personnel; 2) starting 3 institutes to provide full-time
instruction in foremanship and supervision similar to the one
started by Tata Iron and Steel Co.; 3) starting part-time industrial
management courses only in centres where industrial development
envisaged employment of a large number of managerial personnel;
4) overcoming the shortage of teachers to teach management subjects
and industrial psychology in part-time courses by collaborative

arrangements between the Indian Institutes of Management at
Ahmedabad and Calcutta, and the National Institute for Training
in Industrial Engineering; the two institutes of management
should organise regular courses for training of university
teachers of management subjects; 5) increasing the intake to
300 during the IV Plan period for general and commercial
management courses at the two management institutions;
6) increasing the intake of part-time courses for ...
business management, and starting new centres for business
management, ...

A29   ALL INDIA COUNCIL FOR TECHNICAL EDUCATION: Proceedings of meetings —
third to twentieth, 1949—1968, ...
(In Biswas A, Agrawal S. Educational documents since
Independence. New Delhi, Academic Publishers, 1971.
198—238).

At the instance of the Central Advisory Board of Education,
the All India Council for Technical Education was set up in
1945. The Council has done good work, and the Government
has been content to act on the advice tendered by it. A
remarkable achievement in the two decades of independence is
the phenomenal growth of technical education. Of late
improvement of quality and standard has been stressed by the
council. The council has pleaded with the States for the
implementation of the schemes of improved pay scales for
teachers. The council further suggested that no new institutions
should be started as long as the existing ones are understaffed.
Starting of technical education and training at the secondary
level and opening of junior technical schools had been proposed
to stop the overcrowding of universities. The council devoted
its attention to other aspects of technical education such as
cooperation and collaboration between industry and technical
institution, the development of an integrated system of science
and engineering in which the complementary roles of engineering
institutions and research laboratories are clearly identified,
the reorganization of polytechnic education, the refurbishment of
diploma courses, the design and fabrication of equipment to make
technical education self-reliant, the need for encouraging Indian
authors to write technical books, etc.

A30   ANAND K K: Analysis of in-company training costs — a case study.
Indian Management 1972, 11(2), 15—20.

The present study examines the nature of the training office
costs, the cost-per-unit in terms of programmes, trainee days,
training days, and how the costs of one year (1969—70) compare
with those of the previous one (1968—69) in the case of

Larsen & Toubro Ltd., Bombay. The limitations of the analysis are: 1) costs are not accumulated programme-wise; 2) avoidable expenses may be reflected in a prior year's cost; 3) all kinds of costs connected with the training are not covered. The reduction of costs in 1969-70 due to increase in number of training days and programme participants indicates that scope for cost reduction is considerable. It has been emphasized that cost of comparable intra-company vs. outside programmes should be explicitly considered in training decisions.

A31   ANNUAL CONFERENCE OF THE ASSOCIATION OF   . . : . ;
PRINCIPALS OF TECHNICAL INSTITUTIONS (INDIA), 24TH,
JAMSHEDPUR, 1965. Proceedings. Jamshedpur, Superintendent
of training, Tata Iron and Steel Co., Ltd., 1965.
iii, 66p.   .   .

The report of the conference proceedings comprises the
following: 1) welcome address by G. Kumar; 2) inaugural
address by Jehangir J. Ghandy; 3) presidential address
by G.R. Damodaran; 4) vote of thanks by R.N. Dogra;
5) symposium on closer link between industry and technical
institutions; 6) symposium on reorientation of engineering
courses in the light of present day requirements;
7) review of the progress towards adoption of metric system
in technical education; 8) discussion on "are we producing
more engineering graduates than is warranted".

A32   AZAD J L: Technical education (In Uday Shankar, Ahluwalia
S P. Development of education in India 1947-1966. Kurukshetra,
Kurukshetra University, 1967. 81-96). .

A short history of the development of technical education in
India has been given. The tremendous progress of technical
education in the post-Independence period has been described.
The following problems of technical education: a) shortage
of teachers, b) wastage in technical institutions, c) lack of
practical training, d) rationalization of engineer/technician
ratio, e) unemployment amongst the engineers, f) difference in
the duration of courses, g) organization of postgraduate courses,
h) correspondence courses - have been discussed. It is pointed
out that though quantitatively the progress achieved has been
quite impressive, there is room for improvement qualitatively.

A33   BANERJEE D: Education and training in refrigeration.
Economic Times 10 February 1972, p. 10, cols. 4-8; p. 11,
cols. 4, 5.   1800 words.

The trained personnel required for refrigeration industry have
been classified as mechanics, technicians, engineers and
researchers. The following suggestions have been made regarding
their education and training: 1) an organized programme of
training for refrigeration mechanics should be taken up by the
industries with the assistance of technical schools or
institutes on the basis of a comprehensive curriculum drawn up
for the purpose; 2) the training of technicians would fall in
line more or less with a three-year full-time diploma programme
or a four-year (sandwich) diploma programme; it   should be
strongly industry-oriented with maximum possible assistance from
the industry; 3) the specialized training needed for engineers can
be imparted either as a post-graduate diploma course in the universities
or by the industries with active collaboration with educational
institutions for intensive fundamental training in courses 'like
applied thermo-dynamics, heat transfer, fluid mechanics,
instrumentation, etc.; 4) bright engineering graduates may be
selected by engineering institutes with suitable facilities to
impart intensive post-graduate training in basic sciences,
mathematics, instrumentation, and refrigeration and air-conditioning;
5) doctoral degree programme could also be provided with a real
industrial problem in the project work; 6) specialized
"Refrigerating Institutes", more or less on the same lines as that
of Leningrad Technological Institute in the USSR may be started on
a national basis and located in the areas where refrigeration
industry has flourished or is likely to expand.

A34   Blueprint for technical education / News Item /.
Patriot 23 April 1972, p. 8, cols. 2, 3.   300 words.

Some of the recommendations put forth by the All India Council
for Technical Education at its 21st meeting are: 1) forming
statutory boards or councils for technical education in States;
2) granting autonomy to select technical institutes;
3) constituting a joint committee of the All-India Technical
Council for Education and the University Grants Commission,
which will examine the structure of engineering education and
suggest measures; 4) introducing sandwich courses in engineering
education in order to meet the needs of industrial development;
5) offering scholarships to 25 per cent students joining
polytechnics so as to attract the best talent, and reserving a
certain percentage of scholarships to skilled workers; 6) entrusting
the Centre with the responsibility to share with States 50 per
cent of the expenditure the schemes may entail; 7) linking
technical education with management techniques; 8) retraining
teachers and starting a course for principals and heads of
departments in polytechnics.

A35   Centre proposes new integrated system of technical education.
Hindu, May 25, 1968. 1. 450 words.

A new integrated system of technical education at the secondary
school stage has been proposed by the Centre. The scheme envisages
two points of entry – one at the end of the seventh class and the
other at the end of the tenth class. The integrated course will
be of five years duration to run concurrently with secondary
education but as a distinct and specialised course. The idea is
that students completi ɡ seventh class and tenth class may be
siphoned off into technical education, oriented towards industrial
employment. Provision will have to be made for this type of
vocational training for two million students, and on the basis of an
enrolment of 1,000 students per school, about 2,000 technical
schools will be needed by 1986. This scheme will require about
67,000 teachers and it is proposed to train a new cadre of teachers
for this purpose at the regional colleges of education of the
National Council of Educational Research and Training and other
teacher training centres to be set up at selected engineering
colleges and polytechnics. The authorities feel that the entire
scheme of technical education should be reorganized to correct the
inadequacies noticed in the present courses. It   has been found
that the present diploma courses are not industry-oriented and there
is a lot of wastage in polytechnics. A scheme is being worked out
to improve the standard and quality of diploma courses.

A36   CHANDRIKANT L S: Research and extension services in technical
education (In Adaval S B. Ed. Third Indian Year Book of education,
educational research. New Delhi, National Council of Educational
Research and Training, 1968. 249-58).

Since 1950, the Central and State governments have spent over 2100
million rupees on technical education and another 2500 million rupees
are slated to be spent in the course of the Fourth Five Year Plan
period. Hence there is need for research in technical education to
ensure that the money spent yields worthwhile results. The objectives·
of research should be determined in advance and a clear-cut programme
of work formulated. The resources necessary, p⁻˙˙ᵘularly personnel,
must be mobilised. The results of research must be carefully
evaluated and extended to actual field conditions in technical
institutions. A central research organization must be set up
to work in close collaboration with technical institutions and
industry. It should function as an autonomous academic body.
Besides itself carrying out research programmes, it should
distribute research problems to selected technical institutions
which have the necessary competence. The following are the main
areas in which research may be undertaken: 1) curriculum develop-
ment; 2) examination reform; 3) textbooks and instructional
materials; 4) design and manufacture of laboratory equipment; ;
5) design of buildings for technical institutions; 6) evolving .

objective tests for admission. There is also need for a network
of extension service centres located in selected engineering
colleges and higher technological institutes. The research results
should be disseminated through these extension centres. These
centres should organise inservice teacher training in the use of
the new curriculum, instructional material and audio-visual aids,
and discuss the individual problems of teachers. There should be
frequent seminars and workshops on specific aspects of technical
education.

A37   DATTA M M: Role of Institution of Surveyors (India) in
professional education. (In Seminar – Role and problems of
professional institutions in a developing economy, New Delhi,
1969. Papers for discussion. Delhi, the Institution of
Engineers (India), 1969. 20-9).

The present university education in 'surveying' in the country
is limited to being an integral part of the civil engineering
course which does not permit adequate time to the teaching and
advanced study of the subject. Now the responsibility of imparting
professional education in   surveying has come on the surveyors
themselves. The requirements of professional education in
surveying are diverse. In order to achieve short-cuts to this
challenging problem, the Institution of Surveyors has proposed
the following measures: a) introduction of short courses in
surveying in universities and institutions; b) arrangement for
correspondence courses by the institution; c) establishment of
coaching classes in the regional branches of the institution;
d) encouraging writing and publication of technical books
covering professional fields such as surveying, conforming to
Indian conditions and practice.

A38   Developments in technical education. University News 1972,
10(5), 4, 5.

The All India Council for Technical Education which held its
21st meeting on April 21, 1972 accepted the following
recommendations made by a conference of the State Directors of
Technical Education: 1) every State should set up a State Board
of Technical Education on a statutory basis for a) coordinated
development of polytechnic education, b) continuous evaluation
of standards, c) holding of examinations and award of diplomas;
2) under the joint auspices of each Board and Regional Committee of
the   E, there should be a standing Evaluation Committee to
inspect the polytechnics and to suggest measures for improvement;
3) this Board should establish close cooperation and coordination
with industry so as to train the right type of technicians. Same
Some of the other important decisions are: 1) setting up a
committee to take an overall view of the present state of all

private technical institutions in the country; 2) establishing a Central Institute of Printing Technology; 3) extending the duration of the course in Architecture to integrate one year practical training with it; 4) permitting the staff of the Schools of Architecture to undertake consultancy work; 5) providing cent per cent Central grant for a minimum period of ten years to institutions approved by the Board of Management Studies; 6) instituting an expert committee to review and modify the selection procedures in technical institutions and a Joint Committee of the UGC and the AICTE to review the whole system of engineering education at the first degree level.

A39   HEGDE S P: Institutional set up of management education, structural changes in management course. Economic Times 3 June 1972, p. 5, cols. 3-8; 5 June 1972, p. 5, cols. 3-8. 3000 words.

The root cause for the several ills of the management education is the lack of liaison between educational institutions and the local trade and industry. For instance, the lack of ... practical knowledge of the management degree holders is an outcome of the above-mentioned cause. Hence, close liaison between the business world and educational institutions, both at national level and at regional level, has been suggested. Attaching departments of management to selected ... universities is preferred to opening new autonomous management institutions. At the national level an All-India board of management education, training and research may be set up. The members should be drawn from representatives from national bodies of trade, industry, banking, insurance, etc. At the university level, it is suggested that the head of the department of management should be advised by a board of management in which should be represented the local trade, industry, etc.

A40   How effective is our engineering education? /Editorial/. Indian Chemical Engineer 1971, 13(2), 1, 2.

The two objectives of engineering education are: 1) the dissemination of knowledge with a view to developing the analytical abilities of students, and imparting information and know-how which may be useful currently as well as in the near future. Though the former objective is accepted as the academic objective of education and a source of innovation, the latter seems to be the real need of the present-day India. However, a curriculum based entirely on practical and job-oriented objectives is currently considered inferior and suitable only for subordinate manpower. If it is agreed that these two objectives are to underline planning of programmes for engineering

education, their effect on curricular and administrative structure should also be conceded. It has to be understood that admission to engineering colleges on the basis of school final examination results does not ensure the required level of academic competence. It is argued that students who have attained the required level of achievement should be admitted to engineering colleges even if they have not completed the school career. The rigidly disciplined curriculum at the undergraduate level does not promote excellence. It is suggested that there should be plenty of freedom of choice to select courses even at the undergraduate level. With proper guidance Indian students are capable of making right choice.

A41   HUSAIN S K: Professional education and professional institutions (In Seminar -- Role and problems of professional institutions in a developing economy, New Delhi, 1969. Papers for discussion. Delhi, the Institution of Engineers (India), 1969. 53-68).

The first task of professional engineering institutions is to devote their attention on technical education in the country. The professional institutions should conduct postgraduate examinations and active research instead of merely holding examinations for undergraduate courses. There should be close liaison between professional and technical institutions and the industry. There is need for adoption of international and national standards in professional education, production of technical literature, etc. The role of the institutions, specially in developing economies, in respect of professional education, training of technical and professional manpower, developing and utilizing research and inventive talents, encouraging consultancy service, etc. has been described. The results of a survey of a few professional institutions in various countries which was undertaken by the author to get information on the role and influence of professional institutions on the educational system have also been given.

A42   INDIA. PLANNING COMMISSION. EDUCATION DIVISION. Factual survey of junior technical schools. New Delhi, the Commission, 1964. 43p.

The objectives of establishing junior technical schools are for enabling the students who complete this course to join a polytechnic for higher technical education or to join an industry as apprentices. By 1960-61 there were 39 schools. However there were certain deficiencies and practical difficulties in the implementation of this programme. Hence, a questionnaire survey was conducted among the already existing 39 schools. The findings of the survey are as follows: 1) out of the 39 schools, 22 had an annual admission capacity of 41-60 students; 2) out of the 5451 students admitted,

the number of students who secured marks between 40% and 60% in the qualifying examinations for admission were 2795 (51%) and the number who scored less than 40% marks was 2048 (38%); 3) out of the 3221 students admitted only 1141 came out successful which means a wastage of 64.5%; 4) out of the 515 students who passed out of the junior technical schools, 250 (49%) joined industries while another 233 (45%) joined polytechnics; 5) there were considerable variations in the implementation of the scheme in the States with particular reference to the pattern of admissions, utilization of facilities, factors of wastage and the objectives of the courses vis-a-vis the trends of post-educational activities of the students.

A43   INDIA. SECONDARY EDUCATION COMMISSION (1952-53). Summary of recommendations, technical education (In its Report, Delhi, Manager of Publications, 1965. 186-7).

The following recommendations have been made: 1) technical schools should be started in large numbers either separately or as part of multi-purpose schools; 2) Central Technical Institutes should be established in larger cities which may cater for the needs of several local schools; 3) technical schools should be located in close proximity to appropriate industries and they should function in close cooperation with the industry concerned; 4) it should be obligatory on the part of industries to provide facilities to students for apprenticeship; 5) in the planning of technical education at all levels, representatives of commerce and industry should be closely associated with the educationists; 6) 'industrial education cess' should be levied on industries and the proceeds should be used for the furtherance of technical education; 7) the help of the All-India Council for Technical Education should be taken in evolving a suitable pattern of technical courses at the secondary stage.

A44   INSTITUTE OF APPLIED MANPOWER RESEARCH, NEW DELHI. First report on engineering manpower survey, coordination of university education in engineering with employment of graduate engineers. New Delhi, the Institute, 1965. ix, 41p. 14p. 95p. 26p. 17p. 22p. 8p.

The proposed recommendations are limited to the Indian Institutes of Technology and the Regional Engineering colleges. The main aim is to organize the supply, distribution and use of engineering manpower as a cooperatively planned process. The specific proposals with regard to ITIs concern the following aspects: 1) new types of courses at undergraduate level; 2) admission capacity; 3) eligibility for admission to the new higher technological degree courses; 4) machinery and procedure for admission; 5) objectives and duration of the new higher technological degree courses; 6) machinery and procedure for developing course contents; 7) composition of the training and placement committee; 8) settlement and allocation of practical

training quotas; 9) tuition fees, grants and stipends;
10) service undertaking; 11) review of current machinery and
procedure for recruitment and training of graduate engineers
by the various technological employment agencies; 12) open
opportunities at the ITIs for awards of B.Tec (Hons.).
Specific proposals have also been made with regard to Regional
Engineering Colleges on the same aspects as listed above.
The two IAMR papers – a) curricular pattern of university
education in engineering/technology, b) planned encadrement of
professional engineers and engineering technicians are
appended. Appendix III is the summary of opinions expressed
by eminent engineering educationists and professional engineers
regarding the recommendations.

A45   INSTITUTE OF APPLIED MANPOWER RESEARCH, NEW DELHI: Second
report on engineering manpower survey, demand and supply of
engineering manpower 1961–1975. New Delhi, the Institute, 1965.
iv, 92p.

The process of expansion of the intake capacity of engineering
educational institutions has reached a stage at which a dynamic
balance between supply and demand has been reached in the
quantitative sense. Now it is important to establish a dynamic
balance in the qualitative sense. To this end, this report
recommends that the intake capacity attained in the current year
should remain stable for a brief period of two years in the case
of engineering colleges and three years in the case of polytechnics.
Therefore the process of expansion of intake capacity should be
resumed under strict control subject to an annual ceiling of 1500
additional seats for engineering colleges and 3000 additional
seats for polytechnics. The purposes to be secured through reform
of the curricular pattern of engineering education and the nature
of the reforms required may be broadly described as consisting in
the progressive changeover from the existing standard pattern to the
cooperative pattern as well as to the extension pattern of engineering
education. It is recommended that practical steps should be
commenced without delay so that the process of planned changeover
may be put into full working order before the end of the Fourth Plan
period. The need for an organised system for the supply of
information about the employment of engineering manpower in the
country is underlined.

A46   MAHESHWARI S: Training in public administration in India.
Indian Journal of Public Administration 1971, 17(4), 617–33.

The genesis of training courses on techniques of administrative
improvement for the civil servants and the broad range of courses
available in the country have been discussed. The role played
by the Indian Institute of Public Administration has been detailed.

The following observations have been made: 1) the significance
of management, and hence training for it, in the execution of Plans
is realised by the Government; 2) there is a trend towards
diversification of themes in the training courses, which on close
scrutiny, is found to be less than genuine; 3) the training courses
are not always planned in a realistic way to:deal with the live
problems and issues currently faced by the administrators attending
it; 4) there is need for training for the top level civil servants
and the lowest level personnel of the bureaucracy (clerk,
inspector, ticket-collector); 5) participants for the training
are chosen by the sponsoring organizations not on the basis of
felt need but on the basis of who can be spared for the
training; 6) there is absence of a regular follow-up of the
trainees after the course; 7) training is not yet regarded by
the Government as a part of long-range planning of public
personnel; 8) when the Government wants to set up a training
school, it should tap and use the facilities already available
in the universities and other institutions; 9) universities and
colleges should provide for teaching of public administration in
a big way; 10) the legislators and ministers also need training
through seminars, conferences, etc.

A47   MATHUR S G: Can professional institutions effectively help
in-plant or in-field education (In Seminar – Role and problems
of professional institutions in a developing economy, New Delhi,
1969. Papers for discussion. Delhi, the Institution of Engineers
(India), 1969. 78-82).

The education given in engineering colleges and polytechnics is
very much divorced from the practical requirements of the
industrial employer. In-plant training is important in this
regard. It can be given in the factory or workshop itself.
In-plant training should aim at achieving: a) development of
practical skills in technical/process/management areas; b) develop-
ment of practically-oriented technical knowledge. In-plant
training should be properly coordinated by a single agency instead
of the present practice of several agencies   handling it. For
effective supervision of in-plant training, there should be a
coordinated agency with regional centres and having charte red
engineers   of a professional institution or well qualified
engineers. The Institution of Engineers (India) can enrol :
students who want to have their in-plant training properly ·
supervised. The training should preferably be controlled by
a National Training Coun il.

A48   NANDI S K: Reorientation of technical education. Indian
Chemical Engineer 1968, 10(1), 2, 3.

It is felt that there should be stress on research and reorganisation
of the system of technical education to stop import of plants and
technical know-how. The technical education needs a reorientation
on the following lines: 1) for the first four years of the course
factory training should be made compulsory for all engineering students
for six weeks during summer vacation. At the end of the first year,
students must work in a factory for one year and get a stipend of
Rs.350 p.m. Thus they will have 18 months' industrial experience
on completion of the course; 2) industries must provide facilities
like boarding and lodging for the training of the students by
deputing technical personnel for proper supervision of the trainees;
3) laboratory work should be planned in such a manner, that the
engineering students get the facility of constructing equipment;
4) research work for M.Tech. and Ph.D. degrees should be conducted at
the industries under the guidance of the university teachers;
5) national laboratories must devote their activities towards solving
industrial problems, for instance, construction of television sets,
computers etc; 6) Government should send a list of all the materials
imported in the country to every teaching or research centre;
7) after completing a project, research workers should get a certain
percentage of the profit that will accrue after industrial exploita-
tion of the project. For successful implementation of these objectives,
teachers must be given proper status and salary, the retirement age
must be increased, because it is their endeavour which contributes
towards the prosperity of the country.

A49   ew ideas for technical education / Editorial /. Hindu
25 April 1972, p. 6, col. 2. 400 words.

The new proposals made by Tamil Nadu Technical Education Board
are as follows: 1) introducing new subjects such as marine
engineering, nautical architecture, nuclear engineering and
design and automotive engineering in Guindy Engineering College;
2) installing a testing centre for automobile components in
Madras and a testing laboratory for all forms of instruments at
Coimbatore for giving students a practical orientation;
3) establishing a technological university with head quarters at
Guindy College and affiliating six other institutions in the
State; 4) introducing aeronautics, plastic and rubber technology
and dairy engineering, prosthetics, pharmacy, data processing and
diesel traction subjects in polytechnics; 5) conducting sandwich
courses in textile technology; 6) setting up a board consisting of
industrialists and educationists to plan new courses and to study
the problems of training engineers for specific careers. The
Central Government is encouraging reorientation of technical education
and is financing the Institutes of Technology and the Regional
Colleges of Engineering. As the States have realised the difficulty
of financing higher education, the Centre should estimate numbers
and types of engineering personnel needed for the planned develop-
ment of the country and promote technical education.

A50   PENDSE S G: Technical training (In Adaval S B Ed.
Third Indian Year book of education - educational research.
Delhi, National Council of Educational Research and Training,
1968. 259-65).

The present patterns of technical training existing in the
country have been described. They are: 1) the Industrial
Training Institutes (ITI) which provide training in 29 engineering
and 22 non-engineering trades; 2) the Central Training Institutes
which train craft teachers needed for ITIs; 3) the scheme of
apprenticeship training under the Apprentices Act 1961;
4) the scheme of part-time classes for industrial workers organised
in selected institutes and factory premises; 5) the National
Council for Training in Vocational Trades which advises the Central
Government on training policy, prescription of syllabi, duration
of courses, methods of training etc.; 6) training programmes for supervi-
sory personnel in industry taken up by the Director General
of Employment and Training in collaboration with the National
Productivity Council and the Chief Advisor of Factories. The
future development of the training programmes, it is suggested, have
to be considered under three aspects: 1) consolidation mainly to be
accomplished by improving the quality of instructional staff at all
levels; 2) expansion by increasing the training capacity of existing
ITIs or by opening new ones; 3) diversification of the existing
training programmes. There is need for research in the development
and use of teaching aids, teaching methods and techniques, and
construction of reliable selection tests.

A51   PHILIP J: General management executive development programme.
ISTD Review 1971, 1(6), 7-10.

The short range objective of management development programme is
to raise the level of executive performance on the present job,
and the long range objective deals with the preparation of those
with recognised potential for future advancement. While many
incompany programmes emphasise on the short term objective, most
of the outside programmes reverse the order of emphasis. A good
executive development programme should aim at developing in the
participant the managerial skills and provide a generalist's view
of things. Decision making, human relations, communication and
community relations are the skills of vital importance. He should
also be equipped to face the challenges and dangers of
tomorrow - increasing competition, galloping technology; systemisa-
tion, computer application and social, economic and political
changes. Several problems that weaken the effectiveness of an
executive-programme are: poor planning, poor programme design,
poor techniques, poor selection, unhealthy environment, unconcerned
top management, inadequate trainers. Although formal development
plays a very important role, it is subordinate to that of on-the-job
development.

A52   RAI B K: Communication between industry, the professional
        institution and the teaching institution. (In Seminar — Role
        and problems of professional institutions in a developing
        economy, New Delhi, 1969. Papers for discussion. Delhi, the
        Institution of Engineers (India), 1969. 83-8).

        In the context of the unbalanced growth of technical institutions,
        problems of industry, limitations of resources, etc. there is
        urgent need in developing countries for a reappraisal of the
        objectives of professional and technical institutions, and for
        closer collaboration between professional institutions, universities
        and the industry. The efforts of professional institutions generally
        end at holding seminars and symposia which are highly academic and
        unrelated to the topics which deserve deep attention for society's
        benefit. The following suggestions are given for professional
        institutions: 1) associating themselves with the rewriting of
        textbooks at school and college levels to encourage interest in
        engineering sciences; 2) organizing popular hobbies such as radio
        making, model making etc.; instituting prizes for the meritorious
        students at various levels of education; 3) promoting scientific and
        technical popular magazines; 4) providing guidance to students and
        engineers; 5) arranging for students, conducted visits to factories;
        6) playing a liaison role in bringing together industry and the
        research talent in engineering colleges to make the research efforts
        of engineering institutions more pragmatic and useful; 7) providing
        technical and recruitment consultancy to industry.

A53   ROY T K: Chemical engineering education and role of the
        Institution of Chemical Engineers (In Seminar — Role and
        problems of professional institutions in a developing economy,
        New Delhi, 1969. Papers for discussion. Delhi, the Institution
        of Engineers (India), 1969. 101-6).

        Industrial leaders opine that academic institutions have become
        so preoccupied with science-oriented research and teaching that
        they are not training engineers for practice. However, some
        believe that such a training in fundamentals prepares the engineers
        to cope with problems which the industry will face one or two
        decades later. But the engineering departments of universities
        cannot be indifferent to the real needs of industry. There has to
        be a blending between science-oriented training and engineering-
        practice-oriented training. Professional engineering societies can
        help a great deal in promoting the mutual interests of universities
        and industrial organizations by: 1) creating opportunities for
        members of engineering faculty to take up industrial   consultancy;
        2) sending students to practise schools in industrial establishments;
        3) replacing routine laboratory or workshop experiments as much as
        possible by group project work; 4) professional societies themselves
        organizing design competitions among the university departments.

A54   RUDRABASAVARAJ M N: Executive development system. ISTD
Review 1971, 1(6), 11-15. 12 ref. .

The several points that are relevant to the need and the
problem of executive development have been mentioned. Some of
the major objectives of management development are: 1) to
assure managers in required numbers and with the required
skills to meet the anticipated future needs of business;
2) to encourage managers to grow as persons and in their
capacity to handle greater responsibility; 3) to improve their
performance at all levels in the jobs they now hold; 4) to
sustain good performance throughout their careers. The
executive development programme is not merely a programme. It
is a system with closely interrelated phases of activities
involving three sets of characters – the company, the
executive and the school. The roles of these three characters
have been discussed.

A55   SEMINAR ON COLLABORATION BETWEEN INDUSTRIES AND TECHNICAL
INSTITUTIONS, FIRST, BOMBAY, MARCH 1964: Vol. 1. Proceedings,
Vol. 2. Papers presented. New Delhi, Institute of Applied
Manpower Research, 1964. ii, 107p; iii, 93p.

The Institute of Applied Manpower Research undertook in coopera-
tion with the All-India Council of Technical Education to
convene a series of seminars of which the first was held at
Bombay in March 1964. The results of the seminar were helpful
in finalising and implementing the first scheme of collabora-
tion between the public sector steel industry and the engineering
educational institutions. The attention was directed mainly to
engineering education at degree level. In all, 22 papers were
presented. The subject matter of the various papers could be
grouped under the following headings: 1) training of engineers
for industry; 2) exchange of technical personnel between industrial
organizations and technical institutions; 3) orientation of
curriculum of instruction for improved utilization of engineering
manpower; 4) organization of engineering training in other countries;
5) selection and placement of engineering personnel; 6) training of
technicians. Volume 2 consists of all the papers presented.

A56   SEMINAR ON COLLABORATION BETWEEN INDUSTRIES AND TECHNICAL
INSTITUTIONS, SECOND, MADRAS, JUNE 1964: Vol 1. – Summary record
of proceedings, Vol. 2 – Verbatim record of proceedings. ·
New Delhi, Institute of Applied Manpower Research, 1964/1965.
iii, 40p., iii, 117p.

The Institute of Applied Manpower Research with the cooperation
of All-India Council for Technical Education undertook to convene
a series of seminars, of which this one was the second, to bring

about a closer coordination between engineering education and employment of engineering manpower. The attention was focussed on education at diploma level. Some of the important recommendations are as follows: 1) sandwich scheme is the best method of training technicians at diploma level; more polytechnics should be created near a concentration of industry; 2) there is need to start a two-year matric craftsman course; the junior technical schools which have come up in the South should provide candidates for the polytechnic courses; 3) it may be useful to continue the existing three-year course with two years of apprenticeship and rearrange the same as 'Five Year Course'; the training facilities should be properly supervised by supervisors in the industry and a placement officer in each educational institution; 4) the existing special emergency 'two-year course' may be dropped; 5) with regard to the suggestion of bifurcated degree course, it is felt that while attempts are made to develop electives in due course which may cater to requirements of a large group of industries, this step has to be taken in stages, after each group of industries spelt out the number and specific fields of technology in which orientation was desired. The other recommendations relate to a) introduction of part-time evening course, b) problem f staffing, c) revision in the new model syllabus, d) advancement of talented diploma holders, e) four-year integrated course, etc.

A57   SHARMA A: Available technical potential at the delta level. Indian Educational Review 1971, 6(2), 182-95.

A study was undertaken to assess the supply of technical potential at the delta level (class VIII) in the boys' higher secondary schools of Delhi. Other aims were to study the effect of urban and rural environments on the development of technical potential, to determine the loss of this potential through failure to secure technical education and to diagnose the causes of this loss with a view to remedying them. A battery of mechanical aptitude tests consisting of the i) mechanical knowledge test, ii) mechanical comprehension test, iii) space relations test, iv) form relations test, and v) mechanical adaptability test, was used for conducting the survey. The sample consisted of 1093 students of whom 934 belonged to urban area and 159 to rural area. A major finding is that only 14.55% students are potential material for higher technical education and subsequent technical jobs. The rural contribution is 1.10% in comparison to the urban contribution of 13.45%. It is suggested that, among other things, simple machines, their principles and functions may be taught at the delta level.

A58   SINGH R P: Professional education in ancient and medieval
India. Delhi, Arya Book Depot, 1970. iii, 146p.

The book is divided into two sections, the first dealing with
the ancient period and the second with the medieval period.   In
both the periods, professional education such as for priesthood,
teaching, medicine, law, architecture and engineering, and
vocational education for trades and crafts have been dealt with.

A59   SRIVASTAVA S: Interdisciplinary approach in professional
education. NIE Journal 1971, 6(2), 1-5.

The need for an integral approach in professional education
has been realized on learning that 1) a better educated man
can do any job better than the less educated one; 2) no
educational system can function in a vacuum; 3) the knowledge
explosion has changed the past-oriented systems into future -
oriented systems; 4) professional education is an applied
field.   The following four-phased professional training
programme has been suggested: 1) a good grounding in general
education; 2) a deep study of the Sciences - both Social and
Natural as Physics, Chemistry, Biology, Neurology, etc., as the
case may be; 3) a   study as to how this knowledge of the
Arts and Sciences is applicable to one's profession; 4) a good
grounding in the history and development of his own professional
field and in group dynamics and psychology of motivation which
will prepare him to take the leadership role upon .himself.