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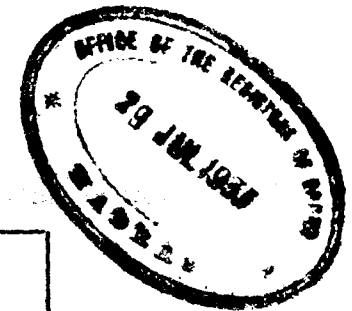
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THE INDIAN EDUCATOR

Devoted to Topics of Educational and Literary Interest
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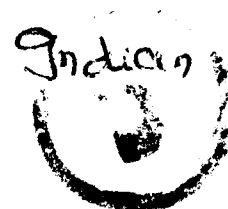
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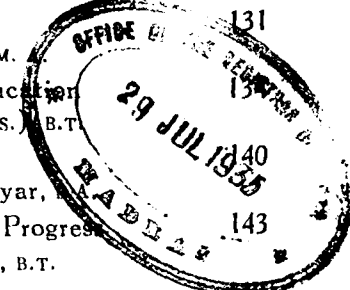
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MR. V. ARAVAMUDA IYENGAR, B.A., L.T.,—Managing Editor.

Vol. XI.

MADURA: APRIL, 1935.

No. 4.

Education in India

Modern Period.

BY MR. K. S. VAKIL, M. Ed., M.R.S.T., F.R.G.S., I.E.S. (RETD.)

(Continued from last issue.)

As regards secondary school courses, they noted that the attempts made in pursuance of the recommendations of the Education Commission to introduce alternative courses, analogous to what is known in England as a "modern side", in order to meet the needs of those boys who were destined for industrial or commercial pursuits, had not met with success. The purely literary course, qualifying as it did both for the University and for Government employ, continued to attract the great majority of pupils, and more practical studies were but little in request. The Government of India, however, would not abandon their aim. In the present stage of social and industrial development it appeared to them essential to promote diversified types of secondary education corresponding with the varying needs of practical life.*

As regards languages in schools, they observed: "English has no place, and should have no place, in the scheme of primary education. It has never been part of the policy of Government to substitute the English language for the vernacular dialects of the country. It is true that the commercial value which a knowledge of English commands, and the fact that the final examinations of the high schools are conducted in English, cause the secondary schools to be subjected to a certain pressure to introduce prematurely both the teaching of English as a language and its use as a medium of instruction; while for the same reasons the study of the vernacular in these schools is liable to be thrust into the back-ground. This tendency, however, requires to be corrected in the interests of sound education. As a general rule, a child should not

* Ibid., para: 23

be allowed to learn English as a language until he has made some progress in the primary stages of instruction and has received a thorough grounding in his mother tongue. It is equally important that when the teaching of English has begun, it should not be prematurely employed as the medium of instruction in other subjects. Much of the practice, too prevalent in Indian schools, of committing to memory ill-understood phrases and extracts from text-books or notes, may be traced to the scholars having received instruction through the medium of English before their knowledge of the language was sufficient to enable them to understand what they were taught. The line of division between the use of vernacular and of English as a medium of instruction should, broadly speaking, be drawn at a minimum age of 13. No scholar in a secondary school should, even then, be allowed to abandon the study of his vernacular, which should be kept up until the end of the school course."*

As regards university education, they observed: "In founding the universities of Calcutta, Bombay and Madras, the Government of India of that day took as their model the type of institution then believed to be best suited to the educational conditions of India, that is to say, the examining University of London. Since then the best educational thought of Europe has shown an increasing tendency to realise the inevitable shortcomings of a purely examining University, and the London University itself has taken steps to enlarge the scope of its operations by assuming tutorial functions. The model, in fact, has parted with its most characteristic features, and has set an example of expansion which cannot fail to react upon the corresponding institutions in India. Meanwhile the Indian experience of the last fifty years has proved that a system which provides merely for examining students in those subjects to which their aptitude directs them and does not at the same time compel them to study those subjects systematically under first-rate instruction, tends inevitably to accentuate certain characteristic defects of the Indian intellect:- the development of the memory out of all proportion to the other faculties of the mind, the incapacity to observe and appreciate facts, and the taste for metaphysical and technical distinctions. Holding it to be the duty of a Government which has made itself responsible for education in India to do everything in its power to correct these shortcomings.....the Government of India have come to the conclusion that certain reforms in the constitution and management of the universities are necessary. They propose that the Senates, which from various causes have grown to an unwieldy size, should be reconstituted on a

* "Ibid" para : 26

working basis and that the position and the powers of the syndicates should be defined and regulated. Opportunity will be taken to give a statutory recognition to the privilege of electing members of the Senate which, since 1891, has been conceded by way of experiment to the graduates of the three older Universities. A limit will be placed upon the number of ex-officio fellows; and a reduction will be made in the maximum numbers of the Senates so as to restrict nominations to those bodies to persons well qualified to discharge their responsible duties. Powers will be conferred upon all the universities to make suitable provision for university teaching. The teaching given in colleges will, instead of being tested mainly or wholly by external examinations, be liable to systematic inspection under the authority of the Syndicate; and the duty of the university not only to demand a high educational standard from any new college that desires to be recommended to Government for affiliation but also gradually to enforce a similar standard in colleges already affiliated will be carefully defined. A college applying for affiliation will be required to satisfy the University and the Government that it is under the management of a regularly constituted Governing body; that its teaching staff is adequate for the courses of instruction undertaken; that the buildings and equipment are suitable, and that due provision is made for the residence of some of the teaching staff; that the financial resources of the college are sufficient; that its affiliation, having regard to the provision for students made by neighbouring colleges, will not be injurious to the interests of education or discipline; and that the fees to be paid by the students will not involve competition injurious to the interests of education with any existing college in the neighbourhood. Colleges already affiliated will be inspected regularly and will be required to show that they continue to comply with the conditions on which the privilege of affiliation is granted."*

As regards training of teachers, they thought that the time had come to endeavour to create a supply of trained teachers which shall be adequate to the needs of the secondary schools throughout the country. Not only must the supply be increased, but the quality of the training given must be improved.

The principles above indicated regarding university education were incorporated in the Indian Universities Act of 1904; and soon after the passing of it, the Universities of Calcutta, Bombay, Madras, Punjab, and Allahabad were reconstituted, regulations regarding the affiliation of colleges instituted, and teaching functions were undertaken by the universities.

* "Indian Educational Policy", paras: 28

The introduction of the Universities Bill gave rise to much heated public controversy, particularly the clauses in it relating to the reconstitution of the Syndicates and the Senates, the regular periodical inspection of affiliated colleges, and the regulations for affiliation. It was openly alleged that Government intended, by these measures, to officialise the universities and to curtail the existing facilities for higher education.

The Calcutta University Commission of 1917-19 which fully investigated the operation of the Universities Act of 1904 observed that "perhaps the main result of the Act was to make the control and supervision of the Government over university policy more direct and effective than it had hitherto been"*. It must be admitted that the stricter rules of affiliation and the regular inspection of affiliated colleges have largely justified themselves by the solid improvement they have caused in the condition of the affiliated colleges.

The next noteworthy event in the history of Indian Education was the Visit of Their Imperial Majesties the King Emperor George V and Queen-Empress Mary to India for Coronation at Delhi in 1911, when opportunity was taken to make a suitable pronouncement on the subject of Indian Education. Replying to the address of the Calcutta University on January 6th, 1912, His Majesty declared:—

"It is my wish that there may spread over the land a network of schools and colleges, from which will go forth loyal and manly and useful citizens, able to hold their own in industries and agriculture and all the vocations in life. And it is my wish, too, that the homes of my Indian subjects may be brightened and their labour sweetened by the spread of knowledge with all that follows in its train—a higher level of thought, of comfort, and of health. It is through education that my wish will be fulfilled, and the cause of education in India will ever be very close to my heart."*

This announcement, coupled with the announcement at the Coronation Durbar of an annual grant of fifty lakhs of rupees for popular education, gave great impetus to primary education all over India.

The educational position was again reviewed during the regime of Lord Hardinge in 1913. In the Resolution then issued, the Government placed in the forefront of their policy the formation of the character of the scholars and undergraduates under tuition. Among other cardinal principles of policy they included the following:—

* Report of the Calcutta University Commission, Vol. I, p. 68.

* "Indian Educational Policy," 1913-p. 11.

(1) The steady raising of the standard of existing institutions in preference to the increasing of their number;

(2) The steady diversion of the scheme of primary and secondary education for the average scholar to more practical ends; e. g., by means of manual training, gardening, outdoor observation, practical teaching of geography, school excursions, organised tours of instruction etc;

(3) Provision for higher studies and research in India, so that Indian students might have every facility for higher work without having to go abroad.†

The education of girls, the Resolution stated, should be practical with reference to the position which they would fill in social life, and it should not seek to imitate the education suitable for boys, nor should it be dominated by examinations.*

As regards secondary education, it reiterated the policy of Government to rely as far as possible on private enterprise and observed that this policy was "dictated not by any belief in the inherent superiority of private over State management but by preference for an established system and above all, by the necessity of concentrating the direct energies of the State and the bulk of its available resources upon the improvement and expansion of elementary education."

It recommended the introduction of a secondary school course complete in itself and of a modern and practical character, freed from the domination of the matriculation, as suggested by the Indian Education Commission of 1882.†

As regards University Education, the Resolution ran as follows:—"It is important to distinguish clearly, on the one hand, the federal university, in the strict sense, in which several colleges of approximately equal standing, separated by no excessive distance or marked local individuality are grouped together as a university, and, on the other hand, the affiliating university of the Indian type, which, in its inception, was merely an examining body and, although limited as regards the area of its operations by the Act of 1904, has not been able to insist upon an identity of standard in the various institutions conjoined to it. The former of these types has in the past enjoyed some popularity in the United Kingdom, but after experience it has been largely abandoned there

† Ibid., paras: 4 and 8.

* Ibid., para: 17.

† Ibid., para: 20 and 24.

and the constituent colleges which were grouped together have, for the most part, become separate universities, without power of combination with other institutions at a distance. At present there are only five Indian Universities for 185 arts and professional colleges in British India besides several institutions in native states. The day is probably far distant when India will be able to dispense altogether with the affiliating university. But it is necessary to restrict the area over which the affiliating universities have control by securing in the first instance a separate university for each of the leading provinces in India, and secondly, to create new local teaching and residential universities within each of the provinces in harmony with the best modern opinion as to the right road to educational efficiency. The Government of India have decided to found a teaching residential university at Dacca, and they are prepared to sanction under certain conditions the establishment of similar universities at Aligarh and Benares and elsewhere as occasion may demand. They also contemplate the establishment of universities at Rangoon, Patna, and Nagpur. It may be possible, hereafter, to sanction the conversion into local teaching universities, with power to confer degrees upon their own students, of those colleges which have shown the capacity to attract students from a distance and have attained the requisite standard of efficiency. Only by experiment will it be found out what type or types of Universities are best suited to the different parts of India." *

Teaching and residential universities were accordingly established soon afterwards at Benares and Patna.

* Ibid., para: 45.

(To be Concluded.)

Some Aspects of University Education in India

BY MR. V. P. NATARAJAN, B.A. (HONS.), B.T.

(Continued from the last issue.)

It is impossible to effect satisfactory improvement in university work until the student on admission to the college is better trained in methods of study and logical thinking and has a sounder foundation of knowledge. Radical improvement in the secondary system is not possible while the present dual control of the Government and the Universities remained. Effective control and work in middle schools and primary schools is extremely complicated. Any scheme to remedy the situation effectively must (1) definitely link up primary, secondary and university education, (2) prevent unnecessary overlapping in the different stages, (3) allow of effective control and development within each stage and (4) allow the most economic use of whatever money is available from public and private funds.

Sir P. S. Sivaswami Aiyar in his recent address at the Lucknow University Convocation, declared, "I cannot help feeling that the average graduate falls far short of the ideal I have set forth." It may be that the acquisition of useful information and general knowledge is a process to be largely gone through in the secondary school stage but it cannot be said that the University has no responsibility in the matter, or that it is creditable to a University to set its hall mark upon graduates who are devoid of any information or knowledge upon matters of general interest. Sir P. S. Sivaswami Aiyar cites a curious instance of the display of woeful ignorance of elementary geography by a candidate for the I. C. S. The candidate was asked what the shortest route was from Delhi to Australia and his reply was that one should go from Delhi to London, from London to St. Petersburg, and thence to Australia! Several candidates were unable to name even the provinces of India! A university education which has failed to kindle among its alumni a desire for wide reading and a thirst for knowledge has so far failed of its purpose. What the causes of this state of things may be and what steps should be taken to remedy the defects are matters for careful enquiring by the universities. Lord Eustace Percy expressed the opinion that the university students did not know how to read for a degree but to be lectured into one. That is an unenviable plight, and has to be remedied soon.

The unceasing endeavour and great wealth devoted to primary education during the past years have not contributed to even the rudimentary literacy of the ryots of India. The children going out of elementary schools are not better prepared than before to follow their father's calling; their smattering of education does not awaken in them any keen sense to keep their villages clean or their surroundings sanitary; it does not help them even to read, write or count; for they lapse into illiteracy very soon after they leave the school, and at adolescence their marks or finger prints have to be taken as evidence of their execution of legal documents. According to the Royal Commission on Indian Agriculture "when calculations are made on the basis of information supplied by the census reports, it appears that the total number of pupils in recognized schools who pass through Class IV is a little more than the normal loss due to death among literate males of twenty years of age and over." The call is urgent for devising a scheme which will prevent the phenomenal wastage in the present system of primary education. If opportunities and facilities be made available for the employment of cultured young men in the work of rural education and reconstruction, Primary Education is bound to produce far more satisfactory results than it does in the present situation. The scarcity of cultured man power with real and abiding interest in the rehabilitation of the ryot is often pleaded as the true explanation for the disconcerting failure of all our efforts to promote the education of the teeming millions. The attitude of the graduates of the universities who comport themselves as if they were of another caste. between whom and their parents there is a wide gulf in thought and ambition, should change for the better, and the day when the graduates live contentedly with the villagers, working among and for the rural masses, will see the revival of a prosperous rural India and a better Primary Education in India. This is an age of universal literacy. Under modern economic organisation, literacy is the backbone of industrial efficiency, and this is denied to India. Lala Lajpat, Rai had observed, "Even the masses have a sufficient background of character and intelligence. They are quick to understand and ready to assimilate. But this is an era of scientific knowledge. For that, literacy and formal instruction are necessary steps. In that India is lagging behind other nations."

It has been the declared policy of the Government of India to utilise private efforts to the full extent in the extension of education in general and of Secondary education in particular. In fact the Government has been entirely apathetic to the interests of the people in the matter of education and has done very little of its own accord. In spite

of the abject poverty of the middle classes and the adverse conditions present, they have "always educated their children". The British policy in India in regard to secondary education has been trenchantly characterised as "uncharitable in the extreme and unsuited to the moral code of any civilized government." Taking into account the poverty of India, the proportionately high expenditure on education from private sources, amounting to more than two-thirds of the total, is certainly creditable for India. If Great Britain had followed the same policy as the United States did and has been doing in the Philippines, no one would have ventured to class India as a "barbarous and uncivilized nation", an epithet for which Sri William Archer is responsible. Increasing and a more carefully planned and benign participation on the part of the Government is necessary for a rapid, well developed and co-ordinated progress of secondary education in India.

A problem evoking considerable interest today is the introduction of vocational and technological courses in the Indian Universities. There has been a persistent demand from many quarters in recent years that our universities should institute faculties of technology with a view to developing the immense natural resources of the country and assisting the growth of her industries. While it may be readily conceded at the present day that technological studies should find a place in our universities, we have to be careful to see that in our new-born enthusiasm for these studies we do not forget certain prominent considerations viz. that the training in technology should not be inferior to that in other branches of university education; the student should have a wide foundation of general, scientific and professional knowledge as a basis for the more advanced study of his subject and technical ability to use that knowledge; in view of the great cost of equipment necessary for technological instruction, the universities should observe a due proportion and economy concentrating on such studies as are particularly suited to local or other conditions and limiting the number of students for training; there ought to be amiable co-operation between the technological departments of the universities and the prominent industrial concerns and the local and central Governments, and lastly the university technological classes should have as feeders a net-work of technical and trade schools, to afford proper training for the large number of workers in the factories. It was only after an elaborate enquiry in the course of which the evidence of many educationists, industrialists was taken, that the Calcutta University Commission recommended that as in the West, the universities in India should include applied science and technology in their course and recognize their systematic and practical study by the grant of diplomas and degrees. "The training of men for responsible

positions in scientific industry is a service which the universities along with other institutions may with advantage render to the community. Moreover, the inclusion of practical scientific studies in the curriculum of the institutions which are recognised as giving the highest forms of training for various careers has a beneficial effect upon the educational outlook of the whole people." It is very important to remember that the foundation for such training should be well and truly laid, and the Commission insisted that there should be a great improvement in the high schools and intermediate colleges in respect of teaching and equipment and the provision of general instruction in scientific training in all intermediate colleges before such far-reaching developments took place. The Commission insisted that for the best results to be secured, men combining scientific knowledge with practical experience and with a gift of teaching should be secured, and these men are not always easy to find. The Commission further stated, "The University will require in its technological departments mechanical equipment sufficient to give the students a good idea of processes of manufacture; and the heads of the technological departments must stand in such friendly relations to business firms as will enable them to secure for the students opportunities of experience in works. These relations with business firms can only be built up slowly as confidence is secured. We are, therefore, of opinion that it will be well for the university to develop its new departments of applied science and technology with deliberation and caution, and to exercise such care in the admission of students to these departments, and in the appraisal of their practical aptitude, as will guard against an overproduction of young graduates in these subjects and will prevent such an outstripping of the demand for them (or failure to send out men who will satisfy their employers) as would lead to disappointment, and to reaction against university methods of technological training." The Sadler Commission urged the desirability, already mentioned, of there being division of labour between the different universities with regard to technological training and research. The question is one deserving deep and calm deliberation, before any hasty decision is given effect to. Dr. Urquhart has struck a note of warning when he observed, "Your change over to technical education would be an excellent panacea if it were a case of posts waiting until men are trained to fill them. Those turned out of technical training schools find the greatest difficulty in securing employment. There are many trained to the utmost pitch and efficiency in the West who can find nothing to do on their return to this country."

(To be Continued.)

Co-education

BY MR. DHIRENDRA NATH SINHA, M. A.

One important problem that is, at present, agitating the minds of the educated public, is how best to impart suitable education to boys and girls of school-going age. Will there be separate arrangements for the teaching of both or will they receive education within the same walls and under the same roof?

Some argue that it is unnecessary to waste money on separate arrangements. If provision be made for educating boys and girls separately, buildings, teachers managements etc., must be uselessly duplicated. There will be additional cost and trouble no doubt but no additional gain. On the other hand, if boys and girls are taught together, a spirit of comradeship will eventually spring up and this will enable them to work in closer co-operation when they will take up their rightful places as grown-up men and women. There are many common spheres of activities in life; if the two sexes shut themselves up in water-tight compartments and go on working, each in utter ignorance of what the other is doing, there will be needless over-lapping, and friction and conflict in many cases. Why should society suffer botheration, especially when the difficulty is easily obviated by helping the growth of mutual trust and fellowship early in the lives of men and women? Such growth can be best provided for in the system of co-education i. e. to say, in the system which makes no distinction between sexes while arranging for the education of boys and girls.

Critics are not wanting who allege that co-education is fruitful of many mischiefs. Boys and girls while placed side by side will prematurely become sex-conscious. This will make the young learners prone to sensuality and will also create a perverted sense of morality. The result will be many cases of sex-aberrations and consequent social unrest.

Moreover, the capacities of boys and girls are different; they require different treatment. If the same rate of progress be laid down for both and if the syllabuses and curricula be settled accordingly, the consequence will be nothing short of a disaster. In some cases boys will move forward swiftly dragging the girls tied to their chariot-wheels; in other cases, girls will act as checks on boys' progress, thus causing unnecessary delay and disappointment. In the first instance, there will be unseemly acceleration and in the second instance, there will be tiresome retrogression.

Finally, the requirements of the two sexes are not the same. Boys will hardly be benefited by a training in needle-work and cookery and girls will derive no appreciable advantage from all those arts and sciences that particularly require manly strength. Hence co-education is not at all worth the money spent upon it and the energy bestowed upon it. It is productive of no good but on the other hand, it creates endless troubles and perplexities. Though it seems to be a short-cut, it is not really so. It will lead to an intricate labyrinth and far from offering an easy solution to a vexed problem, it will make it still more complex.

Let us try to analyse the arguments advanced against co-education. The closer contact established between boys and girls in their class-rooms, play-fields etc., is viewed with dread by many. So far as we think, there is no reasonable ground for any such apprehension. It is distance that lends enchantment to view. A girl is an object of temptation,—she exercises fascination only because she is sedulously kept out of the way of a boy. Take her off from the position of seclusion and loofness and bring her into close touch with a boy of her age, she is no longer a rare commodity to the boy but on the contrary, is something quite commonplace not at all worth special,—not to speak of amorous,—attention. Once bring her down from the upland of the inaccessible and she ceases to be a winsome temptress that she is generally believed to be. We do not say that not a single boy will be guilty of a moral slip in the presence of the girl-students. The failings of human nature are very stern facts: they cannot be altogether ignored. The proper remedy for them is the maintenance of strict discipline in and out of the class-room. Any indecent suggestion made by words or signs,—any awkward situation created by the wilful mis-behaviour of boys and girls, must be taken serious notice of quite promptly and the deterrent punishment meted out to the offenders, will serve as a warning to others.

The argument relating to the different rates of progress should not be levelled against co-education only. If it is worth any serious consideration, it may as well be put forward against any system that provides for the joint-education of boys alone, having different degrees of aptitudes. As it is practically impossible and unusually expensive to form groups of boys in consideration of their varying abilities and make a separate arrangement for the education of each group, this argument cannot, with any justification, be brought against co-education only.

Some again make a fetish of requirements and assail co-education even on this ground. Their attitude is certainly unreasonable. Special arrangements have got to be made with an eye to special requirements not only for boys and girls but also for boys alone having different tastes and outlooks. A boy with a decided leaning to literature will be a miserable failure, if particularly trained in science; one having a special liking for medicine, will never be able to give a good account of oneself if compelled to go in for a degree in theology. So girls as a class may be given special training in domestic science, cookery, needle work etc. in view of their special necessities. This is no argument against their being taught along with boys in all subjects of common interest. If the two sexes could have kept aloof from each other in life, their education too would have been profitably separate. As this is not so, it will be a serious blunder not to allow boys and girls an opportunity for daily contact. If any such opportunity be offered, it will help the free exchange of ideas, the growth of a sense of inter-dependence and the development of a sympathetic attitude, each sex trying to appreciate the difficulties of the other with a view to removing them by hearty co-operation. It is a mistake to think that the close association will stimulate the sex-instinct and will make boys and girls more erotic than they otherwise would have been. On the other hand, the unrestrained access of boys and girls to societies of each other, will go a great length in overcoming shyness and nervousness which are great stumbling blocks in the way of the success in life. To speak the truth, the sex-obsessed are generally those who, in their secluded spheres, do not come in contact with the members of the opposite sex. Judged from all points of view, co-education is well suited to boys and girls of every civilized country.

If any university has prevented co-education in the period of adolescence out of fear from sex-troubles it must have taken a very retrograde step. No period is so helpful to the growth of mutual understanding and good-will as the much-maligned period of adolescence. At this time, heart remains tender and is susceptible to various influences. Best advantage should be taken of this situation so as to turn malleable boys and girls,—the young hopefuls of a country,—into so many selfless and worthy citizens. If, in this period, boys and girls are allowed complete freedom in social and intellectual communication, one sex will certainly be tolerant of the other, and will ungrudgingly concede to the other, its legitimate rights and privileges, and the barrier between sex and sex that has unnecessarily divided human life into two exclusive groups, will certainly crumble down, never to raise its ugly head again.

Mental Testing & Statistics in Education

BY MR. B. B. SAMANT, B.A. (HONS.), B.T.

A LIST OF BINET'S TESTS

Below is given a list* of names of the items as arranged in Binet's 1911 revision:—

Age 3. (1) Points to nose, eyes and mouth (2) Repeats two digits (3) Enumerates objects in a picture (4) Gives family name (5) Repeats a sentence of six syllables.

Age 4. (1) Gives his sex (2) Names key, knife and a penny (3) Repeats three digits (4) Compares two lines.

Age 5. (1) Compares two weights (2) Copies a square (3) Repeats a sentence of ten syllables (4) Counts four pennies (5) Unites the halves of a divided rectangle.

Age 6. 1—(1) Distinguishes between morning and afternoon (2) Defines familiar words in terms of use (3) Copies a diamond (4) Counts thirteen pennies. (5) Distinguishes pictures of ugly and pretty faces.

Age 7. (1) Shows right hand and left ear. (2) Describes a picture. (3) Executes three commissions simultaneously. (4) Counts the value of six sous, three of which are double. (5) Names four cardinal colours.

Age 8:—(1) Compares two objects from memory (2) Counts from 20 to 0 (3) Notes omissions from pictures (4) Gives day and date (5) Repeats five digits.

Age 9:—(1) Gives change from 20 sous (2) Defines familiar words in terms superior to use (3) Recognises all the pieces of money (4) Names the months of the year in order (5) Answers easy 'comprehension questions'.

Age 10 :—(1) Arranges five blocks in order of weight (2) Copies drawing from memory (3) Criticizes absurd statements. (4) Answers difficult 'comprehension questions' (5) Uses three given words in not more than two sentences.

Age 12 :—(1) Resists suggestion (2) Composes one sentence containing three given words (3) Names sixty words in three minutes

(4) Defines certain abstract words (5) Discovers the sense of a disarranged sentence.

Age 15 :—(1) Repeats seven digits (2) Finds three rhymes for a given word (3) Repeats a sentence of 26 syllables (4) Interprets pictures (5) Interprets given facts.

Adult:— (1) Solves the paper cutting tests (2) Rearranges a triangle in imagination (3) Gives differences between pairs of abstract terms (4) Gives three differences between a president and a king (5) Gives the main thought of a selection which he has heard or read.

This list gives but little idea of the nature, meaning and method of conducting the actual tests. A copy given below of the part of the translation of Binet's tests made by Mr. Cyril Burt in consultation with Dr. Simon, will give some idea about the method of conducting the test:*

"Repeating numbers.

Instructions—I am going to say some numbers, will you listen and say them after me?

(for use only after failure in first set)

5	8	9	
37	64	72	(age 3)
714	286	539	(age 4)
3681	5749	8526	(age 5)
52947	63852	97318	(age 6)
256634	573916	495827	(age 9)
9647518	4829553	59281336	(age 11)

'Note:— Rate should be two per second; utterance should be without rhythm, emphasis or inflection. Do not tell the child if he is wrong. Do not repeat the series. Merely give him another chance with another series. Failure owing to interruption does not count. While uttering the numbers or syllables, hold up the hand or finger to prevent the child starting to repeat before entire phrase or list has been completed. Drop the hand, as a signal to the child that you have finished and he is to repeat.

"*Evaluation:—*One correct repetition out of three trials counts as success. Note, therefore, the largest number the child can repeat. The age at which series of different lengths can be repeated is given in the last column above. The repetition of figures in their natural order, e.g. 9645678, should be noted as an instance of automatism"

* From: The Measurement of Intelligence by Lewis M. Terman pp. 37.

* From Mental Tests by P. B. Ballard.

SOME SPECIAL CHARACTERISTICS OF THE BINET-SIMON SCALE

(1) He used the age-standards for the first time. This is one of the most important discoveries in the history of psychology.

(2) He designed the test to examine higher and more complex mental processes. He did not try to measure sensory discrimination, mere retentiveness of memory, rapidity of tapping, power of distinguishing colours etc. but he wanted to measure power of comprehension, abstraction, ability to direct thought in the nature of associative processes, amount of information possessed, spontaneity of attention &c.

(3) He measured general intelligence. He abandoned the faculty psychology. He thought that measuring each faculty separately was impossible as the different and so called simple mental processes were interwoven and intertwined anywhere and everywhere.

SOME LIMITATIONS OR DRAWBACKS OF BINET'S TESTS

(1) It does not measure emotion or volitional functions. (2) It does not bring to light idiosyncrasies of special talents. (3) It is an individual test. (4) It takes a lot of time. (5) It does not serve as a complete pedagogical guide. (6) It cannot be used for finding exceptional abilities in a particular branch. (7) It is not meant for the detection of brilliant children. (8) The choice of tests is sometimes not satisfactory. (9) Directions given are at places, indefinite. (10) It is not so reliable at the extreme ends.

HOW THE SCALE WAS PREPARED

Binet took a particular test. Then he applied it to a large number of children of different ages. Then he tabulated the results according to ages. Then he found out the lowest age at which about 70% of children of that age pass in that test. Then that test was taken to be fit for that particular age. Binet accepted knowledge as one of the marks of intelligence. His argument was that a child of a particular age, that was unable to answer a particular question on a particular topic, was so backward that he must be labelled as stupid.

HOW THE SCALE IS USED

Binet leaves it to the discretion of the examiner as to the exact point on the scale where he should begin. Generally they start with the tests for the age just below the actual age of the child. If the child fails in any of those tests, they go backwards till the child passes in

all the tests assigned for that age, then the child is examined in the tests for his own age and above till the child passes in at least four or five consecutive tests. Terman's plan is to start at the age giving one failure to the age, giving pass only in one test of the group. To the age at which all the tests are passed, are added months proportional to the tests passed in different groups. *Example:* If the child passes all the tests for age 7, and 3 out of six for age 8, and 1 out of 6 for age 9, then we take 7 years and to it add 6 months for tests for age 8, 2 months for tests for age 9 and so we get the child's mental age to be 7 years 8 months.

MENTAL AGE AND INTELLIGENCE QUOTIENT.

In Binet's scheme of examination, we compare the performance of the examinee with what a child of normal or average intelligence can possibly do. Thus the tests for different ages are supposed to be the performances of normal children of that age. If a child whose chronological age is 8 years, does what is expected of a normal child of 8 years, then he scores 8 years mental age; and he is said to be normal; if he does what is expected of a normal child of 12 years, then his mental age is said to be 12 years: he is bright; while if his mental age comes out to be 5 years i. e. he does what is expected of a child of 5 years and nothing more, then he must be classed as mentally defective. So by a given mental age we mean 'that general mental ability which is possessed by the average child of the corresponding chronological age.' Schools generally promote by age rather than by ability i. e. the class location of children is made to fit the chronological age. So all those that have nearly the same chronological age are grouped together but one fact of fundamental importance is forgotten here, namely, if we take a random selection of children 9 years old, we include in them children whose mental age ranges from 4 years to 12 years. This means that if all these children are studying in the same class, as they generally do, then the dull children are promoted beyond their mental capacity, while on the other hand, the bright children are kept back though their mental ability is quite fit for the work of two or three standards ahead. So the mental age ought to be used for the proper classification of children. Children whose mental level is the same can work and learn together much better than children with different mental levels. The danger of over pressure on dullards and under pressure on superior children is easily avoided, if they are grouped according to their mental age.

Mental age tells us the mental level or the standard for which the child is fit, but by itself it gives us no clue whatsoever about the

intelligence of the child. For example, simply to state that the mental age of a child X is 9 yrs. and that of a child Y is 8 yrs. does not tell us anything about the brightness of the two children but if we know at the same time that the chronological age of X is 14 yrs. and that of Y is 6 yrs., then we would know that X is defective, while Y is superior. Let us take a child whose age is 10 yrs. Now if his mental age comes to be 10 yrs., he is only average. If the mental age 11 yrs., he is bright or to state mathematically he is $\frac{11}{10}$ times brighter than the average child of 10 yrs. If the mental age be 14 yrs., he is very bright or mathematically his brightness can be denoted by $\frac{14}{10}$. It was William Stern, a German psychologist, who first gave the idea of this quotient of mental age and chronological age as an indication of the degree of brightness. So

$$\text{INTELLIGENCE QUOTIENT OR I. Q.} = \frac{\text{MENTAL AGE}}{\text{CHRONOLOGICAL AGE}}$$

It is generally multiplied by 100 and is expressed in whole numbers (fractions are neglected). Expressed in words I. Q. would mean the relation between the mental development and what we can expect of the child at that age.

It is found out by Terman and others that I. Q. remains practically constant for the same child from the age 3 or 4 to the age 14 or 15. I. Q. is the measurement (or index) of brightness. There are, however, fluctuations due to (1) Irregularity in mental development (2) Health and (3) Defect in the scale.

The following table constructed from Terman's examination of the I. Q.'s of 905 unselected children, 5 to 14 years of age, is very instructive. It shows that most of the children are of average intelligence and there are almost as many very dull children, as exceptionally bright, though their number is very small.

I. Q.	56-65	66-75	76-85	86-95	96-105	106-115	116-125	126-135	136-145
Percentage	0.33	2.3	8.6	20.1	33.9	23.1	9.0	2.3	0.555
No. of pupils	3	21	77	182	305	211	80	21	5

Different I. Q.'s are described as below:—

1. I. Q. 140 or above—near genius—found about 1 in 1000
2. I. Q. 120 to 140—very superior | found about 4 in 100.
3. I. Q. 110 to 120—Superior—found about 15 in 100.
4. I. Q. 90 to 110—Average or normal—found about 60 in 100.

* William Stern, The Psychological Methods of Testing Intelligence, pp. 80.

5. I. Q. 80 to 90—Dull normals—found about 15 in 100.
6. I. Q. 70 to 80—Border line; I. Q. 50 to 70—Moron;
I. Q. 25 to 50—Imbecile; I. Q. 0 to 25—Idiot.

One having the I. Q. below 75 is classed as feeble-minded and is defined as 'one who is incapable, because of mental defect existing from birth or from an early age, (a) of competing on equal terms with his normal fellows; (b) of managing himself or his affairs with ordinary prudence.' (Definition by the English Royal Commission on Mental Deficiency).

So it will be seen that just as mental age can be used as the basis for promotion or grading of the school classes with children of homogeneous ability, so I. Q. can be used as the basis for the prediction of the child's later mental development. It is said that there is nothing in one's equipment, with the exception of character, which rivals the I. Q. in importance. It would be, of course, a misconception that each mental age is a separate and qualitatively a distinct level of attainment. In the same way each I. Q. is not a distinct index of brightness, contrasting markedly with the one a little lower or a little above.

I. Q. AND SEX DIFFERENCES.

The problem whether women are less intelligent than men is of great importance. Ordinarily men are supposed to be superior. This may be due to the fact that only men were doing psychological research. Now it is found out that as far as the results of these tests can be relied upon, women and girls are in no way inferior in intelligence to men and boys. The causes for the absence of many women in intellectual fields may be the following: (1) they get neither opportunities nor any stimulus, (2) marriage and bearing and rearing children takes up a large amount of their energy, (3) training and atmosphere is unfavourable to them.

(To be continued.)

True Economics

BY MR. P. R. GOPALAKRISHNA AYYAR, B. A.

If the end of life is happiness, it means the satisfaction of wants, complete satisfaction of wants in their entirety. But social life, organised or not, is not conducive to extreme and exclusive satisfactions. Besides, man does not live now on the old plan of plain living even when he does not rise to high thinking. He has his wants so enlarged by evolving ever progressive and Protean desires, that the vicissitudes of his fortune have become immeasurable. If we were to describe a graph to show the man, in India 1000 years ago and him to day, it will be something like a telegraph line connecting the sea-cable to the cloud-capt and snow-clad towers of the Himalayas. This aspect of the matter has caught the attention of noble souls at all times and they have not been sparing in their admonition. From the prophetic utterances of Indian seers in the hoary past to the signal fasts of Gandhi, from the burning jeremiades and blasting anathemas, to the satires of Shaw and diatribes of Dean Inge, in the West, there is no difference in substance—they bear the same burden, they all lament the folly of the age in which they were pronounced. The greatest folly in our day is in the abnormal development of our wants, wants which have driven man away from his native homes and native simplicity as well. Having developed them, he is now at pains to devise ways and means to attain them.

Let us consider a concrete example. Take the Brahmin. He began gloriously in an ideal clerical atmosphere, leading a pure life, with simple tastes and sane outlook on existence, and he did not find it hard to live in spite of constant wars. To day he is the typical clerk in the services, turning eminently into the Bureaucrat, not the Bishop; his simplicity has given place to sybaritical pursuits; his learning has lost its profundity and philosophy while gaining in brilliancy of adaptation; his village home and its homas have been deserted for the urban villas and the electric ovens. I will stop there and moralise. Has he found more happiness? Has he at least satisfied his growing wants?

Take labour—rice hulling. Every home in the ancient village hulled its own rice for food. The process added exercise to a necessary occupation, filled with employment the idle hours and cost no more expense to the family. Now what happens? There is the ubiquitous

mill monopolising it—the exercise is gone, the home occupation is gone, 1 anna at least has been taken away from each family for the day, besides filling the atmosphere with mill-smoke and the ditch-stench. The idle hours are lengthened, and Cinemas have invaded them—to tax the family another anna or two at the least. Machinery has its uses but it is not madness which made a Ruskin or a Gandhi inveigh against industrialism. Machinery should not kill man-power. Directly it ceases to be an auxiliary and begins to aggrandise, it should be abandoned.

Human want is no longer what it was when the Poet said:

Man's wants are little here below,

Nor wants he that little long.

It has so grown beyond recognition that we must soon find a new word for it. It is 'becoming' yet. Bank reserves and insurance companies have not brought him the blessing he has sought and his problems have become more complex. Gandhi has taken to solve them by ordering a retreat or a return to the villages. Sir K. V. Reddi, in his luminous convocation address the other day, turned his telescope to the same "deserfed village", only a little further away, to the uncultivated arable lands. (One may remember here the wish of Napoleon—that he would like to convert all the gardens of Europe into smiling pastures). These are men who have given their best attention and their lives to study the economic conditions to day in this country. But to my mind the suggestion to go back to the village and agriculture, much as I wish it were done, looks like asking a bird which, fledged and full-grown, has gone out of its nest, to go back to it. It won't go, that is all; save to lay the eggs and return to the crowded habitations of man. Rural reconstruction is a beautiful ideal such as the slogan of 'back to nature' or 'live according to nature' was in the eyes of men like Rousseau and his generation. but it will not, I fear, satisfy the hunger of the hour. A more ready hearing would now be given to a call to a cloud-cuckoo town, to a call to reconstruct the aerial cities of Babylonian monarchs; not only to have aeroplanes to fly to and fro, but aerial places to live in and float on for ever! Expansion of Agriculture, will only put off the evil day of reckoning. The ploughs which fitted Cincinnatus of old, will not become the modern Bachelor of Arts and Sciences. Besides, a decade hence more population, less land, and less water to irrigate will confront us no less distressingly than to day. War which was a disguised blessing in controlling population, is being tried justly at the International Bar and I hope will be banned. But we will have to devise other means of birth control. Unfortunately the mechanical means of control are themselves ill-timed now. For we have to meet

another unexpected foe in the field—in the Strangard methods of rejuvenation. The new Doctor won't allow even the age of man to act like a controlling agency in keeping down population. That is a misfortune indeed. Death and decay are primordial factors which were restoring constantly the balance against birth. These in the name of humanity we are trying to interdict.

How can we then shield ourselves perpetually against the ever-increasing obstacles to Happiness? On the material plane, one substitute is as bad as another; one difficulty gives place to another. The need therefore subsists for a proper, a better solution.

There is one only solution for all this evil and it is a call from the spiritual plane. It requires the simplification of wants. Simplify wants, spiritualise life and the control on it, then the portal of happiness will be near at hand. Instead of reconstructing a dead world, galvanise the living one on its path to peace and perfection. Instead of seeking mechanism to restrain population, apply the moral and mental brakes, best self-imposed, upon the desire. Instead of seeking rejuvenation through monkey glands, observe 'Bramhacharya' which did not inculcate total abstention, but resistance to abuse; and conserve the energy upon continence. Instead of prolonging the search after the money-means to satisfy the wants, learn to desist when, and lay down the arms, the plough share or the pen, and leave the field for the younger to fall in behind and fare-well. After 25 years of active work or 55 years of age, do nothing but Honorary service. Let the younger earn the pay and allowances. Don't you long for a living wage at 3000 or 4000 a month when you are three score and ten. Let the younger fall into line, live and work.

It was with a view to inculcate this great lesson of alleviating distress by simplifying wants, the great seers of India organised the four Ashramas, culminating in Sanyasya and Serenity, and stabilised the foundations of society. But we have considered ourselves wiser than our forefathers, and have now floundered in the vast and raging sea of discontent, mental and material, social and economical.

The one great need of the hour is thus for the leaders and thinkers, to call for a halt in the race for modernity, in the precipitate rush for maddened existence and turn back, in towns or torn away from it in Thotapalli hills,* to healthy, simple and chaste living.

In short, simplify life on the basis of the fourfold Ashramas, re-nationalise it; then, we need not pulverise the peaky mountains to pave

* An Ashram exists here, called Shanti Ashram.

our roads with (over which one cannot walk bare-footed without being hurt); we need not bank up our rivers to build that power which in the future is going to be the deadliest foe of man in war or peace: we need not be crazy for gold to coin or conquer our commercial wants; we need none of them which have brought us frequently to the tenter-hooks in modern civilisation—marvellous no doubt, in its march to the mighty ruin that awaits it.

Simplify life—economise the flesh wants, energise the spiritual forces and enter that land of bliss where no wants are felt, not nirvana and ennui, not death—but the Great End of Living in the Light, where the soul perceives itself supreme and Sovereign of Eternity.

The true economics of the situation is then of the spirit, not of matter, and the solution of the several problems that vex us rests not with Political economy (so called) but with the spiritual economy—the science which tells us that the maximum of happiness is attained by the minimum of wants—that the spiritual Swaraj is attainable only by strict conservation of the faculties which now run riot in transforming externals into a tremendous power of destruction, and by saving them from such dissipation, and by concentrating them on looking deeper and beyond the ordinary insight into things, make them not fit to be frittered away, but fit to care for, create and construct; make them in fine dynamic for good and Divine.

Women's Education And National Progress.

BY MR. S. VISWANATHA IYER, B.A., B.T.

INTRODUCTION.

This question has now entered the region of practical politics and has passed the bounds of academic discussion. There was a time when this problem met with a hostile reception among the public. But now conditions have changed, resulting in a change of angle from one of antipathy to sympathy and support. It has been now recognised that women's education is a "*Sine quo non*" of social and national progress. Its significance has been heralded by the march of events in the West, where illiteracy has come to be viewed as an object of curiosity. It must be admitted, that there are very few now in India, who will deny

that the education of women is an urgent problem bound up intimately with her national regeneration, requiring careful regulation and direction to make it conducive to the national well-being.

In general it is to be conceded that there is a welcome unanimity of opinion among the Indian educationists, that in women's education we are one of the backward nations of the world. The figure of literacy among women is distressingly low as 2.9 per cent, when compared with 15.6 per cent for men, a small figure in itself. This fact makes us eminently unfit to be called a literate nation. Even the reactionaries are in favour of an increase in the quantity of education given to girls by means of an increase in the number of schools and that too by the force of compulsion. But the rub comes when the kind of education that should be imparted in our schools and colleges for girls is in question.

Some of the ardent advocates of women's education insist upon having more schools, more scholars, better equipment, more efficient supervision and even co-education in the early stages. As a measure of economy, co-education is even advocated in the advanced stages as well. But the majority of our educationists think that the lines on which the courses are devised at present are thoroughly unsuited and any reform which attempts at an increase in the number of scholars, without a change in the course of studies would be worse than useless. There are some who think that the present system of education imparted to our girls is godless, irreverent, against our traditions and contrary to our Dharma. They are influenced by alien, western modern ideals. It cannot but produce an "aggressive feminism" leading to spiritual ruin for women, not to speak of the economic ruin for men. But it is to be admitted that those who advocate a change in the curriculum of girls' education are not educated reactionaries of this type. Again there are others who think of the women's rightful place at the home and plan the curriculum accordingly. They see little good in teaching girls equational problems or of an English King's domestic infelicities. They think that music and fine arts, cooking and washing, and crooning lullabies would produce more good. Her task would be to make the home happy for the husband and to fulfil her apportioned task of rearing a new generation far better than the present.

Western Culture in the East.

A perusal of the planning of the education in such countries as China and Turkey will bring home to us the fact that these countries are not limited in their vision by what the different sexes are, but what

they would need as citizens of a modern state. Again, they have not hesitated to adopt the so-called western ideal of education and organisation. It is to be realised that education should be suited to the social surroundings and that any given society cannot be static but only dynamic. It would be quite impossible to have a modern system of education entirely based upon ancient ideals. It would be interesting to observe that many of the Asiatic countries like China and Japan have distinctly forged ahead by borrowing freely from the western countries. Yet in Japan it cannot be said that it is a wholesale copy of the west. A policy of eclecticism has been adopted. In India, the case is otherwise. It is a difficult problem. Owing to the political dominance by the western nation, we have reacted unfavourably to the import of the western culture and also to the ideals, however eminent they may be suitable to our progress. It is this prejudice that has to be rooted out. It is this fact alone that makes our educationists thorough reactionaries. It is a wrong attitude and so long as we coddle this theory with references to the ancient texts and glorious pasts, we are bound to be where we are.

We hear much about our ancient ideals of womanhood—of women who have sacrificed everything for home and husband. Ancient India was not full of deep-seated ignorance. There lived many women in ancient India whose stirring examples "could fit a moral and adorn a tale". But certain pernicious customs had deprived them of the rights which they once enjoyed. The result is their emancipation has become a necessity. But we are tempted to ask the question whose ideals they were. One is obliged to ask if those ideals were freely chosen by women in an unfettered environment or if they were imposed upon the society by the omnipotent men themselves. Psychologists hold that social ideals are to a great extent nothing more than social conveniences. It is not to be understood that such ideals were consciously and selfishly imposed on others. But it could not be forgotten that they are the unconscious rationalisation and idealisation of felt needs. The fact that they are unconscious cannot in the least diminish their invalidity.

Educating for the home.

Even if it is to be granted that education should be an ornamental one in the case of women and they should be educated for the home, it is to be admitted that all the cooking and washing, singing and painting, would do nothing but little good. It would make the home comfortable for the husband, if he happens to be a member of the un-

employed or a person of limited means. The argument for this kind of education is nothing but the up-bringing of the children. But it is invariably forgotten that this itself would demand a much higher standard of general educational qualification such as, a knowledge of physiology and psychology, hygiene and general science. No mother can become the up-bringer of her children properly if she knows nothing of vitamins and conditioned reflexes and a host of other similar facts. If an ordinary lay-man is to ignore these facts it may be pardoned. But persons who are educationists and who have been ground slow and fine by the huge mills of the Educational Departments, should certainly know better.

Of course, it is equally important for fathers and husbands to know these essential facts, as for mothers and wives. One can assert that even now there are many husbands who are employed better in homes, if only they would take into consideration the releasing of their wives and mothers for public and professional work.

It is undeniable, that these two sexes are biologically different. But these differences are in no way responsible for the general attitude towards the position of women in the home and in society. The current ideas and attitudes of men about the sphere of women in society are due rather to the product of the particular economic and social arrangements that have stopped to exist after the Industrial Revolution. Again psychology has not established the fact that the intellectual needs and the capacities of women are different. Modern researches have simply questioned the truth of these current ideas regarding the differences between the two sexes. Besides, such ideas have no more currency to-day, than Plato's division of men themselves into three psychological types.

If we consider the question of the education of women, from the view point of preparation for the home and family, the educationists fail to realise the fact that these are not static concepts but dynamic. It never occurs to them that institutions should change and ought to change. So also attitudes and ideas ought to change with them. Our country is now coming into contact with the mighty world forces and it is impossible for us to turn this mighty Atlantic with our little broomsticks. Hence our education of women from the basis of differential curriculum would have to take into account many factors, undreamt of in the philosophy of our Mentors of the past and also of the present. The curricula ought to be so framed as would adjust girls to the ever increasing changes and still more important should teach them how to adjust themselves to the changing environment.

The ideal.

To put it in a deeper sense, education is something more than the adjustments and the teaching of adjustment to a changing society. No educational system could be pronounced adequate, if it does not take into consideration a criticism of the social dynamics, with things as they exist and as they are being shaped. The aim of the educational system should be the creation of the free intelligence which would go to make up the reconstruction of the society and its ideals. This is true not only of girls but also of boys.

If the educational system is based upon the above ideal, it would give the girl perfect freedom to choose that kind of life which she wants. If it is the home-making business she would be provided with ample facilities for securing that end. If on the other hand she desires to choose an independent career, it would encourage her to choose it, at the same time leaving home-making business to others. But it is to be distinctly understood that there is no antagonism between the two. Examples are not wanting to show that every day an increasing number of educated and professional women are not only building the homes but also contributing their shares to the march of social events. This is true not only in India but also in other countries. The girl, given this freedom, will have the satisfaction of having freely chosen her vocation.

But it is deplorable to peruse the present conditions and tendencies. Present day things reveal that many millions of our women are groaning under misery. To add to this, legal systems, social customs and other disabilities are heaping terrible onslaughts of injustice upon them. Girls are simply taught to be wise and as wives they are not the equals of their husbands. If by chance they become widows they are obliged to fall back upon the grudging charity of their husbands' relations.

Women in the West.

The recent census in England that took place in 1931 reveals curious facts about women. It is said that they are the "Jills-of-all-trades". Among other curious occupations of women are those of gunsmiths, plumbing, bookmaking, saddling and harness making. There appears to be no profession or occupation left untouched by women. Even engine drivers, stokers and firemen are included, while shunters, 'pointsmen' and 'level-crossing men' were also counted. Flying clubs are forecasting a hundred per cent increase in women pilots. Women Magistrates are not scarce now-a-days.

Conclusion.

But we in India cannot slavishly copy the west. But it should be the duty of every woman to keep herself in touch with what is happening in the world. India can make her best contribution, not by being conservative but by showing to the world her example of piety and devotion, her power of sacrifice, her wide sympathy and compassion. These are the gifts that India could give to the world and in this women have to have their share and part. The women of India at the present day need less education and more of culture. It is to be condemned that the feeling entertained among modern girls is that the teaching of the past was useless. What we need in India is the true art of living and culture. Real culture means that which makes life simple and rich. It would make women wise, sympathetic and tolerant. If all the women thought that they could learn all from books and not from life, they would remain ignorant and uncultured. Their struggle should be against their own apathy, laziness and ignorance. They could regain their ancient position only by united efforts for the common good. If they found opposition in family life, it was rather their fault, because they had helped to make these circles conservative and backward. True progress can come to our country only if women lived up to a standard. Where each person had an equal right to work, where the Ruler and the ruled were in sympathy and co-operation with each other, where every class was of equal value to every other class of people, where every one had equal rights and responsibilities, there was freedom. It is imperative that women on their part should take pride in all that they do for promoting this ideal. They should never confine themselves to a narrow ideal. They should think of themselves always, as members of the larger world.

The Truth about Libraries.

BY MR. K. SOMASUNDARAM, CERT. LIBR. (MADRAS.).

THE Library movement in India, though of recent origin, has gained immensely in popularity and intensity beyond all expectations, thanks to the band of enthusiastic workers in the field under able and expert leadership. We may even confidently say that it has come to stay. While its promises in the future are rich and even limitless, it cannot be denied that the movement has produced a certain cynical tendency (but not very conspicuous) on the part of the public as to the value or utility of the movement. The sincere servant of the library movement must, however, welcome even this unwelcome attitude and inquire into and remove the causes acting as a check to its expansion. Several healthy movements have not only not gained sufficient recognition but have given rise even to suspicion developing into dislike due to the wrong spirit and methods of work of some among the workers. The element of self must be totally eliminated as some have begun to believe that the movement is made to subserve individual advertisement and private interests. Thus a prejudice has been created against the very movement. The patient and indulgent reader will find in the following paragraphs convincing arguments for lending his whole-hearted support to the movement which is a potent instrument of mass enlightenment.

IMPARTING OF KNOWLEDGE.

Of all the ways and means of serving Humanity, diffusion of knowledge is the best. For, "To carry knowledge free to the doors of the ignorant, to educate them in the righteous path; nothing can be equal to that form of charity; even to give away the whole world can never come to its level." * Knowledge is quite necessary to give a right understanding of things, material and spiritual. Knowledge is power. Scientific inventions and researches are made day to day. Man is gaining mastery over nature and he finds himself in possession of means which give him joy and comfort in life and power over men and things.

REMOVAL OF ILLITERACY.

Illiteracy is a great stumbling block in the way of a nation's progress. "The abnormally high percentage of illiteracy in India is not only appalling to the enthusiastic social reformers but is a blot on the

* Manu.

fair name of our ancient civilization and culture, and is the most vulnerable spot in the safe governance of this country." Since the scheme of elementary education has failed in our country for want of a definite and progressive programme and compulsory education cannot be extended further, it is incumbent on the part of the well-wishers of the nation to go to the sources of knowledge, i. e. books, since "the choice of books is really the choice of our education, of a moral and intellectual ideal, of the whole duty of man." ¹ "The diffusion of these silent teachers, books, through the whole community, is to produce greater effects than artillery, machinery, or legislation. Its peaceful agency is to supersede stormy revolutions, the culture which is to spread, whilst an unspeakable good to the individual, is also to become the stability of nations" ² "Studies serve for delight, for ornament and ability. Reading maketh a full man" ³ "In them (books) the most high and incomprehensible GOD HIMSELF is confined and worshipped". ⁴

ESTABLISHMENT OF PUBLIC LIBRARIES.

It is very clearly understood that the establishment of Libraries is necessary to remove the mass illiteracy, to prevent those who have learnt a little from forgetting the same and convert the educated classes into potential readers.

CONCEPTION OF THE TERM "LIBRARY".

The modern conception in a wide sense is a collection of books and other materials in a place, the readers and the librarian who is to effect the contact between the former two, plus all other facilities which are necessary to impart education in an effective manner. Let us now proceed to books and readers, and the librarian.

LIBRARY LOCATION.

Before we get books, we want a local habitation. It is a truism to say that the Library building must be excellent, having good appearance, with every kind of comfort inside, well-lighted and well ventilated. It must be situated in the very heart of the town which it has to serve, or the most comfortable place where people may come easily and make use of it. To avoid the distance in the way of free and full use of books there should be several branch libraries and delivery stations in different parts of the town.

(1) Frederick Harrison: (2) W. E. Channing, (3) Bacon: (4) Richard de Bury.

LIBRARY FURNITURE.

Just as the building, the furniture should be comfortable and decent and should add to the beauty of the library. Such an arrangement causes people to take great pride in the library as a town's institution. The book racks must be within the reach of every reader and adjustable to suit the convenience of the libraries to hold books etc., which are of various sizes. The gangways between them should be broad enough to allow people to go through without any difficulty or loss of time. Every reader must be provided with a separate chair and table and research scholars be given liberal space for conducting their work. Adjustable book-rests for keeping open books, when the readers have to refer to other books and authorities on the same subject, have to be placed. These may appear to be ideal and hence impracticable conditions. They are certainly not impossible, if discriminating economy be observed in many public and quasi-public departmental activities. Where there is a will, is there not a way?

OTHER MATERIALS.

A clock, a telephone, a thermometer and a barometer and a cycle stand should be attached to a library. The library may be made more attractive by hanging flowers, charming pictures and inspiring portraits of good and great personages on which the tired eyes of the readers could rest now and then and refresh themselves and gain inspiration.

LIBRARY HOURS.

Regarding library hours, it may be kept open according to local conditions during such effective hours when most of the people will come and make use of it.

BOOKS ARE FOR ALL.

The library has to serve the people without any distinction as to caste, creed, colour or sex. Every member of the community is entitled to free education at the nation's cost. So books have to be got to cater to the needs of all alike, men and women, rich and poor, the townsman and the villager, child and adult, and the healthy and the defective.

BOOK SELECTION.

This is a very serious section of the library administration due to the vastness of publications. The decency and attractiveness of a library mainly depends upon its representative and up-to-date collection of books. Every care should be taken to get the best and most popular

books possible within the funds available according to the tastes of the people who are to be benefited by them. A collection of quick reference works such as Encyclopaedias, Dictionaries, Year-books, Atlases etc., that are being asked for often and often for consultation must be housed. Works on domestic sciences must be given preference in selecting books for women's libraries. Books printed in bold type on good paper and full of illustrations suitable for both recreational and instructional purposes are to be gone in for for children.

RURAL LIBRARY SERVICE.

More than 80 per cent of the population of India being agriculturists, a systematic working of travelling libraries is the quickest, easiest and the cheapest device of serving them at regular intervals, having the district or the urban library as their head-quarters. Books in the vernaculars prevalent in the respective areas should be chosen.

SPECIAL COLLECTIONS.

The blind may be made to spend their leisure time profitably with books embossed according to Braille system. Like the blind, the patients in the hospital, prisoners in the jail and the sailors on the sea are to be given books so that they may make use of the great amount of leisure at their disposal in pursuit of knowledge. Generally the principle of getting books in good paper and printing and well got up must be adopted. Local collections must not be ignored. Pictures, albums, maps, lantern slides and other materials that aid education through the eye must also find a place in a library.

PERIODICALS AND OTHER MATERIALS.

Periodicals, Magazines and Journals form a part of book selection in a big library. They contain articles on various subjects specially treated by experts in a very small compass. They are quite indispensable to those who keep themselves up-to-date but have no time to read books on the same. Cuttings from Newspapers and Magazines on current events and burning topics may be preserved to meet the immediate demands from the readers since it will take some time for those topics being published in book-form.

CLASSIFICATION.

The collection of books and other materials require classification so as to make them easily available to readers, without any loss of time. Experience shows that the books and materials have to be classified and shelved on a subject basis. A good scientific scheme of

classification has to be adopted for this purpose. The various schemes of classification such as Expansive, Subject, Library of Congress Dewey's Decimal and Colon so far published are defective for one or more reasons. For, it is quite impossible to divide the field of knowledge into water-tight compartments scientifically. It is still more difficult with books as the books are the embodiment of knowledge that requires a quite different kind of treatment. It is our duty now to be content with what we have and try to rectify the defects in them. Leaving aside the demerits of the above schemes, we have to choose one of them on their own merits. The "Colon Classification" invented recently by the talented librarian of the Madras University, Mr. S. R. Renganathan, obviously possesses many features that the other schemes do not have. So, it may be adopted with great advantage in libraries in general and in those in the Orient in particular, for there is a special treatment of Indology fully worked out.

CATALOGUING.

The catalogue is the key through which the resources of a library are known. The classified books and materials require cataloguing in such a manner that the readers are provided with their requirements in whatever form they ask for e. g., by subject, author, editor, translator, title, series etc. at a moment's notice. The modern form of cataloguing in a classified form proves to be of immense value.

CIRCULATION WORK.

To make the books well read by readers, no pain should be spared to follow an effective system of charging and discharging of books, leading to no loss of time on the part of the readers and the library workers as well. As far as possible, the books must be made easily accessible to readers by observing the principle of "open access" and a good system of "Shelf-arrangement", which help the readers to make their choice as they please very easily and quickly.

REFERENCE WORK.

A certain amount of human aid in the right selection of material also is necessary where the librarian comes on the scene. This kind of human service is called "Reference Work" in Library parlance.

MODERN CONCEPTION OF THE TERM LIBRARIAN.

The importance of the Librarian cannot be overestimated. The old idea of the librarian as a keeper of books has given place to a new conception of his work and mission. Now "the ideal work of a libra-

Notes

The G. O. on Text-Books.

The recent G. O. requiring the retention for five years of text-books in schools is an ill-conceived and unwise step. Educationally, it is not sound, considering the day to day progress made in educational methods and subjects, and the need for a corresponding change of books to suit them. Experiments in individual work are being carried on in the Presidency, and naturally old text-books have to give place to new ones, according to needs. Viewed from the teachers' standpoint also, the G. O. fetters academic freedom; it is an officious encroachment on the privileges of educationists, who alone are competent to prescribe books from time to time as they choose.

The Government seems to have acted hastily in the matter to please a few who do not know what they are about. If there be parents who object to frequent change of text-books in certain schools, they may directly appeal to the Headmasters or Managers concerned. If the Government is afraid that the overproduction of indifferent books by publishers tends to lower the standard of efficiency, it can screw up the Text-Book Committee to exercise greater vigilance and strictness in according approval. To make the Committee discharge its duties efficiently, the Government should reconstitute the body, weeding out incompetent men. For one thing, keen competition among publishers should not be discouraged; their rivalry in itself would be a blessing as it would tend to improve the standard of the publications. If the Government desires to remove any abuses in particular schools, it may advise the Heads concerned. To have recourse to a drastic ruling of the present kind is a highly retrograde step which is bound to prove a serious set-back to educational efficiency. We hope wiser counsels will prevail, leading the Government to recall the G. O. immediately.

Secondary Education in Madras.

Amusing are the ways of the Educational Department of Madras. One wonders whether it knows its own mind and feels responsibility in administering Education. Last year, in the teeth of opposition, a new scheme with two optionals was forced on schools. According to this, the course of studies for Form IV was re-organised, and managers of schools and publishing firms were busy making necessary adjustments. Before the scheme could run its full course, there comes a report that the Department is thinking of reverting to the old one optional scheme. The reversion may be welcome news to most of the schools. There has been a feeling among them, legitimate too, that the old scheme, in spite of defects, has not been given a fair trial. We also think so.

REVIEWS

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But what is really at the back of all these frequent changes? Is not this the result of a lack of definite aims and policy controlling Secondary Education? Should the destinies of thousands of youngsters hang on the sweet whim of the powers that be? How long is the tinkering to go on? Lack of definite ideals has led to lack of continuity of policy both in the Directorate and Inspectorate of Education. Instances of Educational Officers endeavouring to undo the work of their predecessors have not been uncommon, which end in deplorable experiences. A timely orientation of the aims of Secondary Education will save it from the disaster towards which it has of late been drifting.

Reviews.

History of India: (in English): For Form IV: By V. Jayarama Ayyar, B.A., L.T., and revised and edited by T. S. Viraraghavachari, M.A., L.T., Published by the Madras Premier Co., Madras.

This is an attempt by an experienced teacher at presenting the story of the rise, growth and consolidation of the British power in India, in conformity with the revised syllabus. The central topics and march of events have received a fresh setting, illustrated with useful maps and pictures of personages who contributed to the making of the history. The marginal paragraph hints will be appreciated by readers. The language is fairly simple, and the subject is covered in 80 pages. The execution of the book is neat.

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rian is to make the library an intellectual and moral force and an actual entity and influence in the community" ¹

LIBRARIAN AND SCHOLARSHIP.

The librarian, in order to serve the readers effectively, must possess scholarship of wide range and speak with much authoritativeness and familiarity in every conceivable subject possible. He must have the spirit of research and must be a specialist in some branch of knowledge; unless he himself knows the pleasures and pains of a seeker after truth, he cannot sympathise with readers.

LIBRARY AND PROFESSIONAL TRAINING.

Librarianship is vested with several tasks like classification, cataloguing, reference-work etc., which require a well-planned professional training with as much grind and as much technique as that required for any other learned profession such as Medicine, Engineering, Teaching or Law. In the words of Lord Lytton, "Books taken indiscriminately are no cure to the diseases and affections of the mind—there is a world of science necessary in the taking of them." So, it is needless to stress the importance of having trained people for libraries instead of the untrained.

LIBRARIAN AND STATUS.

Nowadays it has not yet been realised that librarians deserve a status just as any other responsible member of society. The librarian should be one of those to whom a decent and handsome pay is considered a legitimate duty owed by the public. Otherwise "to strain his spirit of self-sacrifice to the point of starvation not paying him properly, would be not only mere theorizing but directly planting the seeds of apathy, indifference and ultimate failure of the very purpose for which the library stands".

LIBRARIAN AND HIS RESPONSIBILITY.

The Librarian who has to shoulder the sole responsibility in thus radiating knowledge should always be ready to welcome readers with cheerful outlook and attend to their needs most cheerfully.

LIBRARIAN, A GOOD PSYCHOLOGIST.

He must be a good psychologist so that the readers may be sized up and humoured by his capacity. As soon as a reader enters

(1) Kudalkar.

in, he must at a glance study his person, movements and anticipate what he wants. He must converse with him and try to learn his requirements both from his countenance and conversation.

PERSONAL SERVICE.

The pivot of the Library work is the personal service to readers in the selection of right kind of material available in the library. This section particularly requires the careful handling of men of various types who may come in for various reasons. Persons having the spirit of social service not caring for the returns of their labour, and enthusiasm in the cause of popular education, can be expected to do the right kind of personal service.

LIBRARIAN, A GOOD ADMINISTRATOR.

Last, but not least, the Librarian should possess a good administrative ability. The rules must be observed very rigidly on the one hand for better management of the institution, at the same time not facing any stop in the free use of books. Any accidental situation has to be tackled very intelligently, tactfully, and impartially, according to the circumstances.

In conclusion, if the right kind of service to humanity—imparting of knowledge—is to be offered at the right time in the right place and in the right manner, it is quite possible to do it at all hours in the most fitting place, the Library, by observing all the principles mentioned above.

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25th MAY, 1935.



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THE INDIAN EDUCATOR

MR. V. ARAVAMUDA IYENGAR, B.A., L.T.,—*Managing Editor.*

Vol. XI.

MADURA: MAY, 1935.

No. 5.

Education in India

Modern Period.

BY MR. K. S. VAKIL, M. Ed., M.R.S.T., F.R.G.S., I.E.S. (RETD.)

(Concluded from last issue.)

The next event of importance in the History of Indian Education was the appointment of the Calcutta University Commission by Lord Chelmsford in 1917. It was presided over by Sir Michael Sadler, then Vice Chancellor of the University of Leeds, and included among its members educationists of sound experience of university teaching and organisation, both British and Indian, a feature which distinguished it from all previous Commissions.

Among the important recommendations made by the Commission are those relating to

(i) the separation of the intermediate stage of collegiate Instruction from university studies and its incorporation with the work of secondary schools by the creation of "intermediate colleges" connected with or separate from efficient secondary schools in each district;

(ii) the creation of a Board of Secondary and Intermediate Education, representative of all educational interests, for the inspection and control of the existing secondary schools and the proposed intermediate colleges;

(iii) the institution of two examinations, a high school examination corresponding to the present matriculation and an intermediate college examination corresponding to the University Intermediate (but much more varied in its range) and serving as test of admission to university studies;

(iv) the gradual reorganisation of the teaching staff of secondary schools and intermediate colleges on a professional rather than a service basis;

(v) the creation of new universities and the reorganisation, as far as possible, of existing universities, on a unitary, teaching, and residential basis;

(vi) the reduction of Government interference in the academic affairs of the universities to the minimum;

(vii) the institution of honours courses, as distinct from pass courses;

(viii) the careful selection and appointment of university professors and readers;

(ix) the appointment of small Civil Service Commissions, (a) to define the stage of educational attainment which would be required in the case of various groups of posts under Government, (b) to conduct competitive tests among qualified candidates for such vacancies as may be announced, and (c) to approve all appointments made by direct nomination in cases where this method of appointment is held desirable;

(x) the appointment of a Director of Physical Training and a Board of Students' Welfare in each university to attend to the health and physical welfare of students;

(xi) the institution of a Department of Education in each university for the professional training of teachers for secondary schools and intermediate colleges;

(xii) the inclusion of Education as a subject (a) in one of the courses of study in intermediate colleges and (b) in some of the groups approved for Pass B. A. degree.

(xiii) the establishment of some sort of organic connection between universities and the older institutions for oriental studies with a view to the systematic encouragement and advancement of oriental studies and research;

(xiv) the institution of university chairs or readerships in the Vernaculars and the introduction of the Vernaculars among the subjects approved for pass and honours degrees, with a view to encouragement of their more serious and scientific study;

(xv) the institution of technological courses and degrees suited to varying local needs.

These and other recommendations of the Commission have greatly assisted the movement in favour of reform of university education in this country, and several provinces have already revised or recon-

structed their systems in the light of the suggestions offered. The new Universities of Dacca, Patna, Rangoon, Lucknow, Delhi, Agra, Nagpur, Andhra, and Annamalai have already been organised as teaching universities; and the older Universities of Allahabad and Madras have reconstituted themselves on more or less similar lines.

The next event of importance in the history of Indian Education was the transfer of the whole subject of education, except in so far as it concerned domiciled Europeans and Anglo-Indians to the control of Indian Ministers of Education appointed under the Montagu-Chelmsford Constitutional Reforms inaugurated in 1921. This change is intended to enable the legislative councils by resolution and budget votes as well as by other methods provided by the constitution to secure adaptation of their educational systems to the peculiar needs and circumstances of their provinces. How little this intention has been realised in practice in the Bombay Presidency is well-known to everyone connected with the administration of education in this province. The primary and secondary school courses are the same as they were before the Reforms and even before the last Great War. The Grant-in-aid Code for recognised schools is also the same as it was before the War. The Bombay primary and secondary courses were last revised in 1913 and 1914 respectively and the Bombay Grant-in-aid Code was last revised in 1911. The only change that has come over the Bombay educational system is the transfer of control of primary education to local authorities constituted under the Bombay Primary Education Act, 1923. But, to put it frankly, it is not transfer of control: it is rather the reverse. It is, virtually, withdrawal of control which Municipal Boards formerly exercised freely through their "School Committees" and the District Local Boards through the Divisional and District Educational Officers of Government. For instance, under the Rules framed under the Primary Education Act, the local authorities are not free to open a single new school or to appoint a single additional teacher to meet the increasing educational needs of their areas, though they had been free to do so under the old rules ever since 1884.

The educational conditions which prevailed during the period immediately following the introduction of the Montagu-Chelmsford Reforms were "perhaps the most inspiring in the annals of Indian education. A burst of enthusiasm swept children into school with unparalleled rapidity; an almost childlike faith in the value of education was implanted in the minds of the people; parents were prepared to make almost any sacrifice for the education of their children; the seed of tolerance towards the less fortunate in life was begotten; ambitious and

comprehensive programmes of development were formulated, which were calculated to fulfil the dreams of a literate India; the Muslim community, long backward in education, pressed forward with eagerness to obliterate past deficiencies, enlightened women began to storm the citadel of old-time prejudice against the education of Indian girls.....Unfortunately, many of these golden opportunities were lost through inability to guide this spirit of enthusiasm into fruitful channels.”*

The Auxiliary Committee of the Indian Statutory Commission (commonly known as the Hartog Committee) which reviewed the educational progress made from 1921 to 1928 reported:

“Throughout the whole educational system there is waste and ineffectiveness. In the primary system, which from our point of view should be designed to produce literacy and capacity to exercise an intelligent vote, the waste is appalling. So far as we can judge the vast increase in numbers in primary schools produces no commensurate increase in literacy, for only a small proportion of those who are at the primary stage reach Class IV, in which the attainment of literacy may be expected. It is to be remembered that under present conditions of rural life, and with the lack of suitable vernacular literature, a child has very little chances of attaining literacy after leaving school; and indeed, even for the literate, there are many chances of relapse into illiteracy.

“The wastage in the case of girls is even more serious than in the case of boys. The disparity in education and literacy between women and men so far from decreasing by the effort made is actually increasing. The disparity between the wealthier parts of the country and the poorer parts also tends to increase.

“In the sphere of secondary education there has been an advance in some respects, notably in the average capacity of the body of teachers, in their improved conditions of service and training, and in the attempt to widen the general activities of school life. But here again there are grave defects of organisation. The whole system of secondary education is still dominated by the ideal that every boy who enters a secondary school should prepare himself for the university and the immense number of failures at matriculation and in the University Examinations indicate a great waste of effort. Such attempts as have been made to provide industrial and vocational training have little contact

* Progress of Education in India, 1927-32, by Sir George Anderson, Tenth Quinquennial Review, Vol. I, p. 3

with the educational system and are therefore largely infructuous. Many of the universities and colleges show marked improvements in their methods of teaching, and in the amount of original work which they have produced; and in some of them there is undoubtedly a better training for corporate life than formerly. But the theory that a university exists mainly if not solely to pass students through examinations still finds too large acceptance in India; and we wish that there were more signs that the universities regarded the raising of broad-minded, tolerant and self-reliant citizens as one of their primary functions. They have been hampered in their work by being overcrowded with students who are not fitted by capacity for university education and of whom many would be far more likely to succeed in other careers.”*

The period reviewed by the Hartog Committee has unfortunately been succeeded by a period of great financial stringency, which has caused heavy and indiscriminate retrenchments of educational expenditure. “In a spirit almost of panic, wholesale reductions have been made by rule-of-thumb methods and by percentage reductions with the result that good and bad together have been thrown indiscriminately into the abyss. A well-directed policy of retrenchment would have resulted in the cutting away of the dead wood and ineffective expenditure which have hitherto obstructed the salutary and economic growth of education.”†

* Report of the Hartog Committee, pp. 345-346

* “Progress of Education in India, 1927-32,” by Sir George Anderson, Tenth Quinquennial Review, Vol. I, p. 4.

(Concluded next page.)

How the pace of progress has been slowed down by these retrenchments will be demonstrated by the following figures of the last two quinquenniums:—

	1922	1927	1932
Total No. of Recognised Institutions	173,311	211,048	222,804
Increase	...	37,737	11,756
Percentage of Increase	...	21.77	5.09
Total No. of Pupils in Recognised Institutions	7,742,225	11,529,350	12,122,466
Increase	...	2,787,025	593,116
Percentage of Increase	...	35.99	5.14
Total Expenditure	183,759,692	245,847,572	271,856,622
Increase	...	62,094,603	26,009,050
Percentage of Increase	...	33.79	10.57
Total Government Expenditure	90,230,028	119,332,854	124,603,905
Increase	...	29,102,826	5,271,051
Percentage of Increase	...	32.25	4.41

* "Progress of Education in India, 1927-32," by Sir George Anderson, Tenth Quinquennial Review, Vol. I, pp. 8 and 17

Mental Testing & Statistics in Education

By MR. B. B. SAMANT, B.A. (HONS.), B.T.

BURT'S REASONING TESTS

Cyril Burt started his experiments among school children at Oxford in 1905. He selected children of a particular age, asked their teachers to arrange them according to their intelligence, then he gave them some 12 tests and found out the extent to which the results of his own experiments agreed with the judgment of the teachers. He considered that particular test more satisfactory in which, there was greater correlation between its results and the empirical judgment of the teachers. Some five years later he prepared new tests and made further investigations at Liverpool. He concluded that of all the tests of intelligence those that measure the power of thinking, i.e. the power to understand and to reason, are the best. 'Thus is the commonsense vindicated by the psychologist.'

He published (1919) a set of tests. Binet's tests were meant for the detection of the dull children, while these tests were for the selection of the supernormal children, to whom scholarships might be awarded. They consist of a series of tests 'that appeals more exclusively to the higher mental functions.' They are known as *Burt's graded Reasoning Tests*. A few of them, selected at random, are given below to give an idea of their nature:—

(1) 'Kate is cleverer than May, May is cleverer than Jane. Who is the cleverest—Jane, Kate or May?' (age 7).

(2) 'I don't like sea voyages and I don't like the seaside. I must spend Easter either in France or among the Scottish Hills or on the South Coast. Which shall it be?' (age 8).

(3) 'If I have more than a shilling, I shall either go by taxi or by train: if it rains, I shall either go by train or by bus. It is raining, and I have half a crown. How do you think I shall go?' (age 9).

(4) 'Where the climate is hot, aloes and rubber will grow. Heather and rubber require plenty of moisture: grass and aloes will grow only in fairly dry regions. Near the river Amazon it is very hot and very damp. Which of the above grows there?' (age 11).

(5) 'I started from the church and walked 100 yds.; I turned to the right and walked 50 yds; I turned to the right again and walked 100 yds: How far am I from the church?' (age 12)

- (6) ' Explain how the following code is worked:

message (in code): dpnf up Mpcepo bu podf

the same (translated): come to London at once.

What is the secret letter for 'X' in this code ?' (Age 12)

GROUP TESTS OF INTELLIGENCE

The original Binet-Simon test, and its revisions and adaptations are oral and individual. Being oral and individual they are more searching and incisive no doubt. This and other merits are accompanied by their drawbacks. The individual nature itself was bound to irk those that were not interested in a clinical diagnosis.

In this busy world the question of the time involved in testing cannot be overlooked. With the Binet tests it would take about an hour per pupil to examine. That means a school having 500 pupils will have to spend about five months in this testing business. Apart from the question of time involved, the grading would be very complicated. One may compare the boys tested last with some tested five months earlier. So under the scheme of individual testing it is not so easy to examine everybody and not only this, but it is not possible that everybody can test, as one ought to know not only the technique but also the principle underlying the experiment. There is again another danger and that is of the personal equation of the examiner. It is probable that the examiner may give the instruction in a better way in the beginning but as he gets tired the instructions may not be satisfactorily given and this is possible in spite of the fact that the instructions and the manner of giving them is fixed. He may not be so precise in scoring as he gets tired. Slight change in the mode of the examiner may cause a change in the response from the subject. After all there may be that unwholesome chance of partiality too. Some slight suggestion or a slight change in the time taken or allowed may cause some difference in the response. So considering these difficulties it would be practically impossible to introduce the individual tests everywhere.

In order to partly remove these shortcomings, the Group tests came into existence. Thorndyke, Pyle (1913), Lobsein (1914), and Pintner (1917) and others had adapted mental testing to group requirements. The greatest impetus to this tendency came forth, when America entered the World War (1917-18). She made use of her psychologists. Otis and Terman were busy in group intelligence tests about the same time. Taking their work as a nucleus, a comprehensive

test was prepared with the help of a committee of psychologists. With these tests they were to pick out the unfits—recruits not even worth the training. Even this, if it could succeed, was thought to be a great achievement. A large number of men in the Standing Army were first tested with the prepared test and the results were compared with the longstanding impressions of their superiors in intimate contact with them. This was for testing the test and to the amazement of all, it was found out that the psychologists were able, not only to pick out the stupid, but to grade them if required.

So the test was applied to the whole of the American Army. It was a colossal undertaking, in which nearly $\frac{3}{4}$ million soldiers were examined, including 41000 officers (only the Field and General officers were omitted). To quote Ballard: 'The scheme enabled the authorities to fire out the fools, to prevent the yoking of an ox and an ass and to put the right man in the right place.' The man failing in the group test was examined by some individual scale like the Binet-scale before he was declared unfit.

Nearly $\frac{1}{4}$ of the subjects to be tested were ignorant of reading and writing the English language. For them simple performance tests were invented. Thus the army tests were of two types: the Alpha tests (for those who knew English) and the Beta tests (for the rest).

One of the characteristics of these tests was that they were to be answered at 'Break-neck' speed. As many as 212 questions were to be answered in 23 minutes and 15 seconds.

Of course, the actual handling of the examination takes not less than 50 minutes, owing to the time taken for instructions &c. 'This seems to the plain man to be a wanton incitement to guessing and a wicked discouragement of thinking..... They put a premium on smartness.' But it will be quite clear by throwing a casual glance at the questions, that had there been no time limits then there would be no distributiv and diagnostic value in those questions; moreover, intelligence includee 'the ability to deal expeditiously with certain common tasks'. Of course it would certainly be better, if some tests be without time limit, so that the boys who are slow, being cautious and solid thinkers, would be given some chance. Some new group tests have included some tests without time limits. In the case of group tests it is very easy to examine the answers. They can be even examined with a stencil.

In the Binet tests, there were some questions that were not 'Fool proof' i. e. having not more than one answer. This was avoided in the Army test by suggesting 3 or 4 answers to the question out of which the

best was to be selected. In order to avoid the cramming of the answers, two or three different sets were prepared.

Nearly there dozen standardized group tests have come into existence after the Army Tests. The National Research Council, consisting of almost the same persons who prepared the Army tests, published the National Intelligence Tests. Nearly Rs. 80000 were spent for these tests. Besides this, many others ought to be noted. They are: Terman group tests, Otis group tests, Haggerty group tests, Northumberland group tests (by Thompson and Burt), Columbian Mental tests (by Ballard), Chelsea Mental tests (by Ballard), the Crichton test (by Ballard), the Simplex test.

All these tests consists of short questions expecting still shorter answers and are based on certain logical processes and they test higher mental processes.

There are instruction tests to know whether the subject is quick in uptake or not. To be able to obey orders and do as ordered instantly is very essential in life. This test involves proper listening, proper understanding, proper remembering and proper executing.

There are Analogies e.g. (1) Fire: hot as ice? (2) Egg: bird as seed: hen, *plant*, rice, plough.

To associate ideas by similarity is an important characteristic of the human mind. 'The most elementary simple difference between the human being and brutes lies in this deficiency on the brute's part to associate ideas by similarity' (W James).

There are tests to test the knowledge of meanings—meaning of words and of sentences. This includes process of finding the opposite word e. g. good: bad, early: *late*, or cheap or morning or night. (The correct one is to be underlined by the subject). True and false tests are also included in this e. g. lions are big fish, (false). Questions answered by simply yes or no are also included. There are tests that involve the detection of absurdities e. g. 'Light comes from the sun; feathers are light; therefore feathers come from the sun.'

There are also tests involving the following processes:—

- (1) Identity (Mango is a metal, *fruit*, animal, juice) (2) syllogism
- (3) completion or fill in the blanks (4) Reasoning.

The general conception of the Columbian Mental tests may be got from the following:—

Test I. Obeying orders e. g. (10) Write the number that comes before the number that comes before fourteen. (5 minutes for 16 such items)

Test II. Mixed sentences e. g. (16) Some a pity do that is work it not like people (5 minutes for 16)

Test III. Analogies e. g. (6) Dog is to Puppy as cat is to (tail, pussy, kitten, purr) (5 minutes for 16)

Test IV. Number series e. g. give the next two Numbers:
(8) 6, 2, 5, 2, 4, 2, —, —, (13) 10, 7, 9, 6, 8, 5, —, —, (5 min for 16)

Test V. Best reason, e. g. Write the letter before the best reason.
(20) people go to cinema (a) to learn about other countries (b) to enjoy themselves (c) to meet their friends (d) to eat oranges and nuts.

Test VI. Common sense e. g. Five years ago Phyllis was two years older than Maud. How many years older than Maud is she now?

ACHIEVEMENT TESTS.

Achievement tests and scales try to evaluate scholastic proficiency with the help of objective measurements. The efficiency of a teacher or a school is judged by an examination but as we have seen, the results tell us very little. So achievement tests have been invented which enable us to conduct the examination on strictly rational and scientific lines with objective standards. By objective standard is meant that standard which does not change from teacher to teacher, place to place, and time to time.

Achievement tests and scales consist of tests as well as the distribution of marks obtained in it by average children reading in different standards or classes. There are *standards* or *norms* of achievement for different subjects and different classes. In the construction of these instruments, the school product to be measured is thoroughly analyzed, then material acceptable to educationists is collected and is first tried on selected groups of bright and dull children and if found efficient discriminator, is then tried on unselected groups from different standards or classes to see whether the progress from class to class is detectable or not. The validity of the test is tested by comparing the result with the judgment of many teachers on the same group and also by finding its correlation with a known test and the correspondence with the normal curve of distribution, these standardized tests of achievement are used for supervision, for diagnosis and also for guidance. The work of one school or teacher can be compared with another, the shortcomings of pupils can be explored and the direction of the pupils' scholastic or vocational career can be predicted to some extent with these tests and scales. (To be continued.)

The Role of the Inspector in Educational Administration.

BY MR. P. NATESAN, M. A., B. T.

Inspectors help the administration in the oversight of schooling having due regard to the aims and objects set out by the Govt. But aims and objects change with changing times. Time was when schools were considered as factories for the production of clerks and elementary school masters, and colleges as factories for the production of administrative officers. This led to the domination of schools by examinations and the use of business methods in headmastering and inspecting. The headmaster thought his duty consisted in the strict enforcement of his authority over the masters, in seeing that masters came to school in time, that they produced programmes of work and notes of lessons, that they corrected a specified number of exercises or tests. The Inspector similarly considered his duty lay in verifying whether the notes and programmes had been written up on lines approved by him, whether the methods adopted by the masters in teaching were those suggested by him. No attention was paid to the human element. No notice was taken either of the individuality of the child or the personality of the teacher. The whole thing was mechanised; children were the raw material which the masters as factory labourers were to turn into the finished product.

Fortunately this type of headmaster and Inspector is fast vanishing and giving place to a new type imbued with modern ideas of democracy and freedom in education. No longer is the inspector looked upon as a superior being come to criticise whatever is done and to impose his views. The new inspector goes to the schools as a friend and colleague eager to discuss with the masters the peculiar problems and difficulties confronting them, prepared to offer advice to those who seek it, willing to learn and profit from the experience of schools. He is in fact a sort of co-ordinating officer who takes note of how schools faced with particular difficulties have managed to grapple with them successfully and brings the same to the cognisance of schools in similar difficulties.

Thus in Secondary schools, the new inspector wishes to know how far qualities of leadership have been tried to be developed in the pupils. For under modern conditions graduates of high schools have to be prepared to be efficient representatives of the people on Panchayats,

District Boards and Legislative assemblies. He will notice how schools have utilised the sports field for the development of team spirit, the debating society for improving the powers of speech, the hostels for fostering communal harmony. He will look for any special features of the school such as the prefect system, the house system, the celebration of important events, and note how far youthful enthusiasm has been sublimated. He will not bother himself about the routine lessons except in so far as he is requested to do so by members of the staff or to help to put in the way raw or inexperienced teachers. Another problem that the new inspector interests himself in is to find out how far schools have tried to give suitable advice to its graduates as to their future careers and how far schools have tried to keep in touch with their alumni after they pass out of their portals. He will also interest himself in the methods adopted in schools to minimise causes of friction between the headmaster and his assistants and to develop a happy family spirit.

The new Inspector of Primary Schools interests himself in finding out how children have been prepared to become useful citizens. For the graduates of Primary schools have to learn the proper exercise of the vote, for on that depends the welfare of the village, the district and the country. He will therefore find out how far schools have been able to tackle the problem of wastage and the lapsing back into illiteracy of a majority of the children. How schools have endeavoured to enlist the cooperation of the villagers in the matter of admission of Adikarnataka children and in the matter of providing needy children with books and slates. He will also find out how far single teacher schools have managed to solve the problem of plural teaching. He will be on the look out for any special features of the schools such as the play or project method employed or any cheap and inexpensive apparatus or appliances prepared.

Thus while the old Inspector had to mechanise things with a view to improving the examination results the new inspector looks farther ahead and concentrates in the primary grades on a high percentage of literacy and in the secondary on the turning out of citizens brought up in an atmosphere of freedom and able to earn their living.

Some Aspects of University Education in India

BY MR. V. P. NATARAJAN, B.A. (HONS.), B.T.

(Continued from April issue.)

The problem of women's education in India is one of vital interest to the Universities, in common with the Government and society at large. In spite of all efforts made in recent years, the percentage of literacy among woman is still very low, as will be seen from the following table (reproduced from Dr. Ziauddin Ahmad's 'Systems of Education:')

	FEMALES.	MALES.
Percentage of Literacy	1·8	13·0
„ Literates in English	0·17	1·58

(Total number of University students in Arts and professional colleges is given in the figures noted elsewhere).

The leaders of political and economic thought in India to-day are as zealous in the case of female education as the most ardent missionaries and officials. But in spite of repeated attempts at giving a rapid move to the progress of women's education, the situation is still unsatisfactory. The enthusiasm of the Education Department is confined to Annual Reports and Council Speeches. Serious efforts in this direction have never been made and are not likely to be made till women fight out their cause themselves. The rapid spread of women's education in the universities is hindered by the good deal of criticism directed against the college girls of to-day, who number only a few. Those women who have not had the good fortune of attending college very often make out that their educated sisters are too forward and bold; and not infrequently men hum and haw and insist on saying that their home life has been ruined because their educated wives and daughters refuse to attend to domestic affairs. These criticisms are true in many cases, for there are numerous instances of girls who have hitherto been brought up in quiet secluded homes and have been made to rigidly follow old time conventions, suddenly experiencing the breath of freedom afforded to them in the university hostels, feel that home-life is dull, and all things pertaining to domestic work a drudgery. Home-ties however are usually too strong for the average Indian girl to prefer staying away from her parents. It has to be admitted that it is an anachronism to expect modern girls to be kept for ever in their homes, fit for domestic drudgery.

marriage and breeding and rearing of children, and nothing else. Many Indian parents, even of the middle classes, have begun to realise the impossibility of refusing their daughters the minimum higher education, with the result that to-day all the women's colleges in India are crowded with happy care-free girls, full of zest of living, thrilled with the new world of knowledge and friendship and social activities revealed suddenly before their vision, and imbued with the desire to work hard to have a good time and to make the best of one's future. The most conservative girl learns, by her college education, to be broad-minded and suddenly realises that people of all communities should unite as one homogeneous whole to build up a new India. One is imbibed with a spirit of tolerance and good feeling, so that minor faults in one's friends are forgotten and forgiven, and sympathy for one another's troubles forms a link that is hard to break, even for years after. An interesting picture of the American college girl may not be superfluous. "College girls, like every one else, move with their changing world..... From the set of sun until as far into the night as the local curfew permits, a women's college campus is thick with young men who have arrived in open cars from anywhere within a radius of a hundred miles. At the same moment groups of care-free young women burst from apparently empty houses. Everybody seems to know everybody else. They drive, dance, play bridge and lesser games, walk, talk. Next morning the girls appear at classes in the same old knitted jumpers with the day's translations done and neat typewritten papers ready to hand in. How they managed it, nobody knows." The "after-college what? Problem" seems to be pressing in the United States since 1930. Here in India the problem is only just beginning to take room, as finding a career has not been a paramount necessity for the Indian girl, but in the States although "marriage is still regarded as the natural and desirable vocation", the question of finance comes in, and so the American college girl goes job-hunting, though there are few jobs open. Also the predominance of the long continuing depression has made the college girl of 1933 and after become more thoughtful and serious, and realise that America's play time is over. Bill paying fathers are tightening their belts and sending to college only the girls who evidence positive and active intellectual interests. The college girl of to-day yet has many excellent courses before her, and has "the best of the era which is passing and some very good things from that which is coming. The chances are that she will make a pretty decent sort of citizen." (Miss Alzada Conestock.) Surely the same can be said of the Indian college girl too.

India stands to-day at the cross-roads, with gigantic constitutional changes impending. One grave objection entertained to the grant of ex-

tended political reforms to India in certain directions appears to be our abject unpreparedness to defend ourselves. How far this is a rational defence put forward by the diehards, it is not possible to argue or judge. Yet so far as the universities are concerned, very few of our graduates join the Indian Territorial Force, or joining, continue for a period long enough to make them senior officers. His Excellency the Commander-in-Chief recently observed, "The University Training Corps were primarily raised to obtain recruits for the officer classes in the provincial and urban units of the Indian Territorial Force. But as a recruiting ground for officers, it had been found that they had entirely failed and the U. T. C. were of no direct military value. Even from the educational point of view, the results achieved had been disappointing. On the whole there seemed to be no spontaneous desire in most parts of India for the U. T. C." The world to-day is beset with the conflicting doctrines of *nationalism vs internationalism*. The problem of disarmament has been on the anvil for quite a long time, but has not reached a solution. Is it possible for the countries of the world completely to disarm themselves and abolish their armies, navies and air forces? Is it likely that the mutual fear and distrust of the nations will completely disappear in the near future? A sudden and radical transformation of human nature embedding deep sentiments, age-long traditions, instincts, prejudices, antipathies, racial and national, love of power and commercial greed and mutual rivalry, is impossible. It has often been urged, and has been pointed out elsewhere, that the peoples of the world must give up their national outlook and acquire an international mental vision. Some years ago, the poet philosopher of India denounced the evils of nationalism with the fervour of a prophet and with masterful eloquence. However higher desirable may be the ideal of the citizenship of the world, it is unfortunately too utopian to be realised in any conceivably near future. Because nationalism of an aggressive, predatory or exploiting type has been developed by the peoples of the West, it does not follow, as Sir P. S. Sivaswami Aiyar points out, that it is bad also for this "country of no nations". Defensive nationalism, especially in countries which are geographically destined to be a unity but have not been consolidated into a homogeneous entity, requires to be fostered by every possible means calculated to achieve solidarity. Abstract ideals of conduct have to be adapted to the circumstances of individual nations. That the militarism of Western countries has led to wars of aggression is no reason for holding that a country which has been emasculated and become unable to defend itself should not aim at the ideal of self-sufficiency for defence but lead a parasitical ignoble existence. How deep the decay of military spirit in India has gone may be judged from the difficulties ex-

perienced in recruitment to the urban military infantry, the formation of which was sanctioned, after immense pressure a few years ago. It is a blot in our educated young men, the products of universities, that they have failed to respond adequately to attempts made to infuse a patriotic spirit of self-defence under conditions which were assimilated as nearly as possible to those obtaining in the Indian Auxiliary Force. It is up to the universities to try their level best to remove at the earliest possible moment this sad blot on the fair name of the country which once boasted of the mighty Sivaji, the renowned Rajputs and the Sikhs who have illuminated the pages of India's history.

(To be concluded.)

Composition *

Teaching & Correcting.

BY MR. S. VISWANATHA AYYAR, B. A., B. T.

INTRODUCTION.

The subject on which I have proposed to talk to-day is "Composition Teaching and Composition Correcting". To many, the subject may seem to be a trite one. But its importance cannot be gainsaid in view of the recent S. S. L. C. circular that has been sent to all the heads of the institutions. Of course the subject is trite. So are all things beautiful and holy; the nearer the triter; but also the more vital, the more misty; perhaps, yet for this reason calling for more attention and closer scrutiny. It is even so with the subject, that I have chosen to-day. It is so varied and so many sided, so subtle and pervasive; the more it is studied, the more it offers for study; the more familiar it becomes, the more riddles it reveals; the older it grows the fresher it seems.

The notions of some of the teachers who are entrusted with the responsible task of teaching English Composition are quite fallacious and one such is that, they expect too much from the boys even from the very commencement. It is generally believed that as soon as a boy has learnt to compose sentences of a sort in the English language, he can automatically be led into the art of attempting compositions of a written character. This is a dangerous idea to start with and might, if persisted in, be responsible for the failure of the boys to acquire the necessary sentence-sense, which is the basis of all good writing and the

* A lecture delivered at Bangalore.

criterion by which ultimately the value of all written work is to be judged.

The problem therefore is when to begin written composition and where to begin it. It is pretty clear that the oral work should precede written work by fairly a long period and oral work is intended to lay the foundation to build the superstructure of written work. It would be a mistake to suppose that oral work is quite a separate one and must be treated separately. Oral work and written work are not antagonists. They are not in the least rivals. But they are complements. In oral composition matter is provided and it provokes questions and counter questions and draws answers from the pupils, of course the teacher also takes part in the game. This would insure more vigour, freedom and interest. It will add vivacity and vigour and will form an excellent auxiliary to written work. It is in short intended to enable the boys to construct sentences correctly, to observe and persevere the necessary grammatical and thought sequence and to imbibe some ideas as regards the function and the structure of the paragraphs. It is only after sufficient practice has been given to the boys in the oral method of teaching composition, that written work should be undertaken or can be undertaken with profit. If, on the other hand, it is begun abruptly, as is often done, it would leave the boys in an uncharted sea like a rudderless boat. Free and easy construction of sentences of the various subjects, a sufficient vocabulary and an elementary knowledge of the diction and rhyme of the language are essential preliminaries to any programme of work in written composition, intended to yield useful results. As Professor Clapp observes, only exercises in speaking would make the training broader and more practical. The technique of writing would be more carefully handled.

At the beginning I had the occasion to remark that we expect too much from the boys. This remark is true only as regards the time at which written composition is begun, but also as regards the subjects on which they are required to express themselves. The teachers of composition always require the boys to write on abstract subjects or on topics that are invariably unconnected with the text-books. A teacher is rather inclined to attach more value to the imaginative capacities of the boys. Nothing would be more psychologically unsound than this.

The young minds are more proclivated to the concrete than the abstract, to the known rather than the unknown. It is therefore of immense importance to note that in the early stages, as far as possible, the subject matter of the text-books should be the pegs on which

the exercises in composition should revolve. Not only that, it should be the aim of the instructor to accomplish the difficult task of expressing himself in his own language, to allow him to fall back for help on the language of the text-book, as far as possible.

Now it is quite clear that progress in composition should be not only from the oral to the written, but also from the chained to the free composition. By chained composition it is meant the reproduction of the words of the text-book. Free composition means expressing in one's own language. This means that the language of the pupil has attained a stage of recognising the peculiarities of idiom and structure of the language. Therefore the teacher must realise the necessity as well as the desirability of setting exercises in imaginative compositions, involving the exercise of the pupil's original thinking and original expression. He can then be made to think out situations for himself, to discover solutions for such situations and to clothe his ideas in a language befitting those situations.

But nearly all schemes for teaching the young to write, have been based upon the idea of teaching composition through reading. There has been a change in the angle of vision. Now the teaching of the non-detailed text-book has been abandoned and reading in the library has been encouraged. Teachers are inspired by a passage of Stevenson's in which he says that he played 'the sedulous ape'. What he found he liked, and he set himself to copy it. The value of this precedent is questionable. In the words of Professor Saintsbury "It is commonplace now that only towards the end of his too short a life he was on the point of acquiring a style perfectly natural, free and his own".

While the principle of learning to write through reading has got its own value, it has also got its fundamental weaknesses of its own. For a boy or a girl, to write like "Hazlitt" or "Addison" is nonsense. We choose these authors as models in composition because of their simplicity in style. The boy or girl simply tries to copy their way of writing which is not imitation, but mere mimicry. It would always be easier to copy the bad than the good. The child does not think of the style as the warp and woof of writing, but only as a superficial ornament. He looks for the tricks and tries to copy them, whereas we want him to be simple, direct and honest.

The teacher of composition has a three-fold task. He must teach the child to write simple and correct English. He must give him a taste

for straightforward English. He must create in him an aversion for jargon and bombast. He must watch for the native talent and help it to develop.

Composition should be taught not only as an art, but as a craft. There should be no place for literary artifices. The child must learn to handle a pen in the same way as he would handle a chisel. He must know what he is about, and he must be precise and exact. If a boy has nothing to say in wood, he will never be a carpenter; if he has nothing to say in words, he will never make a writer. The essential and the basic in the aim of teaching composition must be, to discover, what the child has to say and then to enable him to say it.

The possibilities of the five minutes' essay have not yet been fully explored. It teaches the child to put down the first idea which enters his head. The old theory was, that a composition should have a beginning, a middle and an end. The five minutes essay will make the child plunge into the middle at once. The ordinary child faced with the problem of writing an essay in 30 or 40 minutes will fumble and will never come to the point at all.

When the time is limited to five minutes, he is forced to write down quickly. Many journalists, for instance, turn out lucid, admirably written articles at great speed.

The average child confronted with the topic, a pen and a sheet of paper, bunches up his muscles, so that he is mentally and physically tense. But no writer has ever written well except, when spirit mind and even pen all moved easily. Before children start to write, they should be comfortably relaxed; a friendly talk or a joke will often remove the tension.

Very few children realise that an idea goes with the mind, while you are writing or speaking: yet a sentence may grow and change as it is being spoken or written. For this reason a plan may be useful to clear the mind about the shape of the essay. It is now generally agreed that the subject set should be concrete, understandable and attractive. It is a good plan to give a backward class a lead. We can give them the first sentence but we should see that it is a lively and provocative one, which will suggest a whole set of pictures. In composition, children must learn to gather all their odd bits of knowledge and all their impressions and then to arrange them in a proper and pleasing sequence. Selection and arrangements are purely matters of technique and can be taught: but the child must learn to visualise clearly and to grasp the

importance of detail. The difference between a good and a bad and a dead composition very often lies in the use made of detail; accurate observation gives a suggestion of vitality that vague generalization can never give.

If oral composition is dull, there is something wrong and no manual of "Teacher's Aids", will help, for they merely deal with an artificial situation, whereas the teacher is out to employ the resources and vitality of real human contacts.

No satisfactory technique has so far been evolved, yet all manuals stress the importance of class discussion. But what we want is not a formal discussion, which has hardly started before it has dried up, but an easy and natural conversation.

This is no easy task to contrive with a class of forty. No method will guarantee that an able and a stimulating teacher with an average class will produce exhilarating, helpful and instructive talk in which all the members of the class participate, at a moment's notice.

Thus it is clear, a very great care is necessary in the matter of teaching composition. This is all the more important especially in the case of English Composition. For, English is a foreign language, and so far it is so, we are in a disadvantageous position. Progress in this matter should keep pace with the boy's acquaintance with the language, with their capacities to comprehend and use the English idiom, with their command over their vocabulary. And as such progress would be slow. But the teacher's aim should be perfection at every stage; otherwise slipshod writing of English would result, which would prove detrimental to the interests of the learners in their later lives. The pupils can be judged by the "Surrender Value" which the instruction has had for each individual pupil, by the permanent value and utility which he has derived from his study of English. This "Surrender Value" should always be as high as possible; and the framing of the courses in English Composition should be determined by a consideration of this principle only, and not by the pedagogical predilections of the framers of the course.

(To be concluded.)

Indian Pedagogics.

The Future of Indian Pedagogics.

BY DEWAN BAHADUR K. S. RAMASWAMI SASTRIGAL, B. A., B. L.

I shall indicate in this chapter what are and should be the forward movements in Indian Pedagogics in future. We must remember that the purpose of education is a composite purpose. It must give us strong and healthy body. It must enable us to conserve the truths which have been already discovered and stimulate us to adjust ourselves to others and to live a life of self-sacrifice and devotion to others and to organise suitable institutions and express the national life better and better through them. It must finally enable us to know and love and realise God.

While such should be the general objective in education, any scheme of education which does violence to it by omission or by insufficient attention to any one of these aspects is not a proper scheme of education at all. To-day there is much confusion in regard to our ideals of life and this confusion has its parallel and counterpart in our ideals of education. By wide thinking and careful judicious action we have to get our national life into the royal road of progress again in education and in life.

Further, every great people has specially emphasised this or that aspect of its composite scheme of education so as to conserve and perfect the specialities of its national culture. Among the Hebrews education was primarily religious whereas the Athenians aimed at a harmonious development of human powers. Among the Spartans education was dominated by practical military discipline whereas among the Romans it was regarded as leading to the improvement of law and order. In England the aim of education has been to fit the boys for practical life in industry and commerce and for the duties of a far-flung empire. In America the aim is to train the youth of the land for the betterment of the greatest democracy in the world. In such a variety of cultural ideals, India has her own ideal. It seems to me that the Indian ideal is the highest and noblest of the ideals of education known to the world and it is our duty to preserve it and perfect it and perpetuate. Its aim is to secure all the *Purusharthas* and lead the soul with the aid of Dharma to righteous enjoyments (artha and kama) here and to immortality (moksha) hereafter. *Vidyaya amritam asnute.*

In proud America a recent writer named Mr. James H. Baker utters an anguished cry in *Educational aims and civic needs*. "Men conquer nature, and take cities in the modern way, and control political

bodies but do not rule their own spirit. They profess a love for humanity, are practical philanthropists, but in business are unjust to men. They become cultured, but are not defended thereby from refined vices.....I fear that education has lost sight of its great central truth which is humanism. Efficiency we have and culture, but too little of saving human doctrine and discipline". Do Indians want this type of culture? Not at all? Are they eager to barter away this birth right for a mess of pottage and go in for the so-called liberty and refinement? Not at all. Mr. Baker says rightly: "The mistake of the French Revolution was emphasis of right over duties. We are yet living somewhat under influences that produced that revolution and hence have an ill-defined sense of liberty. The disregard for the laws of the state, the spirit of irreverence, often border on licence and in so far deprive us of liberty". Do we desire to have the high-sounding tragedy of the French Revolution re-enacted in India? No, a thousand times No. To-day in the West every man is a law unto himself. Let us hear Mr. Baker again. He says: "There are no universal human standards to which the individual must adapt himself. This doctrine leads directly to the pursuit of personal inclination. It leads to freedom of election and easy methods in the schools, to weakness of home control, to general inadequacy in training of youth, and in so far tends to produce a generation of 'unlicked cubs'. It pervades all our interests and amusements. It substitutes the Sunday comic supplement for the Bible: problem plays for Shakespeare; tales of Tom and Dick for human types; impressionism for art; feverish amusements for healthful recreation; nondescript music for Beethoven, in music and words representing neither joy nor sorrow nor wit nor humour nor courage nor aspiration nor any other human emotion or sentiment—nothing but imbecility". Does India want this type of freedom? Not at all.

The real secret of education is thus well stated by Mr. Baker: "The child is to be adapted to civilization instead of civilization to the child". In short we want Indian educators and Indian education for Indian children. Mr. Baker says aptly: "Our education is wasteful because *it attempts too much*, uses too little judgment in the choice of subjects and material *and in consequence does nothing well*. In general education there is time for the best things only, those of permanent value, and it is the work of the teacher to create the necessary attitudes, interests and reactions, and inspire appreciation of higher values". In India we are running the same mad race as our brothers and sisters do in the West in education as in life. It is now realised in the West that "there is danger of making narrow specialists before the foundation of manhood is laid". We have the same danger in

India to-day. Only we add to it the additional danger of making ineffectual and jobless specialists before the foundation of Indianness is laid. Spiritual values which were our special glory have been thrown on the scrap-heap. Cultural values are fast following suit. Have we got to-day our ancient and admired admirable passion for beauty and goodness and truth? Mr. Baker says: "In the moral realm a sense of touch with the Infinite attends the right path and a sense of estrangement follows perverted ways". This sense of touch with the Infinite was our special distinction and merit in the past. But it is a vanishing quantity and a dying quality to-day. Here in India "was this wonder of a humanity aflame with the Deity, burning but unconsumed". Alas! That fire has almost died out.

Thus the deepest aim of education should be *dharma*. It has been said well: "The good and strong will is the chief end of education". Flabbiness of spirit and a mere love of amusement and passion for a fun and good time are in evidence everywhere. Mr. Baker says well: "The Persians taught their youth, first, religion; second, uprightness; third, restraint; fourth, courage. Mere efficiency never made a people great. Not Phoenicia nor Lacedaemon nor Carthage, but Palestine and Athens and Rome are pre-eminent in history". May not an Indian ask: "Why should we kow-tow before London or Paris or Berlin or Rome or New York or Chicago?" Nay, may he not ask, "Why should I tamely accept pedagogics at the hands of Rousseau or Spencer?" *Return to Nature* is but glittering rubbish. The natural state is mere savagery and life of uncontrolled impulse. *Dharma* is the secret of civilisation and culture. The Darwinian doctrine of competition and survival of the fittest is but the law of the jungle applied to the kingdom of man. The ethical process does not consist in imitating the cosmic process but checking it by humanising it and then divinising it. The glory of man consists in his selfless devotion to Humanity and to God. It is this attitude that Shelley describes as

"The desire of the moth for the star,
Of the night for the morrow,
The devotion to something afar
From the sphere of our sorrow".

Sensualism add pessimism and fatalism and materialism and hedonism and cynicism are casting their baneful shadow all over the world as the result of modern education. Life has ceased to be a romance, an adventure, a delight. It has become a grim hunt for a snug life and a good banking account. This is surely as low as it is barren and bereft of joy.

(To be continued.)

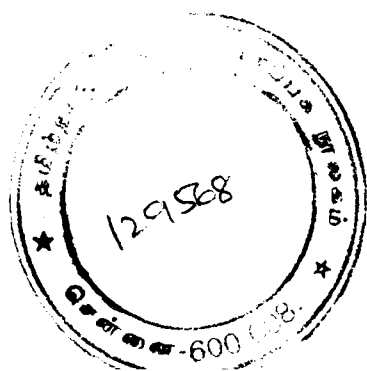
The Birth-Right.

BY SIVAPRAKASH.

It is usual to assume or assert that the birth-right of man is liberty. But pause to consider the matter and it proves a myth. It might have been demonstrable in the golden dawn of the Universe when a certain type of Misanthropy hypothesises all the glory that is not, existed. Such a golden dawn is itself a myth I fear, and myths might have been demonstrable then. But what is that rare kind of birth-right, called liberty? Is it freedom to act or think as one liked? Well then, from the dawn of the human mind, there has been limitations upon its powers, if not to conceive, at least to crystallise the thought into expression, as in Political liberty; if not to contemplate an act, at least to achieve it as in social and religious liberty. It may be that at times, as in the hoary past, there was no organised restriction upon the freedom of the individual, but it never was an untrammelled birth-right. Even Cain, typical of a frame of mind and the earliest advocate of liberty, couldn't escape being banished to wander with the branded brow. To my mind the only birth-right is bondage. The soul, the supreme, the luminous one, according to holy scriptures, desires and gets entangled in births. Birth itself therefore is bondage; and what else can be the birth-right, the prime and the perfect birth-right, but bondage? Born in the body, the Atman suffers the limitations derived from heredity and the handicraft of nature, limitations to which the flesh is heir to. The Atman, which the Upanishads declare to be above all bondage, is bound by its own imaginings and descends to the earth and realises the rights of bondage. The breast-milk it imbibes is the first link in the long chain it is going to forge for itself before it tries to think of the lost heritage. Hunger which is the desire to grow, cries for the milk, and the milk while satisfying, moulds the fetters of love. The fetters of love are euphemistically termed the silken cords. May be they are of gold, but they still bind, not break the slavery. The slavery of Samsara begins here. The family curb is extended to the curb of the body politic. The ties of family and thorny bridles of the highly organised state, are at the two extremes of the Soul's experience. All the qualities derived from the three-fold clay-house are only so many chains that gather round the soul which courted the birth and is caught in the bondage. Death is an exit no doubt but the wise say that death does not lead to the land from which there is no return! How can one get rid of this bondage? Will Avadutha Sanyasa rid the soul of this wretchedness,

this birth-right of a bondage? The Lords of mystic lore are aware and avow that true liberation is in Videha Kaivalya, only attained by non-attachment. The Peace of the Cave-dweller, of him who is at the Heart-cave, in other words the balance after discharging the liabilities of the life-house, is of this nature, for though he may dwell in the cave, he is not an enslaved resident there, but the Prince who having paid up for the birth-right of bondage here, has reacquired his prenatal condition, and has made of death, not the door to rebirths in bondage but the pregnant glory of the grace of the Great-Oneness which is compact of all creation and Creator. Death no more is the way to ignorance, but to knowledge which liberates the soul from love and hate, like and dislike, form and phenomenon and freedom which presupposes thralldom. Desire no more baulks the soul's enjoyment of its own immanence; and then there is the enjoyment of a different birth-right, being born on the other side of death. If therefore the only birth-right is not bondage, it is death—it is deliverance from bondage—but there is the rub!

But for me, let it be not that liberty which lies on the lip and reigns nowhere, but bondage—as a birth-right or as an acquisition—if it be of the bonds of that infinite love which only a guru can show and save the shishya with, the grace and power of knowledge; and that immaculate love like Savitri's which transcends the barrier of death, or Chudalay's which descends as Divine food; and that fathomless love that is a friend's which abides Sans conditions, through affluence or adversity; and that parental and filial love complementing each other for the welfare of both, here and hereafter. It is a birth-right no one can grudge the exercise of, it is a birth-right no one can deprive one of—it is a birth-right which blesseth one at home and abroad, on earth and in Heaven. Blessed is the mortal who is so happy as to live in that bondage, for Peace is there, or nowhere.



The Children's Charter for India.

Draft for Criticism and Circulation.

THE PREAMBLE.

WHEREAS THE ALL INDIA FEDERATION OF EDUCATIONAL ASSOCIATIONS is convinced that the Indian Society and the Indian State (British & Indian) owe to the child the best that they have to give:

AND WHEREAS it is also convinced that the continuity of our Race and Culture and the realization of all our unfulfilled aspirations and ideals depend upon the child who is the future man:

THE ALL INDIA FEDERATION OF EDUCATIONAL ASSOCIATIONS declare the following to be the birth-rights of every child born in any part of India and in any strata of society irrespective of caste, creed or colour: and enjoins upon the Society and the State to discharge the undermentioned duties towards the child:

THE CHARTER.

I. EVERY CHILD is a national asset of first class importance; and it is the duty of the State and the Society to widely diffuse the knowledge and practice of Eugenics and emphasise the parental responsibility of careful marriage and mating, so as to transmit the highest possible potentialities to their children. It is the foremost duty of parents, society and the state to provide for every child free and adequate means for its full and complete normal development—physical, mental and moral.

II. EVERY CHILD must be helped by all concerned to be born under proper hygienic conditions, and it is the duty of the State and the Society to see that such conditions are provided for every child, irrespective of caste, creed or colour and also irrespective of the economic or social status of the family in which the child is born.

III. EVERY CHILD'S mother must be provided with free and adequate succour during the pre-natal and post-natal periods so that the child may be born healthy and its growth may go on unhampered by adverse family circumstances.

IV. EVERY CHILD must be adequately nourished, clothed and must be provided with hygienic surroundings for dwelling, irrespective of the economic or social conditions of the family in which it is born.

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V. CHILDREN that are orphans and the waifs must be properly sheltered, clothed and fed and must be provided with free and adequate means for their normal development—physical, mental and moral.

VI. EVERY sub-normal and defective CHILD must be given a special treatment for putting it on the path to normality, failing which it must at least be provided with full facilities to make its life endurable and easy.

VII. EVERY delinquent child must be reclaimed from the baneful effects of the bad homes, bad company or bad surroundings and must be in all possible ways enabled to shed off its delinquency and to return to normal life.

VIII. EVERY CHILD must be insured against sickness or accident.

IX. EVERY CHILD'S person must be regarded as sacred and inviolable in times of all kinds of disturbances and it should be the first to receive relief in times of all kinds of distress.

X. EVERY CHILD must be protected against all the inhibitions of fear as well as against every form of exploitation—physical, mental and moral.

XI. EVERY CHILD must be brought up on the principles of the dignity of labour and must be trained to earn its livelihood by fair means.

XII. EVERY CHILD must be afforded opportunities for the best and highest education it is capable of, *i. e.*, the fullest development of all the child's power—intuitive, affective, cognitive and active to their highest capacity, and be set in the intelligent and creative relationship with his or her environment, mundane or extra mundane.

XIII. EVERY CHILD must be initiated into the principles of Physiology and Hygiene, Aesthetics and Eternal Verities found in Nature and in Life.

XIV. EVERY CHILD must be given full opportunities to develop fearlessness, self-initiative and self-expression and power of forming independent judgment.

XV. EVERY CHILD must be brought up on the principles of unity that underlies all forms of life, so that it may develop respect for all forms of life.

XVI. EVERY CHILD must be brought up to have respect for the elders and to love all that is best in the various race-cultures and religions of its land.

XVII. EVERY CHILD must be brought up to have sympathy for the weak, the defective and the old and must be trained to help them.

XVIII. EVERY CHILD must be allowed to mix freely and on terms of equality with any other child of either sex, irrespective of caste, creed or colour.

XIX. EVERY CHILD has a right to be educated in its own mother-tongue at least during the Primary and Secondary stages.

Student Life at the German Universities.

BY DR. ADALBERT EBNER.

With the reorganization of political conceptions and economic ideas there also arose a new type of citizen in the Third Reich. The type of student and, at the same time, life at the Universities have also changed. National Socialism as a view of life has broken with individualistic thought, and replaced it by the idea of the Community, of which the great final aim is the nation. The Community idea demands good order and discipline; the Community involves a leader and a following.

It is the task of the German Universities to serve the purpose of realising the National-Socialist cultural idea by research, instruction and education. Science itself will be bound up with the nation in order to draw all inspiration for its questions and thoughts from this connection with the people. The student is to be educated at the University as a National-Socialist German, and to be given his scientific professional training there. The vocation of the academic youth is to become the leaders in the formation of the future of the nation and the State, and to carry out the material reconstruction of the Father-land. The nation wishes the students to be German men with the virtues of honour, honest pride, enthusiasm, readiness to make sacrifices, and faith so valuable for a community life.

Within this framework three fundamental guiding lines in the life of the German student may be recognised.

Owing to his association with the people, his life has been given an aim which, however, he cannot learn as knowledge, but must acquire through experience of Socialist community life. He thus becomes a national student.

Their own distress and their own fate has made politicians of the students. They, the section of the nation with the greatest vitality, were driven to the limit of endurance in the wretched struggle with the idea that there were no prospects of obtaining employment. In their despair they were filled with the fighting spirit when National Socialism once more provided them with faith and hope in the future. They thus became the pioneers and storming parties of the new Reich, and are now the guardians of its ideals. Hence the German student is a political soldier.

The students' life is governed by work. In the struggle for vocational training based on genuine scholarly methods, they seek to increase the knowledge and ability necessary for their vocations. This work is marked by academic freedom in the National Socialist State too. All that it recognizes is the voluntary pressure born of inner moral strength which is a wonderful idea in student life. Hence the German student is a worker.

The realisation of these lines of guidance indicated in general terms is provided for by newly created institutions:

Before the young student enters the University he must have gone through a period of labour service. The fundamental form of this labour service is the camp. Students, peasants and workers are to live alongside of each other in these camps, do the same work, and get to know and understand each other for the general good. In this comradeship the students gain experience of Socialism. He is not out to find regular employment in the labour camp but a task and a serious duty. The camp is to provide him with the idea of work as "service to the nation as a whole". Here he will gain experience of the sufferings and the longings of the people.

In order not to let the impressions received during this period evaporate when the young student comes to the University the "Kamradenschaftshaus" or students' hostel was created. Community is the means that is to be used to educate the young people, and consequently it must also be their form of life.

The purpose of hostels is political education which will be achieved by means of schooling political reports on the events of the day and suitable books. They pursue a course of physical training by means of games and discipline, but their real task is the educational work which is systematically included in the whole programme of the day's work. Besides this, social work for students will also be done in the "Kamradenschaftsheim" or students' home, which therefore maintains ex-

change relations with instructors drawn from the nation. The "Kamradenschaftshaus" is managed by a leader, and the student stays here for his first year.

As a political soldier, the student is a member of one of the Storm Troops or Defence Squads. In these formations he is the guardian of his ideals, practises comradeship and discipline, and has an opportunity of taking physical exercise.

His position at the University is regulated by the students' law. The responsibility for and leadership of the entire body of students is undertaken by one of their comrades as leader, who maintains absolute discipline among the rest. Along-side of the leader is the League Chamber in which the students' corps are represented. The principal member is the speaker who is in close touch with the leader. The leader himself has a consultative voice in the Senate of the University with regard to matters affecting the students.

The professional corporation is also represented as a constitutional link in the body of German students. The professional corporation has its own legal rules and regulations. Every student is obliged to join it, and does so as a rule during his second year at the University. The task of the professional corporation is to continue the political education in the spirit of National Socialism. Its work is done by means of lectures which the University officials are requested to arrange, delivered by specially appointed lecturers or also by a working community established by the professional corporation itself. The curriculum includes national-political and National-Socialist schooling, training in history and knowledge of Germany, and an introductory course in philosophy and art.

A suitable part is also played by life in the students' corps in the Third Reich. While the students' corps were already firm supporters of the State before the War, a fresh phenomenon is the Socialism which has now found its way into them and forms a tie between them and the people. The independent student who belongs neither to a political formation nor to a students' corps is not provided for in the Student's Law. The Students' corps have thus assumed a fresh importance. Students' duels have also been retained, and what was formerly forbidden or yet tolerated by the State is now permitted as an effective means of education in self-control, resoluteness and formation of character. The idea of honour, which the armed student has always defended with his weapon in his hand, will also be cultivated in the new State as a valuable asset in the student's character, but this idea has

assumed a fresh form, for it includes both personal and professional and also national honour.

Games play a great part in the life of the young student, but these forms of exercise are also a means of completing his educational principles. Sport is not practised for its own sake, and is to be nothing superfluous. The students intend to awaken the virtues inherent in the German character by means of sport. The students are really represented in every branch of sport, in light athletics, matches, and in ball and lawn games. But other forms of sport are also practised which are very popular with German students, namely, mountaineering, gliding and aquatic sports.

The life of the students does not overlook the art of the nation. They take part in the creative art of the nation as in other genuine art owing to the necessity of satisfying their feeling for the beautiful. In addition to this, they turn to art for other reasons. After all, art is not isolated. It awakens problems in the mind of the individual, and is developed here as the meaning of life itself that knows no end. In this way the life of a student also plays a creative part in art. The State, however, provides the student with the possibility of going to the theatre, listening to music, and seeing works of art all the year round at small cost.

The student arranges his life in accordance with the profound seriousness of the times, but in his connection it is not forgotten that youth is still youth and demands its rights. One of these rights is the students' festival which include the "Kommense" or commensal meetings which have not disappeared from the students' festivities, but unlimited and senseless alcoholic excess in these festivities belong to a fabulous past. The self-discipline of the modern student only permits him to enjoy happiness. The cultivation of gaiety is now one of the features of the students' festivities and is expressed in gay students' songs as clear as the wine in a glass.

Sociability is also a part of the students' life. It finds its finest expression in mutual respect and good behaviour, and harmless but genuine gaiety.

These forms of life also find expression in the external appearance of the students' life at the Universities. The Community idea leads them to make huge demonstrations an independent unit. The streets are filled with these political soldiers who wear their brown garb of honour with pride, but alongside of them the gay colours of the students' corps have

retained their place. Their common profession of faith is demonstrated outwardly by the German greeting and realised afresh in their hearts.

The life of the student in the Third Reich is no easy task. It includes the whole being, and demands the whole of his strength but it is supported by the fact that belief is the source of strength. The "amalgamation of German youthful gaiety with the moral feeling of responsibility connected with God and the nation" leads to a form of students' life which is "gay, German and upright".

The German Universities too not only receive German but also foreign students. As homes of research, knowledge and teaching, the gates of the Alma mater are still, as they were in the past, for every foreign student the entrance leading to unusual treasures. As a member of this community, the foreigner enters the University as a guest, and the exercise of hospitality is an eminently fine characteristic of the German Universities in the Third Reich. But the foreigner is free from all the obligations imposed on the German student. He merely enjoys the rights derived from his academic citizenship. In addition to this, the new Community to which he belongs will exercise its honourable obligation of host in tireless endeavours to show him the beauties of the country, the national treasures and the life of the people. The academic offices for foreigners at the Universities undertake the organization and execution of this desire, and at the same time provide an atmosphere of home for the sons and daughters of all countries who have met on the basis of attachment owing to their common experiences at the university. The spirit of comradeship at the German Universities will, however, be the bridge leading to general friendship.

School and Backward Pupils.

BY MR. G. V. AYYAR, B. A.

Almost in every class the backward pupils form the majority. The very best are a handful, two or three, four or five; those of the second degree are about a dozen; the backwards, in varying degrees of backwardness, form the greatest number. How is one teacher to tackle so many varieties of learners? This is a question often put by teachers. As a general rule, the backward pupils are despaired of, they never improve an iota, and are promoted by sheer length of stay in the same class, causing the same inconvenience to teacher after teacher. Such pupils are never reformed, and leave the school, as a general rule, unreformed.

The headmaster of one school denies that any pupil is too bad to improve: he maintains that 19 out of 20 pupils can and ought to pass the examination. The better class of pupils hardly need help—they are a help to the teacher; they require little or no teaching. They can almost be left to themselves. It is they that take the first rank at examinations and hold the first places in public service, later on. The headmaster would give less time and attention to these first class pupils, a little more to those of the second degree, and the best part of his attention to the most backward. From the very outset, he divides his class into these three groups and his objective is to bring all the pupils gradually to a level as far as possible. He maintains that the teacher's part is not merely to give the finishing touches to his pupils, nor merely to lecture to them on the lesson but to examine and diagnose each of his pupils, and apply to each the remedy each case requires. A few of the very bad are detained after class, and given efficient additional teaching free of cost. It is the height of kindness to give free additional tuition to those that need, and eventually this proves even more advantageous to the teacher than the tuition that brings an immediate income. For, ultimately the real paymaster is God, not man; but he who overworks himself in his duty gets the extra he deserves in some shape or other, often unexpected.

I once visited the fourth standard of a school and examined the pupils in English. The first six knew their lessons well, but the last seven knew nothing, and could hardly read or spell the words, and yet the whole class had to all appearance done 30 lessons. I straight-away went back to the 10th lesson; even that had been badly learnt by the majority. Each of the backward pupils was made to read that lesson three times. At the end of the hour, all the pupils together were sure of at least one lesson, and a spirit of confidence had begun to animate the class; and the way was paved for the better learning of the next lesson. The teacher could then see that, proceeding on the basis of thoroughness and insisting on all learning a lesson before further progress was made, he would have very little reason to complain of the dullness of his pupils. Some pupils are undoubtedly slow, some are dull, but hardly one in a hundred is demented and unfit to learn. A class is not surely the preserve of the best pupils; and the backward pupils are not fairly, to be the butt of abuse. They belong to mankind as well as the most gifted; and to disrespect them or treat them with contumely, call them asses, and dunces and duffers, would hardly be kind.

The headmaster, in his pressure of work and excess of routine, finds it difficult to spare time to visit each class and make his acquaintance

with the various kinds of scholars in his school. Delicacy also stands in the way. But the gradual training up of the teacher until he is turned into a thoroughly reliable and intelligent workman, is a task that only the headmaster can do. One headmaster made it a point to give every teacher a clean hour's interview once a month, if not once a fortnight, to examine his books, his note-books, his readings, his class work &c. to probe into all his work, to understand his merits and his defects, and offer suitable, kindly advice and instructions. The assistants were thus turned into a band of learned, skilful, efficient, devoted and loyal assistants. The same headmaster also made a habit of examining heaps of boys in the same way and after understanding thereby the defects in the teaching, very confidentially and delicately, advised the teachers concerned. No wonder the school became all but perfect.

Gleanings.

News versus Knowledge.

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 "The removal by the telephone, the telegraph and the radio of those barriers of time and space which have always widely separated mankind, together with the ability and zeal with which the art of journalism has been carried forward during the past generation, has resulted in the development of new problems of public character which are not easy of solution and which have important practical bearings. The news of the immediate day, whatever its character and from whatever point it may come, now takes an overwhelming precedence in the conscious attention of the vast majority of those who are able to read and who do read. Their intellectual life, if it may be dignified by that name, consists wholly in leaping from head-line to head-line. It is from an appalling crime in the morning to a tragic accident in the afternoon or to the record of unthinking appropriation of hundreds of millions of non-existent public funds in the evening, that their conscious attention jumps. So rapid and of such immediate interest are news items of this kind, which it is the bounden duty of the daily journals to present, that the readers of these journals find little time, opportunity or invitation to think. They have become journalistically minded, and news constitutes pretty much the entire body of their knowledge.

"As yet twentieth century man has not adjusted himself to a life in which news which is perhaps of merely momentary interest and passing importance plays so dominant a daily part. He finds himself compelled to try to keep abreast of the news in order to carry on conversation with his fellowmen and to deal with the tasks of daily life. His problem is, while doing this, to find time to think, to reflect, to understand and to fit the passing news into its proper framework of understanding and interpretation.

"The more news which the daily journals bring to the attraction of the public, the more important it is for that public to understand the meaning of the news, the lessons which it teaches and the conduct and policies to which it points. Man cannot live by newspapers alone. He must learn to make news take its place in the raw material of ordered and reflective knowledge. Unless he does so, news itself will have for him merely an emotional value and his intellect will atrophy.

"It is not without interest to record the fact that the wisdom of Goethe saw all this a century ago and at a time when these tendencies and habits were simple and small indeed, compared with what they have since become. These are Goethe's words:

I cannot but look upon it as one of the greatest misfortunes of our age that it allows nothing to ripen quietly; that the next moment, so to speak, devours the preceding; that no time is allowed for digestion; and that we live from hand to mouth, without leisure to bring forth any finished product. Have we not reviews and magazines for every hour of the day? By this portentous machinery everything that a man does or writes, or intends to do or write, is dragged before the public. No man dare do anything, enjoy or suffer anything, save for the delectation of others; and thus every trifle goes from house to house, from town to town, from kingdom to kingdom, from one quarter of the world to another, at galloping speed."

NICHOLAS MURRAY BUTLER.*

* From the Report of the President of Columbia University for 1934.

The Dean of St. Paul's on Education.

The Dean of St. Paul's (Dr. Matthews), preaching at a service at St. Mary Abchurch which was attended by delegates to the meeting, said that among the instruments for carrying civilization forward there was none, except the home, of more importance than the school. The material with which the schools had to deal was not entirely raw when it came to them. In essentials our children had the minds of primitive men. They had to be civilized. The problem of civilization was the problem of the educator.

Some schools seemed to have laid almost the whole stress upon docility. They had attempted to mould their pupils into some pattern which was desired by the society which they served, and when this element in education was carried to excess the school discouraged initiative in the boy and condemned itself by being a place where genius was not fostered and might even be killed.

On the other hand, there were schools and theories of education which seemed to place all the emphasis on initiative and expected every child to be a genius—places where discipline was a name of reproach. The effect of this type of education was not yet sufficiently apparent to enable them to pronounce a decided verdict, but it was easy enough to see the danger which they ran.

The existence of society depended upon docility and a discipline which could not be assumed as original endowments of human character. If all children were trained as leaders and nothing else, one wondered how the army would march, but, of course, the ideal at which they aimed, and which they would never achieve, was to produce a harmony of these two qualities, initiative and docility. A perfect society, could it exist, would consist of men who could both lead and follow. Though all human beings were not geniuses, no human being need be a robot.

—[The Times]

Report on Examinations.

(Hyderabad Teachers' Conference.)

1. Examinations may be given
 - (a) To promote students to a higher class.
 - (b) To arrange candidates in order of merit.
 - (c) To test the knowledge acquired by the candidate.
 - (d) To test the effectiveness of teaching.
 - (e) To diagnose the weakness or aptitudes in (1) pupil, (2) teaching & curriculum.
 - (f) To create in students a stimulus for study.
 - (g) To enable an employer to select an efficient worker.
2. Examination is essentially a measurement and therefore reforms in examinations are attempts to secure greater reliability and validity in measurement.
3. Questions must not be couched in high sounding or ambiguous language but must be simple and direct. They must cover the entire portion including the easier matter. The first few questions should be easy and must create a feeling of confidence among the students. If difficult questions are set in the beginning they have a harmful effect, especially on nervous candidates. A few questions should be such as to encourage original thinking, deduction or observation.
- In some subjects, such as Mathematics, instead of giving 12 questions, it is more desirable to give 35 or more simple questions which can be answered in about two hours.
4. The traditional examination is predominantly of the Essay Type. It is difficult to measure the essay, because it is complex and made up of many factors like spelling, idiom, handwriting, comprehension, etc. In general, the essay type of questions should be minimised and should be replaced by objective type of questions where the personal element of the examiner is eliminated.
5. The True False Test, the Multiple Choice Test, the Completion Test etc., are known to have increased the interest and efficiency of class teaching for the following reasons:—

- a. The correction is not subject to the eccentricities of the examiner.
- b. Owing to the large number of questions the element of chance is reduced.
- c. It is possible to cover a cross section of the entire course.
- d. Intelligence and attainment may be measured separately.
- e. It gives no place for the crammer and prevents students from committing to memory the opinions of annotators and professors.
- f. It prevents guess work on the part of the students about probable questions.
- g. It saves the time of the teacher, who has a large class.

And the use of these tests is therefore strongly recommended.

The essay type of questions may be used to judge aesthetic appreciation, the organisation of a field of knowledge or creative thought.

It is essential to regard the two types of examinations as complementary.

6. We believe that short tests requiring a few minutes, given at frequent intervals and without previous notice to the students are of value, e.g., 15 questions on subject matter requiring word or phrase answers to be answered in about eight minutes.

7. We believe that class examinations, some of them preferably brief and objective be given at least four times a month, and of these three examinations be without previous intimation to boys.

8. In examinations, instead of giving marks, it is sometimes desirable to have a five division scale involving words—Excellent, Good, Fair (being the average), Poor and Bad—or letters, A, B, C (average), D and E “so as to simplify evaluation and secure a more even distribution in the scale”.

9. To measure relative ability, an easy paper is much better than a hard paper. A good paper must enable an average student to pass his examination. A few hard questions must be given for the purpose of selecting the more intelligent students.

10. There should be a judicious combination of oral and written tests, particularly in the Primary Stage. In the Secondary Stage, Viva Voce tests are meant to test ‘the intelligence, alertness and the general intellectual outlook of the students’.

11. The annual examinations should not be the sole test in determining promotions to the higher classes of borderline students who have failed.

12. In valuing the ‘essay type’ answers it is desirable to value question by question and not paper after paper, in order to avoid variation in standard.

13. We recommend that steps be taken for the preparation of intelligence tests and the training of teachers in their use and interpretation, with a view to their application in schools.

14. We recommend the provision of suitable schools of special classes for feeble minded children, with trained teachers who could help the children to become self-supporting and not a burden on the community.

15. We recommend the consideration of the eventual possibility of the formation of a department for vocational guidance, and the arrangement of suitable tests of special aptitudes and teams of tests for special occupations.

16. We believe that public examination questions be not set by an individual but by a panel of examiners. It is desirable to have some teachers with at least an experience of five years on this panel.

17. Public examinations should be such that average students of an average school pass. At least 50-55% of the candidates must pass an examination.

18. Teachers’ Training Colleges can help teachers in service by instituting a course of extension lectures on the mathematical and statistical aspect of examinations.

19. It is recommended that the Educational department prepare standard Tests in Arithmetic or English reading to serve as a basis of experiment, and provide a model for objective types of questions.

Notes

Text-Books

Another comment from us on the G. O. on Text-Books seems to be necessary. An M. L. C. of Madras recently wrote in the ‘*Hindu*’ gloating over his being instrumental in ushering in this G. O. He regretted that teachers should agitate for the cancellation of his benevolent move. His reason was that in District Board and Municipal Schools, the President or the Chairman had usurped the powers of the teacher and the latter had no voice in the prescription of books, and it was to remove this abuse he had influenced the Minister to act as he had done. It may be that the M. L. C. had diagnosed correctly, but has he sought and applied the correct remedy? Is he right in getting the aided schools also within the purview of the G. O.? Did he consider whether it would be educationally sound to have text-books unchanged for five years? A wiser course in the circumstances would have been the enactment of a G. O. strict-

ly discountenancing the encroachment of Managements on the legitimate powers of the teacher. Fettering the discretion of the teacher in these vital matters and dallying with educational problems without regard to consequences is deplorable. We wish the M. L. C. and the Minister had exercised wider vision and farsight.

Compulsory Primary Education at Kumbakonam.

By Mr. S. VASUDEVAN, M.A., B.T., Associate Editor.

True lovers of education will be glad to read the report on the working of the Compulsory Education Scheme in the Kumbakonam Municipality for the year 1933-'34. It states: "All boys of school age and 73.8 per cent of the girls are attending the fifty three municipal and non-municipal schools in the town". These figures will speak for themselves as to the success of the scheme. It is creditable that a high percentage of the girls of school going age are at school, even in the absence of compulsion. It is noteworthy that mixed schools are popular.

The question of wiping off mass illiteracy seems to be engaging the serious attention of the Municipality, as evidenced by the starting of night schools, libraries and reading rooms. Recalcitrant elements may sometimes hamper the progress, but smooth-sailing can be secured by enlisting the co-operation of the public. We wish the Municipality all success in its endeavours towards the advancement of primary education, and hope that it will continue to give a similar lead in other educational activities also.

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Reviews

1. General Science: Book IV for Form IV, in Tamil: By M. Narayanaswami Ayyar, B.A., L.T., Science Asst., St. Michael's High School, Coimbatore. Published by V. S. Venkataraman & Co. Kumbakonam. Price: Rs. 1.

This forms the fourth of the series of Science Books in Tamil by the author written in conformity with the latest syllabus. The matter has been correlated with the daily life and surroundings of the pupil. Each lesson has been intelligently planned to treat of the 'What, How and Why' of the topic and written in simple, terse Tamil. The method is practical and concrete, with simple experiments and demonstrations. Diagrams have been added where necessary. The questions at the end of each lesson will be greatly helpful in bringing home the essentials of the subject. Technical terms in Tamil have been used only where necessary and their English equivalents have been given side by side. Vernacular terms have been adopted from the list published by the Government. Written by an experienced teacher, the publication reveals the author's clear grasp of the requirements of the class. The book will be found very useful by pupils studying the subject in Tamil.

2. Readings in English Literature, Part II: Edited by K. Srinivasa Kini, B.A., L.T. and published by The Basel Mission Book and Tract Depository, Mangalore. Price: Re. 1.

Part II under review has been planned on the same lines as Part I reviewed in our last January number. The selections have been carefully made, most of them from modern authors, to suit the recent circular from the Madras S. S. L. C. Board. There are three sections in the Book, the first dealing with Prose, the second with Poetry and the third with Exercises in written Composition. The explanatory notes, questions on subject matter and the exercises in grammar and composition, continue to be the special features. The neat print and get up along with the interesting contents of publication make it eminently suitable as a text-book for use in High Schools.

3. Confessions of a Thug: (Abridged and Adapted): By P. K. Ananthanarayanan M.A., L.T. Published by Bharathi Publishing House, Bangalore City. Price: 12 as.

Meadows Taylor has been known for his interesting historical romances embodying faithful pictures of Indian life. The author of the book under review has done a service to youngsters by introducing them to one of such stories. The hero of the narrative was a daring Thug responsible for many murders. A few of his lively adventures find a place herein. Reading through, one will glean an idea of the customs and practices of the Thugs, their organisation and their extensive operations. The story makes easy and delightful reading. It will serve as a good book for library reading in schools.

Books Published by Macmillan & Co., Ltd.

4. The Critic: By R. B. Sheridan. Edited with introduction and notes by Robert Herring, M. A. Price: 1/6.

The 'English Literature Series' published by Macmillan & Co. has been enriched by this addition. The introduction should be very helpful to students of literature. First there is a biographical sketch of Sheridan. It is followed by a section dealing with the life of the people of the 18th century which shows how the drama was influenced by this. Next there is a critical appreciation of the construction and characterisation of the play. The stage before and after Sheridan and the characteristics of the Drama in the 18th century next form the subject of discussion. The introduction thus gives the reader a comprehensive idea of the English drama. At the end of the play are given brief notes, some dates of the period, questions, subjects for short essays, and a list of references which would prove as 'helps for further study'. The book would be useful to undergraduates.

5. Longer Poems Old and New: Selected and edited by A. S. Cairncross, M. A., D. Litt.

This is another of the Scholar's Library Series, very handsomely got up. Readers who have a taste for English literature will appreciate the discernment of the editor in the selection of poems in this compilation. The rich variety found herein from Chaucer down to our own days forms a delightful anthology. The questions at the end bearing on each poem are critical and capable of testing the reader's appreciation of poetry. The volume will prove a good text-book for the University classes.

6. Hydrostatics and Mechanics: By A. E. E. McKenzie, M. A.

This is an elementary treatise designed to suit the requirements of the School Certificate. It is divided into two sections, one devoted to *Measurement and Hydrostatics* and the other to *Mechanics*. The author, as a general rule, attempts to bring home the fundamental notions of the subject by explanation supported by apt applications of the principles visualised by pictures and suggestive diagrams. Pupils who find Mechanics abstruse will obtain a clear grasp of it by studying this book. The author has pressed to his service the remarkable engineering and aerial feats to illustrate and explain the laws and principles of the subject. The study throughout is fascinating and instructive. The value of the book is enhanced by the topical summaries and questions added at the end of each lesson. Pupils who desire to have an intelligent grounding in the subject will find the volume highly useful.

7. Milton's Paradise Lost Book. II: Edited by M. Macmillan, B. A. (Oxon.), D. Litt.

University students will find the booklet under review helpful in their study of English Classics. Edited with copious notes and a highly illu-

minating introduction, it will prove an excellent companion to them. The circumstances under which Milton preferred to compose this great epic, how far he was original in the choice of his materials, the superiority of his first two books over the others, and a comparison of the poet's representation of Satan with that of Valmiki's Ravana and similar proto-types, are some of the topics discussed in the introduction. The notes give meanings of words, and phrases, allusions etc. and the appendix, the important grammatical peculiarities. The booklet is attractively got up.

8. Self-Help in English Composition: By Anthony Desmond. Price 1/6.

The author has written this with the aim of giving to students and teachers a number of rules that will assist them in detecting errors in English Composition. The book is confined to errors in Grammar, in the use of particular words, and in indirect narration. Having been engaged in the teaching of the English language to Asiatic pupils for a long time, the author has an intimate knowledge of their common errors, and this book therefore, is of great value to pupils who wish to write better composition. We strongly recommend it to the attention of all English teachers.

9. Observational Geography of the British Isles: By Herbert Hatch B. Sc., and C. R. P. Duckering. Price: 2-6-0.

This has been designed to suit the requirements of the school certificate course in England, and will be found equally useful to Indian Schools. The authors' aim herein is to make geography study practical. The knowledge of the subject will be vague unless pupils make an organised observation of streams, cliffs, roads, farms and other parts of the subject matter of the science. Accordingly, thoughtful suggestions for practical work have been given. The book is divided into three sections, Physical, Human activities and Regional. Each chapter has a set of exercises to be done by pupils either in class or at home, and they are in consonance with the aim of the authors. The publication will prove a valuable addition to every school library.

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MR. V. ARAVAMUDA IYENGAR, B.A., L.T.,—*Managing Editor.*

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No. 6.

Education in Germany

BY MR. K. S. VAKIL, M. Ed., M.R.S.T., F.R.G.S., I.E.S. (RETD.)

Soon after her defeat in the last Great War, as after her defeat at Jena in 1806, Germany recognised the need of reorganisation of her educational system.

In the Constitution she adopted in 1919, she provided for education as follows:—

"The Federal Government, may, by law, prescribe fundamental principles with respect to Education, including higher education and scientific libraries.

"Art, Science, and instruction in them are free. The State guarantees their protection and participates in their promotion.

"The education of youth shall be provided for through public institutions. The Reich, the states, and the municipalities shall co-operate in their organisation.

"Training of teachers shall be uniformly regulated for the Reich according to the principles which apply generally to higher education.

"Teachers in public schools shall have the rights and duties of state officials.

"The entire school system shall be under the supervision of the state: the latter may permit the municipalities to participate therein. Supervision of schools shall be carried on by technically trained officials who are mainly occupied with this duty.

"Compulsory education shall be universal. This purpose shall be served primarily by the elementary school (Volksschule) with at least eight school years, followed by continuation school up to the completion of the eighteenth year. Instruction and school supplies shall be free in elementary and continuation schools.

"The public school system shall be organically constructed. The middle and secondary school system shall be developed on the basis of a *grundschule* (foundation school) common to all. This development shall be governed by the varying requirements of vocations; and the admission of a child to a particular school shall be governed by his ability and aptitude and not by his economic or social position or the religious belief of his parents.

"To enable those in poor circumstances to attend secondary and higher schools, the Reich, the states, and the municipalities shall provide public funds, especially educational allowances, for the parents of children who are considered qualified for further education in middle and secondary schools until the completion of such education.

"Private schools as a substitute for public schools shall require the approval of the state and shall be subject to the laws of the states. Such approval shall be granted if the standard of the private schools in their curricula and equipment, as well as in professional training of their teachers, does not fall below that of public schools, and if no discrimination against pupils on account of the economic standing of their parents is fostered. Such approval shall be denied if the economic and legal status of the teachers is not sufficiently safeguarded.

"In all schools effort shall be made to develop moral education, public-mindedness, and personal and vocational efficiency in the spirit of the German national character and of international conciliation.

"Instruction in public schools shall take care not to offend the sensibilities of those of contrary opinions.

"Civic education and manual training shall be part of the curricula of the schools. Every pupil shall at the end of his obligatory schooling receive a copy of the constitution.

"The Reich, the states, and the municipalities shall foster popular education, including people's universities.

"Religious instruction shall be part of the regular school curriculum except in non-sectarian (secular) schools. Such instruction shall be given in harmony with the fundamental principles of the religious association concerned without prejudice to the right of supervision by the state.

"Teachers shall give religious instruction and conduct church ceremonies only upon declaration of their willingness to do so; participation in religious instruction and in church celebrations and

acts shall depend upon a declaration of willingness by those who control the religious education of the child.

"Artistic, historical, and national monuments as well as landscapes enjoy the protection and care of the state.

"It shall be the duty of the *Reich* to prevent the removal of German artistic treasures to foreign countries". *

"To carry out these basic principles of educational administration, a special Department of Education in the Ministry of the Interior was created in 1920 and the following Federal School Law was passed:—

"I. The *Volkschule* (people's school) is to be organised in its first four years as the *Grundschule* (foundation school) for all, upon which the middle and secondary school systems shall also be built.

"These *Grundschulen* shall guarantee, along with a complete preservation of their principal task as part of the *Volkschulen*, also satisfactory preparation for direct entrance into either a Middle or a Secondary school.

"II. The existing *Vorschulen* (special junior preparatory departments of secondary schools) are to be abolished immediately." *

In 1921, suggestions for the determination of the aim and for the inner organisation of the *Grundschule* and for the construction of its curriculum were issued for the guidance of the states.

The subjects of secondary education and training of teachers are dealt with by a Federal Council of Education in the Ministry of the Interior.

Actual school administration is entirely in the hands of the individual states which are bound only by the principles of the constitution.

The schools are financed by the states and municipalities in proportions varying in the different states. As a rule, the state pays the salaries of elementary and secondary teachers which are everywhere fixed by law, while other expenditure is met by the municipalities.

The *Grundschule* is the common school for all children. It is the foundation of the whole educational system and covers the first four years of school life.

* "The Reorganisation of Education in Prussia" by Kandel and Alexander. pp. 179-186.

* Ibid p. 187

Its aim is to give a basic training on which not only the *Volkschule* in its last four years can be built but also the middle school and the different types of the Higher School.

The subjects of instruction in the *Grundschule* are religion, local informational studies, German, arithmetic, drawing, singing, physical training, and sewing for girls in the third and fourth years.

On completion of the course of the *Grundschule*, pupils proceed to the upper section of the *Volkschule* or to the Middle School or to any of the different types of the Higher School.

The upper section of the *Volkschule* is the finishing school for those children who, on completion of the compulsory school period, are to enter practical life and to receive their further education chiefly in vocational schools.

The subjects of instruction in the upper section of the *Volkschule* are religion (or moral instruction), German, history and civics, geography, natural science, arithmetic, geometry, drawing, music, physical training, and sewing for girls, and, in addition, where provision can be made, manual training for boys and home economics for girls.

Specially gifted pupils of the *Volkschule* are, at the end of their seventh school year, enabled and encouraged to proceed for further education to a special type of secondary school called *Aufbauschule*. It has a six-year course, which ends with a Leaving Examination (Abiturienten Examen or Reifeprüfung or Ripeness Proof or Maturity Test) leading to the University or to an institution of higher education.

The subjects of instruction in the *Aufbauschule* are religion, German, history, geography and civics, mathematics, natural science, first foreign language, (English or French), second foreign language, and drawing. Thus, promising pupils of rural and small town schools can, through the *Aufbauschule*, proceed straight to the university, if they choose to do so.

The Mittel (Middle) School stands between the *Grundschule* and the Higher School. It aims at providing a suitable type of preparation for many sorts of intermediate positions in the administrative service of the state or municipalities as well as in the large industrial and commercial enterprises.

The Middle School offers several alternative six-year courses: (1) a general course for boys, (2) a general course for girls, (3) a vocational-commercial or industrial-course for boys (4) a vocational-trade

and commerce or domestic economy and social welfare-course for girls, and (5) a course for pupils desirous of proceeding to a Higher School of an academic type. All these courses are very much alike during the first three years and very flexible during the next three years. The subjects of the general middle school course for boys are:—*Compulsory*: religion, German, history and geography, one foreign language, arithmetic (book-keeping), geometry, natural sciences, drawing, music, and physical training. *Optional*: a second foreign language, manual training, gardening, and shorthand.

The subjects of the general middle school course for girls are the same as for boys, with this difference that they have sewing in addition.

The Higher School is of the following types:—(1) *Gymnasium*, (2) *Pro-Gymnasium*, (3) *Realgymnasium*, (4) *Prorealgymnasium*, (5) *Reform gymnasium*, (6) *Reform Realgymnasium*, (7) *Reform Realprogymnasium* (8) *Realschule*, (9) *Ober Realschule*, and (10) *Deutsche Oberschule*. Of these, *Realschule*, *Progymnasium*, *Realprogymnasium* and *Reform Realprogymnasium* have a six years' course, while the others have a nine years course. *Gymnasien* are older and more classical in their aim, while *realgymnasien* and *realschulen* and *Deutsche Oberschulen* are more modern in origin, aim, and outlook.

After completing six years' course, the pupils of the *Realschule* proceed to the *Oberrealschule*; those of the *Progymnasium* to the *Gymnasium*; those of the *Realprogymnasium* to the *Realgymnasium*, and those of the *Reform realprogymnasium* to the *Reform real gymnasium*, and receive further education there for three years.

(To be continued.)

Statistics in Education

BY MR. B. B. SAMANT, B.A. (HONS.), B.T.

(Continued from May issue)

Variation Array.

Any science begins as a qualitative science and the rigid backbone of mathematics takes it to perfection. If we just cast a glance at the history of scientific achievements, we shall instantly see that they all began as qualitative sciences and later on developed into quantitative ones. Experimental psychology is now in no way an exception to this general rule, as a quantitative organization of psychological data has been successfully tried.

When we have collected educational facts in a numerical form the first task is to classify the data in some suitable way so that it can clearly bring out the general facts to light. Suppose we have got the marks of a class, then we have to properly arrange the result. Let us take one example.

Marks obtained by 35 boys in a class are given below:

35, 49, 52, 39, 42, 15, 56, 47, 36, 35, 55, 86, 68, 13, 67, 6, 74, 60, 21, 40, 30, 32, 47, 58, 57, 42, 33, 46, 26, 25, 76, 51, 45, 43, 54.

The boys are not arranged according to their marks, so the figures also are not properly arranged. When we arrange them in the descending order (highest number first and the smallest last) we get the second column in table 1, page (208)

We can now show this result graphically. If we draw vertical lines proportional to the marks of the boys, at equal distances on a horizontal line and join the tops of these vertical lines by a smooth freehand curved line, then we get an *ogive* curve representing the same result. This curve is known as the **variation array**.

The marks of the first boy are 86 and those of the last (the 35th boy) are 6. The point in the line representing the marks of the middle or the 18th boy is called the **median point**; and the **median value** or the **median** is the score of this middle boy, namely 45 marks. The median point can

be mathematically found out by the formula, median point = $\frac{N+1}{2}$; where

'N' is the total number of boys. As the number of boys in the present case is 35; so the Median point = $\frac{N+1}{2} = \frac{35+1}{2} = \frac{36}{2} = 18$.

The point half way between the median and the lower end is called the **lower quartile** (or in short **L. Q.**). It is given by the 27th boy and is equal to 33. In the same way the **upper quartile** (or **U. Q.**), which is half-way between the upper end and the median, is given by the 9th boy and its value is equal to 56. The formula for L. Q. and U. Q. points can be given as below:

$$\text{L. Q. point} = \frac{N+3}{4}; \text{ and U. Q. point} = \frac{3(N+1)}{4}$$

[NOTE: Some statisticians, however, take median pt. = $\frac{N}{2}$,

L. Q. pt. = $\frac{N}{4}$; and U. Q. pt. = $\frac{3N}{4}$. They define their median point as that point on the scale on both sides of which there are an equal number of measures, namely $\frac{N}{2}$ and not as the middle-most measure.]

Let us take another example. The heights in inches of 31 boys in a class are given below:

57.6, 58.6, 59.0, 59.2, 59.6, 60.3, 60.6, 61.1, 60.9, 61.2, 61.3, 61.2, 62.1, 63.8, 62.2, 61.4, 60.9, 60.8, 60.0, 60.4, 59.9, 59.5, 59.2, 59.1, 58.2, 58.8, 58.7, 58.1, 59.8, 59.8, 60.2.

The heights arranged in the ascending order of magnitude will be found in table 2 (page 208). The median is given by the 16th boy ($\frac{31+1}{2}$) and is equal to 60.0 inches; the L. Q. = 59.1" and U. Q. = 61.1". The variation array got from this result is an ogive curve which is opposite in nature to the one above.

(Note: If the number of boys be 100 then the median would be (given by 50.5 while by the other formula it will be given by 50.)

(Continued next page.)

No.	Marks	Deviation (from 40)	No.	Height in inches	Deviation (from 60)
1	86	46	1	57.6	-2.4
2	76	36	2	58.1	-1.9
3	74	34	3	58.2	-1.8
4	68	28	4	58.6	-1.4
5	67	27	5	58.7	-1.3
6	60	20	6	58.8	-1.2
7	58	18	7	59.0	-1.0
8	57	17	8	(L. Q.) 59.1	-0.9
9(U. Q.)	56	16	9	59.2	-0.8
10	55	15	10	59.2	-0.8
11	54	14	11	59.5	-0.5
12	52	12	12	59.6	-0.4
13	51	11	13	59.8	-0.2
14	49	9	14	59.8	-0.2
15	47	7	15	59.9	-0.1
16	47	7	16	(Md.) 60.0	0
17	46	6	17	60.2	+0.2
18(Md.)	45	5	18	60.3	+0.3
19	43	3	19	60.4	+0.4
20	42	2	20	60.6	+0.6
21	42	2	21	60.8	+0.8
22	40	0	22	60.9	+0.9
23	39	-1	23	60.9	+0.9
24	36	-4	24	(U. Q.) 61.1	+1.1
25	35	-5	25	61.2	+1.2
26	35	-5	26	61.2	+1.2
27(L. Q.)	33	-7	27	61.3	+1.3
28	32	-8	28	61.4	+1.4
29	30	-10	29	62.1	+2.1
30	26	-14	30	62.2	+2.2
31	25	-15	31	63.8	+3.8
32	21	-19			
33	15	-25	Total	1863.5	+18.4
34	13	-27			-14.9
35	6	-34			
Total	1561	+335 -174 +161			-3.5

Table 1

Table 2

The Frequency Table.

When the number of boys is very great, it is not so easy to arrange them according to their merit and without properly arranging the data, it would be almost impossible to make out anything from it. So another easier method of tabulation is adopted. The maximum number

of marks or *score* is divided into equal parts or *classes*. For example, if the marks are assigned out of a maximum 100, then we may divide the scores into 10 classes, each *class interval* being of 10 marks. (Note: we could have as well divided it into 20 classes of 5 marks each.) Then we tabulate the result. (see table 3 pp. 20.) In the first column, we write the classes of scores, say 0 to 9.9, then 10 to 19.9 and so on. The next column is the tabulation column. We take the score (on page 206) as it comes (not necessarily in an arranged form as in table 1 p. 208). The first score namely 35 marks falls in the class 30-39.9, so we put one line, one dot, or one sign for it in the tabulation column. For 49, we put one sign in the class 40—; for 52, in the class 50—; for 36, again one more in the class 30—; and so on. When we get five dots or signs, we group them together, just to simplify counting afterwards. When the entire tabulation is over, we count the lines or dots &c., to find the *frequency of occurrence* in each class and note it in the third column. (The tabulation column containing the check marks is only an aid for counting.) This table is known as the **Frequency distribution** or the **Frequency Table**.

Let us try to construct the frequency table from table 2. The height of the tallest boy is 63.8 inches while that of the shortest is 57.6 inches. So the *range* of distribution is 6.2" (=63.1"—57.6"). Here the total range for the class intervals may be taken from 57" to 64" for our convenience and may be divided into 7 classes, each class interval being of one inch. When tabulated, we will get the frequency Table 4 (page 210.)

So from these two examples it is clear that for the construction of the frequency table, we must (1) choose a suitable range to include the maximum and the minimum scores, (2) divide it into suitable class-intervals, (3) exactly determine the class limits, and (4) finally find out the frequency of occurrence in each class-interval.

[Note: the point about fixing the class-limit seems to be of much controversy. If the marks range from 0 to 100 and if the class-interval is to be kept of 10 marks, then any one of the following methods can be followed.

(1) Class-intervals taken as 0 to 10; 10 to 20; 20 to 30; and so on. In this arrangement it is doubtful in what class to put the marks 10, 20, 30 etc.

(2) Class-interval designated by the mid-point of the interval e.g. 20, 30, 40 and so on instead of 20-30, 30-40, 40-50, and so on. Each

score is to be put in that class whose mid-point is the nearest to that score.

(3) Class-interval stated thus: 0 and onwards, 10 and onwards and so on. (Generally written as 0-, 10-etc.)

(4) Another method is to designate it as: 0-9.9; 10-19.9 and so on. (The third or the fourth method is the most suitable)]

Frequency distribution of 35 boys			Frequency distribution of 31 boys		
Score Class interval = 10 Marks	Tabulation	Frequency	Score Class interval = 1 inch	Tabulation	Frequency
0-9.9	I	1	57.0-57.9	I	1
10-19.9	II	2	58.0-58.9	IIII	5
20-29.9	III	3	59.0-59.9	IIII IIII	9
30-39.9	IIII II	7	60.0-60.9	IIII III	8
40-49.9	IIII IIII		61.0-61.9	IIII	5
50-59.9	IIII II		62.0-62.9	II	2
60-69.9	III		63.0-63.9	I	1
70-79.9	II				
80-89.9	I				
		Total.. 35			Total.. 31

Table—3

Table—4

In table 3, we find that in the class-interval 40-, the frequency is 9. This means that 9 boys get marks between 40 to 49. The frequency is 3 in the class 20-, means that only 3 boys get marks between 20 to 29. Thus the frequency table gives us the general idea about the whole result. It is much easier to grasp the nature of the result from the frequency table, than from a heterogeneous mass of scores. For grasping the general situation, at sight, it will be still easier, if the frequency of distribution could be graphically represented. The graphical representations would be most serviceable when many results are to be compared.

(To be continued)

Some Aspects of University Education in India

BY MR. V. P. NATARAJAN, B.A. (HONS.), B.T.

(Concluded from May issue.)

Another vital problem is the relation between the Indian Universities and those abroad. On account of the insufficient provision in our country for research work in literary subjects and for technical professional education, Indian students are compelled to go to foreign countries for advanced study, and the number of such students is steadily increasing. Most of the Indian students, for various reasons, go to the United Kingdom, and present rather a tough problem for the Universities there. Till a few years ago the Intermediate and even the Matriculation Examination of an Indian University was accepted by the British Universities as a sufficient qualification for admission. But all the Universities have recently raised their standard for admission. Further on account of the limited accommodation available in the British Universities, it is found necessary for those who are unable to secure admission to any institution in Great Britain to go to the continental Universities, where the condition of admission for a foreigner is very simple. This steady migration calls forth a more interested activity on the part of our universities, either in assisting their alumni in wisely directing their efforts in this direction, or in providing the same attractions in India itself which are now available abroad. And urgency is lent to the solution of the problem by the findings of a recent committee appointed in Great Britain to consider what further steps could usefully be taken to encourage suitable students to go to the British Universities and institutions for education and training, general, commercial and technical. There have been numerous complaints that Indian students are not securing proper facilities in Great Britain for their further studies. The conference of Indian students adopted resolutions pointing out these difficulties, which, in many cases, were not experienced in continental Universities and firms. Of course, as pointed out in the report of the work of the Education Department in London for 1931-32, many students do leave with insufficient educational or financial resources. The High Commissioner says that "to his own knowledge, there are over-many Indian students whose sojourn in England has been unprofitable, either because they were from the outset inadequately qualified by preliminary training or because of failure of

health or financial backing". The fact that it was found necessary to repatriate to India as many as 24 students shows the necessity for exercising greater care by parents and guardians in India. Further, the necessity for education abroad may be considerably diminished in the near future if only the Indian Universities advance rapidly in the catering to the needs of the students, who hanker after every different course of study conceivable under the sun. Dr. Quayle remarked in his report that the Public Service Commissions give full recognition to Indian degrees. Yet exaggerated value is still attached to foreign degrees, and so long as this is the case, it is inevitable that a number of students would be attracted to foreign countries for further courses of study. On the whole, however, the balance of advantage appears to be quite in favour of discouraging Indian students from going abroad and wasting their substance there, especially as students who have returned to India find it more and more difficult to secure suitable situations here. But to those who do go, the offer of proper facilities is absolutely essential and the leading force in this respect must be the careful and energetic tackling of the problem by the Indian Universities before it is too late and superfluous.

Many of the products of the Universities cherish in their bosoms the laudable ambition of joining public life. The urge of nationalism, Rt. Hon. Sir T. B. Sapru has attested, was never more insistent and irresistible in the case of the Indian youth than at present. It is the right of the Indian youth to be consciously loving India—his Fatherland, and he who does not recognise that right and duty must be a political invertebrate worthy of the fostering care only, according to Sir T. B. Sapru, of the Indian Empire Society and Mr. Churchill of diehard fame. Public life is a very serious and difficult vocation entailing prolonged and painful preparation and probation. A choice has to be made between two conflicting schemes—the destruction of the huge and complicated structure of society in the vain hope of building it upon altogether new foundations, and the less dramatic and spectacular, but more laborious and solid task of repairing the damaged spots in the edifice. One of the onerous inheritances of our people is that we are by temperament drawn into endless discussions of theories and principles (amply testified to by the endless and vain talk of the members of the three Round Table conferences!) and on the intellectual side of our life we have to exercise more than ordinary self-restraint lest our inherited metaphysical tendencies cramp, if not paralyse, our faculty for work. There is the urgent need for suppressing fissiparous tendencies and for a conscious effort to cultivate a broad and catholic spirit of tolerance

in religious and social matters and for the realisation that apart from the field of relationship between Man and his Maker, there is a vast field of common service, common enterprise, common enjoyment and cooperation, from which religious and sectarian polemics must be rigorously excluded. Above all the alumni of the Universities should mingle more with the masses—the teeming illiterate poverty-ridden millions of India.

The rehabilitation of the masses and the reconstruction of Rural India might very well constitute one of the foremost of the ardent pursuits of the Indian Universities. Rural Education is sadly neglected today and needs urgent attention at the hands of all bodies, particularly the Universities. The Indian masses as a whole and in general do not get education in the modern sense of the term. One would naturally ask as to what they are doing and how they are adding to their stock of general information. The masses are generally engaged during the daytime in working for their daily bread. The institutions of recreation which have made their lives worth living all these years are confined only to a few—the temple of worship, 'bhajan' and 'harikatha' parties, the village tank or river-ghat, and occasional fairs during festival days. From the Indian point of view, the masses have very little education to speak of. Old Indian education evolved from the people and catered for the people. The present education has evolved from the Government, and like all other measures of Government, this system also is suffering from top-heaviness which means the progress of University education without sufficiently accelerating the spread of literacy—a situation which the Universities cannot continue looking on with equanimity because of the shaky foundations, built on sand, of their own very existence. The word 'public' in public education in India has been characterised as a misnomer in present day India. Foreign tongue, non-religiousness, officialism and dearness are the general defects, sameness of the courses, too much literary bias, non-perception of Indian needs, unsuitability of timings, and untrained teachers and want of compulsory and free primary education for both the sexes are defects of details. The modern teacher under Governmental stimulus has become officially-minded, a petty autocrat, and has remained unapproachable and a non-mass man. It is a ridiculous spectacle to see an Indian teacher wasting his energy in trying to imprint knowledge in a foreign tongue on his pupils for the purpose of giving them education. Acharya Sir P. C. Ray has vehemently criticised this thus: "If we begin by critically examining our methods in India, the first outrage that we find we committed was in making a foreign tongue our vehicle of instruction.

It is surprising that this principal reason for our intellectual sterility was not discovered till very recently, and it is still more surprising to find that some of the well-known educationists of the time continue to regard this relegation of the English language to an inferior position as fraught with disastrous consequences. The study of foreign languages including English is by no means discouraged; only they must not be looked upon as mediums of instruction. A man of education must, in the first place, be one well up in all round information, and he can gather it best and in the minimum of time if he does so in a language he learned to lisp in, while sucking his mother's breast—the language of his nursery. Arithmetic, History, Economics, Politics, Logic and Geography, in short the book of knowledge, can readily be mastered in one's own vernacular. That should be the first stone in our educational edifice if we want to build high and well."

Nation-building can only be achieved by nationalised education and through the tongue of the mothers. Unfortunately, India is the solitary unhappy country where arguments become necessary to establish matters which are axioms in themselves. The irony is that the people lamenting for the probable degradation of English do not at all give a thought to the real degradation already suffered by our vernaculars. That is not all. A Matriculation candidate's capacity for knowledge is comprehensive, but this expression is cramped because of the foreign medium. His very progress is stopped and he stagnates miserably. The majority of the students leaving the High Schools are neither able to satisfy the English boss nor the Indian firms employing only the vernaculars in their dealings, and consequently they fall a prey to hovering unemployment, a sad commentary on the long period of education in our schools. Educational psychology has recognised the limitations on ability to learn a foreign language and through the medium of a foreign language, but the Indian educators have not yet come to their senses. It is time, and the Universities are now devoting their full attention to this, that an earnest endeavour is made to give the languages, foreign and indigenous, their due place in the educational structure.

Mass education must essentially be directed towards the betterment of the immediate environment of the ignorant illiterate people. President Roosevelt said, "There is too much belief that education is purely a matter of books. I have met people with excellent literary training whom I regarded as wholly uneducated in the essentials of life, and on the other hand I have met men thoroughly versed in these essentials, who are shaky in their spelling. Education must be practical. I want education directed to make man able to care for himself and for those de-

pendent upon him. I want to see your colleges turn out men not merely fitted to take Government jobs, but who are good farmers and mechanics. Education must be a step not away from the farm but in the direction of the farm." These words deserve to be carefully pondered and re-pondered over, particularly when considering the measures for the rehabilitation of rural India.

It was Abraham Lincoln who said "it is impossible for freedom in one part of the United States and slavery in another to exist". The same thing could be appropriately said of the world of today; we cannot have one country educated, and another suffering from the degrading effects of illiteracy and ignorance. The post-war conditions have brought along with its horrors and degeneracy a fund of enlightenment and keenness of altruistic vision to mankind. India has been the cradle of human civilisation from whence have come the first concepts of philosophy, religion, science and learning. She has been to the world a pioneer nation which has initiated all the advancements of the centuries. India has a definite and sustained spiritual message which she has given to the world ever since pre-historic days: and the essence of this message is the superiority of the spiritual over the material. India has not become abortive in her ability to bring forth the harbingers of spiritual gospel and life. She still produces a Tagore to prove her poetic faculty, a Bose, a Ray and a Raman to substantiate the fact that in keeping with the growing trend of modern times she is not bankrupt in scientific thought either. India can give a great deal to the West in terms of her humane ideals of life and she can receive a great deal in terms of modern progress and ways of organising human affairs. It is to the Indian Universities that we look up to for the bringing about of such an international co-operation resulting in a new era of peace and understanding and making possible the realisation of the ardent desire of the great American Benjamin Franklin: "God grant that not only the love of liberty but a thorough knowledge of the rights of man may pervade all nations of the earth so that a philosopher may set his foot anywhere on its surface and say 'This is my country'".

The Language Problem.

BY MR. K. S. VENKATASUBBAN, B.A., L.T.

DEFINITION AND SCOPE.

The language problem is one of the most important problems which the pupils as well as the teachers have to face at present in our country. There is no scheme of education in which the pupils are not called upon to study one or more languages besides their mother tongue. Especially is this the case in a country like ours, where the number of languages spoken is very great and all pupils seeking higher education should do so through a foreign language. Hence it behoves us to consider, when a pupil has to learn more languages than one, not only the order of study of these languages but also their relative importance and mode of teaching.

RELATIVE CLAIMS OF LANGUAGES.

We have already said that the Indian pupil seeking higher education must learn at least two languages—his mother tongue and English which is a foreign language. Sometimes he learns a third language, such as Sanskrit or Persian. In rare instances he chooses some other European language like French or German. Nowadays his attention is drawn to the study of Hindi which, though not the *lingua franca* at present, bids fair to be so sooner or later. Under these circumstances, it is but right that we should ask what should be the maximum number of languages which a pupil ought to learn at school or college, what should be the order of studying them and what should be the value or importance attached to each. For on the solution of these problems depends the worth of our education. Before we give a definite answer to the above questions, we have to consider briefly the aims of language learning.

AIMS OF LANGUAGE LEARNING.

There is no doubt that the most important aim of learning a language is to acquire it as an art, that is to say, learn it as a native of the language does, using it not only for the purpose of understanding the thought expressed in the language but also for expressing our thought in it. But there are other subsidiary aims, such as reading and appreciating the best literary works in the language, acquiring knowledge and skill in the use of the language for purposes of literary composition, studying its grammar, vocabulary, etc. It should, however, be admitted

that the latter constitute more or less 'academic' aims and as such are not realisable by one and all.

At this stage we shall do well to consider what some of the best authorities on language learning have to say on this subject. Harold E. Palmer, a well-known authority on linguistics, says that the aim of learning a foreign language is four-fold:

- (1) To understand the language as used by a native of the language;
- (2) To speak the language as a native of the language does;
- (3) To read books written in the foreign language; and
- (4) To use the language in writing as a native does.

In other words, Mr. Palmer wishes that the pupil should attain complete mastery over the language, both in its active and in its passive forms. Dr. Michael West is of a different opinion. He holds that a pupil ought to imbihe the correct forms of speech and expression by reading widely and carefully books written by the natives of the language and that he should not be in a hurry to express himself in the foreign language. Consequently he advocates the free use of the vernacular or mother tongue of the pupils in the initial stages which is not permissible according to Palmer who insists on the exclusive use of the foreign language from the beginning. J. J. Findlay strikes a slightly different note when he says that the object of learning a foreign language is to get at home with it 'as the specific art of the foreign people'. Thus we find that different educationists have stressed different aims and each has advocated his own method of learning the foreign language. Now the average teacher (or an intelligent student who wants to learn a new language by himself) gets puzzled when he comes across these conflicting aims and ideals. Hence it is necessary that we should formulate the true aim of language learning, at least so far as the majority of our pupils are concerned.

Now there is very little doubt that most of our pupils, including pupils studying in high schools, have for their object not the perfect mastery of a language in all its aspects. but a fairly good command of the language, involving the power of understanding the language and of using it for purposes of ordinary expression. Anything beyond this, such as the detailed and critical study of texts, the mastering of grammatical rules, and the study of literature must be beyond the scope of the average pupil. Consequently much of our grammatical teaching, meaning thereby detailed parsing and analysis, will have to be eschewed if we are to make the work of language learning useful and easy. Of course, this does not apply to the study of the vernacular or mother

tongue of the pupil in which he must necessarily have a greater proficiency than in the foreign language.

SOLUTION OF THE PROBLEM.

Having considered in outline the claims of several languages and the objects of learning them, we have now to come to a settlement regarding the language or languages to be studied by our pupils and the method or methods of teaching them. It must be admitted by one and all that the mother tongue should take precedence over all other languages and so its study should be pursued with greater vigour than at present. As it is, things are different. We pay more attention to English, which is a foreign language, than to any of the vernaculars. The position has to be reversed and the vernaculars rehabilitated. Perhaps no other country in the world lays so much stress on the study of a foreign tongue. Japan, although it encourages the study of English and has even founded an institute of research for it, still pays more attention to its vernacular. Incidentally it may be observed that not only should the vernaculars receive greater attention, but that all subjects should be taught through the medium of the vernacular. This is so obvious that it requires no argument in its support except, perhaps in our own country. Next to the study of the mother tongue comes the study of English which is important to us for more reasons than one. Its study also should be pursued on more rational lines, eschewing all that is either worthless or wasteful of time. The object being a practical command of the language, the quickest possible methods should be employed. In this respect we shall not do better than copy the example of Japan which has established a bureau of research in the methods of teaching foreign languages under the able guidance of H. E. Palmer. Next perhaps to the study of English, which by the by should be compulsory for all, comes the study of classical languages, such as Sanskrit or Persian, Greek or Latin. These have merely a cultural value and so should be reserved for those who show a special aptitude for them. Lastly there must be adequate provision made in our schools for the study of a national language such as Hindi. Of course opinion may be divided as regards the stage at which it should be introduced and the extent to which it should be studied, but no one can deny that it deserves a place in the curriculum of our schools, since it is one of the best means of welding together the inhabitants of this continent. Such in brief are the problems confronting the educators of our youth and unless they are faced squarely and solved satisfactorily, the education of our youth will not be what it ought to be.

Some Lessons from Negro Education.*

BY DR. G. S. KRISHNAYYA, M.A., PH. D.

The world over, there is a growing feeling of interest in the Negro. The progress of the Negro during the last 75 years can be considered nothing less than phenomenal. Nor is that progress limited to any one field. You notice it in the thousands and thousands of wideawake bright school boys and college students. You are struck with their hospitals, churches and schools. You are impressed with the banks now owned and managed by a people who started life as slaves. Your attention is arrested by the countless, comfortable, and happy-looking homes now occupied by a race which had nothing they could call their own. And then, what about the millions of acres owned and cultivated by the Negroes—often producing more than their white neighbours—they who once were good enough only as 'field hands'? What about the part they now play in industry and commerce, their stake in the country and their contribution to its progress? And yet it must not be forgotten that in estimating the Negro's progress one must look for its significance not so much in the aggregate as in comparison with the resources with which they started and the progress of other people or groups under somewhat similar circumstances. The progress of the Negro is not to be measured by the heights to which he has gone, but by the depths from which he has come.

Not less wide spread is the reputation of Negro educational methods. The fame of Hampton and Tuskegee has reached India and we have come to associate the all-round improvement of the Negro with their system of education. The changed complexion of Negro life—they have changed from a crying race to a trying race—a people with a problem have been changed into a people with a programme—is due not a little to the emphasis placed in the schools and colleges on factors and faculties which make for economic, social, physical and mental progress.

Especially fascinating are these slave-people to other people who have yet to shake off the shackles of inertia and lethargy

* A detailed description of some of the leading Negro Schools and of their message for India is to be found in the author's book, *The Rural Community and the School*, published by the Association Press, Calcutta.

and with steadfast faith and hope strive to change the ordinances of fate and circumstance. The message of hope and encouragement which the other rural folk may receive is one which cannot be ignored, for it is likely to contribute considerably towards the solution of India's rural problems.

With this background, we may pass on to see if, from the point of view of the situation and circumstances in India, Negro education has any lessons to suggest. Is there any guidance, or inspiration which we may derive for the solution of our many school problems?

The most important lesson which we may learn is the adapting of the curriculum to the needs of the child and his environment. Creative intelligence and unencumbered imagination have not sufficiently gone to work in India on this most vital problem—hence the need for calling attention to what would otherwise be merely platitudinous. Until and unless school work has more than a nodding acquaintance with child-life, the responsibility for the numerous maladies, both of rural education and of rural communities, must be laid on the shoulders of the school authorities. It is unreasonable to expect parents to be willing to spare their children several hours each day for what must seem to them worse than waste of time, energy and money. The most superficial observer of some of the Negro schools would be struck by the fact that they felt that there was no aspect of child life which was considered either too low or too lofty to engage the attention of the school. The teacher was expected to know not merely the school boy and his physical and mental needs, but his parents, their income and occupation and the conditions prevailing in his home. With all this information concerning each pupil, which teacher could talk irrelevantly and uninterestingly? Our courses of studies ought to seek to prepare our pupils, for life in their community. If first things were first, the pupil's needs would be given prime importance and round him the whole educational system would turn, not round the Matriculation examination as now.

Not only is the pupil's life made the centre of Negro educational effort, but the whole school seems to concentrate in *meeting* the physical, intellectual, religious and economic *needs of the community*. Did the Negroes live in ugly, unhealthy, uncomfortable homes? — Then "Better Homes" became the watchword and home-makers were given training in diet, its cooking, canning, nursing, sewing, sanitation, budgets, gardens, colour combination, etc. Did the farms need improvement? — Then privately owned acres were converted into a

laboratory for the teaching of school agriculture. The chief place was given to this most important Negro occupation. Knowledge about diversified cultivation, soils and manures, budgets and costs, co-operative buying and marketing, became the possession of the progressive young farmers as well as of their conservative farming fathers. More than that; this knowledge was put to actual use, and better results were demonstrated on the farms. Subsidiary industries, such as carpentry, blacksmithing, poultry-raising, fruit growing, basket-making, were taught, with a view to enabling these men and women to add to their resources. In India such a relation between our rural communities and our rural schools would usher in a new day for both. The vast majority of Indian girls are bound to find in home-making, their chief occupation in life; and yet the present artificial and stereotyped curriculum hardly attempts to meet their need. The majority of boys in the village are inescapably marching towards agriculture for their livelihood and yet even lip-homage is often denied to it by the rural curriculum. Much can be done along the lines described above, to make our schools responsive to the needs of the rural community.

The needs of the community are not likely to be known unless special pains are taken to study them. Much valuable effort in our country is wasted, because enthusiasm rather than intelligence has dominated the situation. In the village Schools, and especially in the Normal Schools which prepare village teachers, *the study of civics, rural Science and rural problems* should be made compulsory and significant. The future leaders of the rural community cannot be allowed to remain ignorant of these important matters. Familiarity with the different rural agencies and their work may then lead to better co-ordination and more fruitful co-operation. Civic sense and citizenship—responsibility, conspicuous now by their absence, could also be thus promoted. Further, this would help in the development of community service, and would make the school a community institution. It would be worth while to make a first hand survey of the conditions in the village of the province, or district, determine what the rural school can do in preparing pupils to bring about better conditions, to discover what has been done elsewhere to make life in rural surroundings safer, happier and more satisfying, and to decide how the teacher and the school can best work with the community in bringing about these better conditions and develop an appreciation of rural life and a vision of what the village might become.

Such a study would lay bare numerous defects that would need urgent attention. Among them would be unwholesome attitudes and injurious practices. These the school will seek to correct as far as possible, through the content and method of instruction, through the encouragement of co-operative activities, and through unceasing and vigorous propaganda. In the American communities where a proper respect for manual work was found wanting, the different institutions assiduously set about to make labour dignified and manual work sacred. The teacher's attitude and example must inspire right conduct. The pursuit of some desirable goal, and the participation in some all-absorbing activities, will lead to the disappearance of this prejudice. Once the new idea has been accepted, it will not be difficult to build the concept of the dignity of labour on it. From early childhood, manual training should be encouraged. No work should be treated as degrading or menial. School gardens and other practical projects, such as those introduced in Moga, will go a long way to counteract the present attitude. Likewise, special emphasis needs to be laid on particular problems of each locality. What is required is a rational and comprehensive scheme, which will take note of the general principles which have come to be more or less universally accepted, lay special stress on the community's peculiar needs and give due attention both to the stage of social evolution in which the people are, and also to their resources.

The American *emphasis on the practical* seems to offer the much needed antidote to the British-Indian literary type of education. Even the most superficial observer could notice that the American schools had to face the problem of manual labour and the creation of a wholesome attitude towards it. Most of them struggled consistently and successfully against the popular preference of a theoretical "white collar" education.

The problem in India is not easy of solution. The complaint is heard, in season and out of season, that the universities of India are *producing too many graduates* who are vainly knocking at the doors of the Indian Secretariat for appointment, so that un-employment is likely to become the most common occupation of the educated middle class in the near future. If this is so, (and the enrolment in the Law Colleges bears its eloquent testimony:) what is responsible for such an over-supply?—Surely our one-way academic traffic system. What are students to do, when all types of school-courses in India are designed as a preparation for College and University? There is scarcely any real choice before them. It was this evil that some of the Negro schools

averted by the introduction of parallel-courses. Attention has therefore to be drawn in India to the need for increasing the lines of interest among students and *diversifying their education*.^{*} Instead of making it necessary for all to march, in single file, through the literary course to the university, it should be made possible for some pupils to do intensive work in agriculture or mechanics, or home science, or teacher-training, and yet have the necessary training in certain fundamental skills and subjects. It may be that the American example is of more value at the high school stage; but attempts are being made in some quarters to diversify the curriculum even at the primary and middle school stages, so as to prevent migration to the town high school, and to encourage the stay in the villages of some of the promising products of the village school. Doubtless, at first, it will be difficult to divert many from their degree-hunt: and how else can it be, when for a whole century, a high pass in the degree examination has been the *sine que non* for Government service,—one of the most lucrative and attractive forms of employment open to Indians? This degree-hunt will take time to be set right, but it will not disappear until a concerted and many-sided attack is unsparingly carried on by all concerned.

"Train up a child in the way he should go, and when he is old he will not depart therefrom". If it is desired to encourage industries and promote technical training, the start needs to be made in the Kindergarten. It is absurd to expect a decade and a half of literary education to produce a man skilled in agriculture, keen on business, or interested in machinery. While children are young, their interest in creating things should be aroused, and they should be trained in the handling of tools. It may be well worth while also to introduce some cottage industries,—not for vocational purposes, but chiefly to cultivate skills and aptitudes. It is noteworthy that some leading Negro institutions find it both advisable and profitable to encourage handicrafts and native industries, as part of the curriculum. Practical methods of nature study, and school gardening, and the formation of clubs around different rural projects, are also to be recommended. Club work gives practical training in the fundamental economic process of food production, conservation and marketing. It makes for a vital interest and skill in agriculture and home economies, for, pupils learn by doing, undoubtedly the best way to learn.

^{*} Dr. A. H. Mackenzie, formerly Director of Public Instruction U. P. and now Pro-Vice-Chancellor of the Osmania University, is advocating this for Hyderabad State.

Such a method provides an *invaluable corrective* to many Indian failings. It develops initiative; it encourages self-reliance; it makes for group action, it calls for resourcefulness; it demands perseverance. The scientific attitude of testing results and forming conclusions is fatal to a blind belief in outworn tradition. The purposing and achieving of ends spells disaster to age-old contentment and uncontrollable fate.

If any system of education had been devised to meet the needs of India adequately, it would not have been conceivable for *school and community* to be divorced from each other. Fortunately, there is evidence now of advances on both sides, and it is being realised that perhaps even more important for the popularisation of mass education than anything else, is the *rapprochement* between the two alienated institutions.

Too much cannot be said in commending this movement. The tendency to make of the school "a house of the people" deserves every encouragement. With lakhs and lakhs of rupees invested altogether in school equipment, it is wasteful to restrict its use to a few hours each day, five days a week, for only a few months in the year. The school, in most cases, by its very nature, being "public-built, equipped, maintained and run from public funds and open to all, regardless of creed or political affiliation"—is the one place where all can meet, or should be able to meet, on an equal footing. This therefore is the natural community centre, and should be considered the "Capital" of the village community. Failure to use the school building as a social centre is poor economics as well as bad educational philosophy.

The chief aim of the *community centre*, as exemplified by Negro institutions, should be to deepen the content and broaden the scope of the term 'education' and to extend the activities of the village schools, so that they may evolve into "People's Universities".

It should provide for the play-life of the community. It should be a community forum, a place where the citizens meet for the courteous and orderly discussion of all things that pertain to the community's welfare. Local conditions will determine other activities that should be engaged in, such as co-operative buying and selling,

This meeting of the people at regular intervals not only furthers the social, political and educational life, but definitely promotes a *community spirit* amongst them. If this "we-feeling" is to be cultivated, opportunities must be provided for its expression. Too much cannot be said in favour of stimulating in our villages a public spirit

and a community interest. This is the only way of ensuring the success of all campaigns for civic and sanitary improvement—and it is a way that has rarely been tried in India. A school which makes the service of the community its goal will find countless opportunities to justify its existence.

With a school thus serving the people, the problem of "the educational indifference of the agriculturist" is automatically solved. His attitude towards the school and that of his children cannot but be one enthusiastic co-operation. "Here and there has the school helped me; how can I help the school, say?" the rustic family will inquire. The task of preventing a lapse into illiteracy, and of instructing the unlettered in matters of health, home-making and better arming is rendered a hundred-fold easier. Such a school would concern itself with all from the unborn babe to the aged parent. Such a school is the '*educational dispensary*' of its community.

An ideal school cannot become actual without *the proper type of teacher*. The necessary kind of instructor is impossible to secure unless the school teacher is made a more influential and respected member of the community than he is at present. It is an old proverb that "the teacher makes the school"; but in the new dispensation it may be as truly proclaimed that "the teacher makes the community". This is not realizable, however, before facilities for the adequate selection, training and supervision of teachers, a professional pride in the teacher's calling, and salaries attractive enough to appeal to the best men, have become matters of fact. Till then, all schemes are likely to be more like so many cries in the wilderness.

If the school is to be a community centre, the teacher must be a *social worker*. Hence the emphasis on the training of community leaders is noticeable in most Negro Schools. Similarly, in India, there are many things, great and small, which are more or less expected of the teacher, and which yet are not usually dreamt of in the teacher's certificate. There are skills and qualities which would be a valuable possession to a community leader. The schools preparing rural teachers should bear these in mind; for unless these men are duly equipped, they are not likely to recognise or discharge the great responsibilities of their high calling. As director of the children, the teacher has to be something of a leader. The teacher, as director of the one and only community institution, is guardian of the Educational interests of the community.

The problem is thus one of taking the community as it is, assuming control of a neglected deficient School, and bringing the children

and the community to appreciate the beauty and richness possible. The teacher then becomes a link between the people and their opportunity. Such a view dignifies the vocation of teaching and elevates it, both for the teacher and in the eyes of all others.

However, unless the *standard of the recruitment* is appreciably raised, and the quality of training obviously improved, it is not to be expected that this lofty view of the profession will be realised by those within or become evident to those without.

- *The amount of salary* received by the teacher may be reasonably considered a measure of his efficiency on the one hand, and on the other of the esteem in which his services are held. Until the existing discrimination in favour of certain "services", with all its implications, is abandoned once and for all, the teacher cannot help feeling that the implication is that for the welfare of the nation he is of little value. If a levelling up is absolutely impossible, the teacher claims that in the interests of the profession he represents, there might well be a general levelling down, and that it is unfair, unsound and unreasonable to demand self-denial of one group and thrust luxury on the other while all are the "most obedient servants" of mankind.

An important phase of the professional improvement of the rural teacher, stressed greatly in America, has hitherto received scant attention. The notion is fairly deep-rooted that once the teacher obtains his diploma, he has no further need of either instruction or improvement, for he knows all there is to be learnt regarding his trade, and this because of his one or two-years exposure to the training course! Perhaps if short courses were arranged from time to time, and teachers were encouraged to return to the training centres for further or *refresher courses*, it would not be as readily taken for granted that, on bidding goodbye to his normal school, enough pedagogy had been injected into him to serve him the rest of his life. Our training schools are guilty of grave neglect when they imagine that their task is finished with handing over their students to the Government or University examinations. Further, so long as there are hosts of untrained teachers in the villages, the training schools or their equivalent, should go out to them. The aim ought to be to carry '*first aid*' to the teacher while he is at the job. Inspectors should follow these teachers into their communities and there teach and inspire them in the handling of their particular problems and show how to relate the school course to the activities of the community. This type of supervision is probably more urgently needed than any reorganization of text-books or curricula.

Then, when the teacher has become a community teacher, and the school has become a community centre, the school *at night* will often be full of adults keen on instruction regarding every thing that pertains to the welfare of their village; and *by day*, it will be the happy meeting place of eager children, who have learnt to find in the school an opportunity for growth, and in the teacher their most trusted friend, philosopher and guide.

In conclusion, the secret of success achieved by the Negroes in the field of the rural reconstruction should be noticed. The besetting sin in India and other rural countries, has been to treat rural problems in isolation, and to ignore their interdependent character. This piecemeal and therefore partial attack has proved ineffective and naturally so. All too often have they neglected the adult while trying to instruct the young. Progressive educationists have come to realise that, if success is to be achieved, all the different phases of rural life must be tackled together simultaneously. Village life is a unit and they that serve it must regard it as one and complete. This is what Negro example proclaims—Every age group in the community is provided for its programme. Several different interests are catered to. Their work covers the entire rural field. Such an all round, many sided campaign as this is the crying need of India and until this is undertaken the results are bound to be unsatisfactory.

It was Booker T. Washington who put Negro education on this road when he said "We shall prosper in proportion as we learn to dignify and glorify labour, and put brains and skill into the common occupations of life". This indeed is the motto of Negro education and if our villages are to be uplifted, there is no surer guide than that which has given such enviable direction to the educational system of another people in many ways similarly circumstanced.

Indian Pedagogics

The Future of Indian Pedagogics.

By DEWAN BAHADUR K. S. RAMASWAMI SASTRIGAL, B.A., B.L.

(Continued from the last issue.)

Thus piety and all that it implies should be one of the main objectives of the new pedagogics. The next important element is politics. We must realise and teach that each great country and culture and nation has a great part to play in the life of humanity as a whole. Each has got a contribution of its own to make towards the sum total of human welfare and human happiness. This can be made only when there is perfect concord and efficiency and patriotism in each country. If there is discord or inefficiency or lack of patriotism, no great and signal contribution can be made by the country and the community to the summation of human progress and human enlightenment. Such contributory efficiency of each country does not imply any unhealthy competition or mutual dislike. It is due to a desire for the enrichment of human life—"for the glory of God and the relief of man's estate".

The true-spirit to-day must be met and understood. All over the world men are striving, not for the contemplation of a past or a future glory, but for a present glory and greatness. They are willing to put up with any drudgery and put forth every kind and degree of effort to perfect the cultural type and to bring into being a higher level of unity and freedom and happiness. Shall India alone lag behind? Is it not her duty to link together a right education and citizenship and politics? We have to embark upon a better and more intensive study of Indian History and economics and politics and sociology so as to fit ourselves for a higher and more united national life by having higher ideas of social equality and economic justice and political unity while preserving the distinctive qualities and graces of the racial type.

In this direction schools and colleges and universities have to do a great deal. Unless they keep the flag of higher knowledge flying, politics will become the game of demagogues and social discords will wreck social welfare beyond redemption. University knowledge will be only a delusion and a snare if it is unrelated to life. It should lead to the efficiency and humanisation of industry, civic improvement, social unity and betterment, reformation of laws, and the growth of responsible government.

In short, the new pedagogics should aim at making the new education the means of conservation and increase of the national fund of

social and political altruism, of justice and sympathy and concord. The arrival of the Indian democracy is sure, though slow. Shall our inevitable democracy be allowed to be ruined by ignorance and inefficiency and corruption? Will not Indian education lead a crusade against the sordid squalor of our life to-day? Is it going to shut itself up in a palace of abstractions and unrealities or is it going to come into the crowded thoroughfares of life and work for the healing and the uplift of the Indian nation?

This then is one of the new objectives of Indian pedagogics. It should create a new and vital social and economic and political idealism and make it fruitful in new ways in the fields of future practical life. It must make morality dominate politics and public good the goal of public institutions. It must put down the materialism and cynicism and hedonism which are rampant in life to-day.

India is to-day surging with new life and is in the vortex of world-movements. This is seen in the realm of education as well. We are no longer prepared to copy from English models alone. We wish to learn from all the experiments of the world in the educational field and yet be ourselves. The present era of criticism and experimentation is a prelude to an era of new creativeness. All aspects of education—rural and urban, primary and secondary and collegiate, literary and vocational,—have to be vitalised and renovated. Indian education must stimulate Indian inventiveness, and dower the Indian mind with new faculties of organisation and leadership. It must vitalise the Sanskrit and the vernaculars with a newer and richer life.

Education must therefore be no longer content with protecting the heritage of the past and borrowing ideas from the West. To-day it is mainly doing the latter work alone. It must hereafter become the centre of a new applied social and economic and political idealism. To-day it stands bewildered at the cross-roads. It must shake off its bewilderment and lethargy and become a pathfinder and explorer and lead us to the promised land. It must conserve and perfect the spiritual values in civilisation in the social and economic and political spheres no less than in the realm of spiritual life. Only then will India be able to live life at a higher level and to recapture her synthetic vision and use it for human uplift.

Thus a truer and nobler piety and a truer and nobler political life should be essential aspects of future Indian pedagogics. Equally important is a truer and nobler practicality. In point of industrial invention India lags very considerably behind to-day. This is not due to

any inherent or essential sterility of the Indian intellect. It is due to the fact that science has not yet been accorded a prominent place in Indian education and because technological education has not taken any great forward strides in India as yet. In every school the mornings should be devoted to *reading* and the afternoons to *doing* in the case of all students. Even in regard to mental work, the students should not be lectured at but should be left to discover for themselves. Replace text books by life. Have small classes and let the teacher be but a guide. Except the few students who are to enter the learned professions and the fewer students who are to take to research work, the bulk of the students should fit themselves for agricultural and industrial and commercial careers with the help of applied science and technological training.

When Indian education has fulfilled itself in all the respects stated above, it will then, and only then, be what true education is and should be viz. the continuous drawing out of the best in us and others for the greater happiness of man and the greater glory of God.

Composition

Teaching & Correcting.

BY MR. S. VISWANATHA AYYAR, B.A., B.T.

(Continued from the last issue.)

Now I come to the second part of my lecture namely the correction of written composition. It is generally believed that there is nothing more beneficial and irksome in the work of the teacher, than the useless task of correcting every error that he comes across. Such an undertaking is in fact calculated to impair his efficiency and make it impossible for him to come to his task with real zeal and earnestness.

But there are other considerations, besides these, that tell against over-correction.

To many, corrections are apt to conceal rather than help to bring out the real meaning and the thoughts of the pupils, for there is always the possibility that what the pupil wants to express is replaced by what the teacher wants him to express. Thus the whole object of composition teaching, that is allowing pupil the opportunities of free self-expression is defeated. The pupils are apt to avoid work which they see others do for them. They are sure to lose active interest in

their undertakings and to write their compositions carelessly and with a less effort and leave it to the teacher to correct and improve every error they happen to commit. Thus they forego valuable lessons in self-help and one of the aims of the new education is defeated, while an array of correction is apt to discourage the pupil by impressing upon him the utter worthlessness of his efforts.

To quote the word of Mr. Chubb "we have made a fetish of theme correction, which is about as sensible to correct every mistake as it would be to halt the student for every mistake in speaking. There should be different understanding as to the scope and purpose of correction. It is not omniscient." On the other hand there are some teachers who argue against over-correction. They argue that the most important thing in composition is the writing of it, and that the pupil will himself be able to correct his composition if he lays it aside and returns to it for criticism and correction after some days. Such a measure is not without its value. But the present educational practice will not welcome it, for, it still clings to the belief that the teacher has much to contribute towards the development and progress of the young. It has survived the onslaughts of those who advocate individual freedom and self-help methods for children.

We can therefore accept that some amount of correction in the written work of the pupil is very necessary. Our practice and problem is therefore to find ways and means, by which the burden and tedium of this labour may be lightened for the teacher and the work made more effective, so as to yield better and more satisfactory results.

Before we proceed to formulate any principle of method of correction, let us be sure of the aims and objects of correction. Children often make mistakes not only in thinking but also in expressing thoughts; inconsistencies, loose sense, grammatical errors and others of the kind spoil and mar what they express and it is very helpful if they are informed of their mistakes and fully understand the why, the how, and the where of such mistakes. The correct forms should be explained and taught in such a manner that habits of correct expression are set up through constant self-expression. The essential point is that the pupil should understand what is wrong and know how to correct it.

In the first place much of the drudgery involved in correction would be reduced if the teacher inspired children to render their best composition. It should be the teacher's duty to make composition interesting. Interest is the main spring of all good work, and a teacher who fails to make his composition interesting either by setting uninterest-

ing topics or by approaching the task in a cold listless manner will surely multiply his labours in correction. He must therefore infuse such enthusiasm into the class that young writers learn to take a pride in their work, and regard composition as an art worth pursuing.

Teachers should refrain from setting too much written work, if they cannot cope with its careful marking and correction. Here, as elsewhere, quality should be preferable than quantity. One composition a week carefully written and carefully corrected will be far more beneficial than two or three hastily corrected and half heartedly corrected.

The most important thing which every teacher of composition must bear in mind is, that the pupils must themselves correct their own mistakes. Correction is primarily intended to improve their composition, not the teacher's, and it is essentially their duty to understand and correct their own written work. As far as possible the mistakes should be elicited from the pupils, and by means of further illustrations, questions and suggestions they should be made to grasp why what they have written is wrong.

Errors in idiom and grammatical structure should be corrected by oral drill; so far as spelling is concerned, the habit of referring to the dictionary should be encouraged. In the upper classes, wherever possible, a reason can be given for a correction. The pupil should be helped to realise it. As Wyatt remarks, "A correction which is not impressed upon the offender just wastes time and the most impressive kind of correction is one in which the pupil finds out the correct form for himself, and then enters himself in his exercise book, and commits it to his memory." The teacher should refrain from writing the correct form in the exercise book. But, he must make sure that the pupil carries out the correction in the margin preferably,

We may agree, therefore, that every mistake need not be corrected. Teachers who merely pepper their pupils' exercises with entries of the correct form over the mistakes are ordinarily thinking more of impressing the inspector than of teaching their pupils' English. The teacher should know the type of error which his pupils cannot be expected to correct for themselves. Such mistakes ought to be corrected in the class, use being made of the blackboard while doing so. To make the correction more impressive and lasting, too many errors should not be dealt with at a time, and all corrections should have its general aim, the eventual and not the immediate elimination of errors. A careful teacher would collect and classify such errors in a card. It would be better, if he has got a charter of what he is going to correct.

Not by the correction of errors alone, the pupils could be taught, but also by the exhibition of good work. Occasionally model compositions may also be exhibited. It should also be remembered that a little encouragement is a good thing. It should be an important duty of the critic to commend where commendation is due. The pupils should not be allowed to feel that there is always a censor over their heads to detect where they have gone wrong. On the other hand, they should be able to consider the teacher as a philosopher, a guide, and a friend.

In marking errors the use of the code of symbols to economise time and energy should be adopted. It will put the pupils on the right track of mistakes even though the adoption of the course has got its own inherent weakness. This would be leading the pupils in the path of self-correction. In marking exercise books a teacher should take particular care to be neat and tidy. Else the temptation to scribble remarks in pencil or in red ink would make the boys become mimics, and they are likely to become untidy in their work.

The ideal method of correcting mistakes is of course to have the pupils by the side of a teacher, so that it may be thoroughly discussed with him in every detail. But this method is rarely found practicable, under the ordinary school conditions. The next best method is to divide a class into a certain number of batches and to take each batch in some leisure period. Anyhow the teacher should remember that content and form are as important as language and he should never fail to judge the composition as a whole.

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BY MR. G. V. AYYAR, B.A.

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(Further particulars may be had of: The author, St. Mary's Tope, Trichinopoly.)

Notes.

Education in Travancore.

The latest annual report issued by the Education Department of Travancore shows how far the Durbar has carried into effect the recommendations of the Reforms Education Committee. The Government has no doubt accepted in principle almost all the important proposals of the Committee, but could give effect only to such of them as were free of financial obligations. Among those that have been held up for this reason are the establishment of a Technological College and the introduction of alternative practical courses in schools and of the residential system in colleges. Some of the changes adopted are noteworthy. The Government has reorganised the Inspectorate, withdrawing from it the powers of appointment, promotion and transfer it had till now enjoyed, and vesting them in the Director. The privileges of according recognition to and starting new schools hitherto granted to Inspectors of Vernacular schools have been transferred to the Director. It has been observed that the latter measure of centralisation has eliminated the tendency of running bogus schools. Some of the Primary schools have been closed down or amalgamated, and aid withdrawn from many private Primary schools where it was thought there was overlapping. This might be a great hardship to school-going children of localities affected by this step. Other salient features are the encouragement given to co-education and employment of women teachers in primary schools; the increased interest in the education of Muslims and depressed classes, the steps taken to re-organise Sanskrit education and the opening of Malayalam Honours Course in the Maharajah's College. The Government is also keen on raising the academic standards in colleges by restricting admission. While people will appreciate most of these reforms, they will regret that the Durbar should keep in abeyance vital measures on the plea of financial stringency. We hope the Durbar will realise the urgent need and importance of diverting necessary funds for effecting these reforms also in the near future.

Provident Fund & Insurance Premia.

Teachers under local bodies have the privilege of paying their insurance premia from their Provident Fund deposits, which others in aided schools have been denied. Very often this has been the subject of discussion in teachers' conferences and resolutions praying for the extension of the privilege to others have also been sent up to the Government, in vain. It appears that recently some Headmasters corresponded with the Government on this matter and their request has been turned down. Teachers are not, probably, aware of the reasons which made the Government decline to extend the rule to aided schools. Certain invidious distinctions exist between the service under local bodies and that under aided agencies, which teachers should agitate to remove at first. The local bodies being the sole masters, contribute an equal quota as the teacher, the Government paying nothing. They guarantee a measure of security of tenure to their employees which is rare in other schools. Transfers, if any, are within the district, and this helps to keep up continuity of service under the same management. They also maintain a service register which greatly facilitates the keeping of accounts. It is the absence of these advantages, among other things, added to the obnoxious discretionary powers vested in managers of aided schools to withhold their contribution at their sweet will, that handicap the members concerned.

The remedy for this state of things lies in the teachers agitating for the withdrawal of the aforesaid powers from private managements, the maintenance of service registers by District Educational Officers and the assurance of security of service to teachers. There may still be other difficulties to contend with, which only provincialisation of the teachers' service can hope to remove. The delay in the transfer of accounts from one school to another in case of migrations, the consequent untimely payment of premia and lapse of policies are some of the problems that have to be tackled. We hope teachers will do what is needful in the matter.

Reviews.

1. **A Text Book of Geography** for Form IV, By T.S. SundaramAyyar, B.A.
Published by The Teachers' Publishing House, Madras.
(English & Tamil Editions)

The author has followed the departmental syllabus in every detail, and has brought out innumerable facts briefly within the easy reach of the teacher and the taught. The treatment of the 'World Studies' towards the end of the book leaves nothing to be desired, and the advantages of the book are enhanced by the addition of copious illustrations and economic diagrams and graphs. Though the 1934 Scheme is held in abeyance, the book will be a useful companion reader in the hands of the S. S. L. C. pupils on "General Geography". The Tamil version is a translation of the English one, and is written in lucid, readable Tamil.

G. T. Williams, B.A., L.T.

2. **Simplified English Grammar:** By L. Tipping, M. A. Published by Macmillan & Co., Ltd. Price: Re. 1.

Though many books on grammar have been written and published in recent times, the books of Mr. Tipping stand prominent for their novelty of presentation and the easy elucidation of the most uninteresting and difficult principles of English Grammar. At every step, throughout the book, the author has anticipated the difficulties of the pupils and has given original and suggestive methods to avoid those pitfalls. In this book the author makes the analysis of sentences more interesting and *realistic* by the adoption of the 'Graphic Method of Analysis'. This is not only the 'simplest and clearest' method of teaching grammar but the most *practical*. Great attention has been shown in the selection of copious and suitable exercises to drive into the minds of the pupils the important rules of grammar. The parsing of difficult words at the end of the book is highly enlightening and instructive. The book is eminently suited for use in the IV Form.

N. Subramania Ayyar, B. A., L. T.

3. The P. S. High School Magazine, Mylapore, Madras, Vol. I. No. 1, March, 1935.

We congratulate the Editorial Committee of the above Magazine on the excellence of the first number they have brought out. The contents bear on a variety of topics and are highly useful, instructive and interesting. Opportunity has been given to the self-expression of pupils, whose performances are refreshing in tone and thought. The hearty co-operation of the teachers and the old boys of the school is also evident. The magazine records also the activities of the school, which will keep the public and parents informed of its progress in various directions. Pupils' knowledge of the vernaculars, Tamil and Telugu, is sought to be developed by informing contributions of fine literary worth. Fulfilling all the requirements of a well-conducted school magazine, both in quality and quantity, the number bids fair to be the fore-runner of more brilliant successors in the future months to come. We wish the Journal a long and prosperous career of useful activity in the cause of true Dharmic education.

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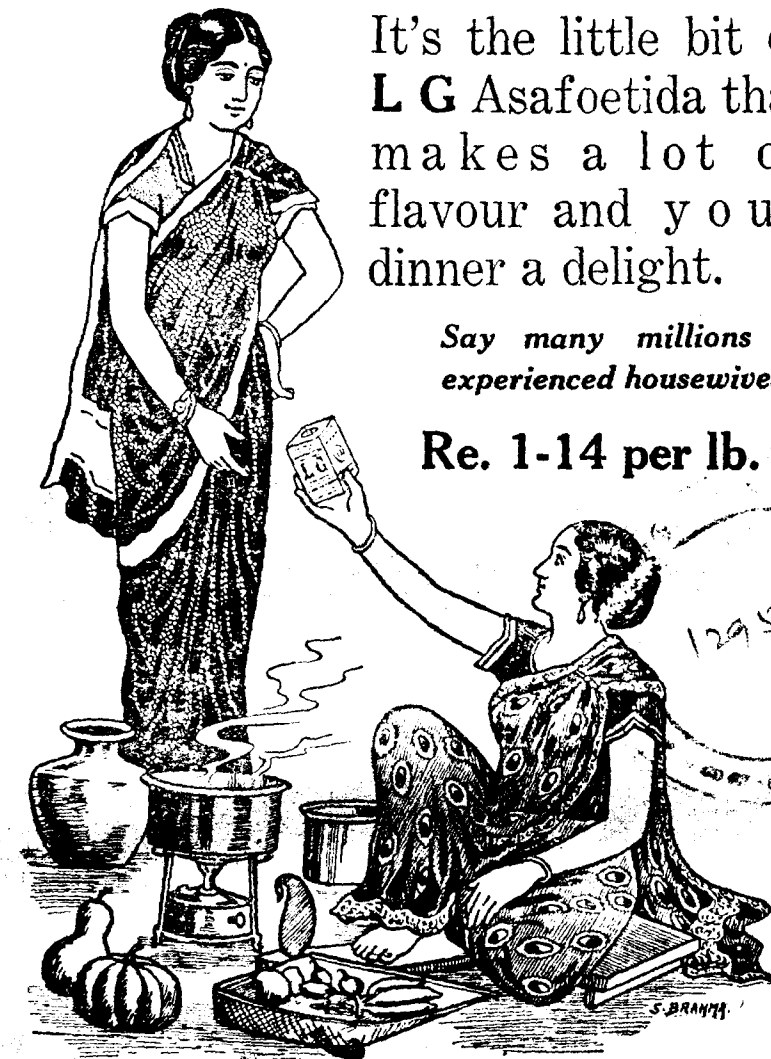
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