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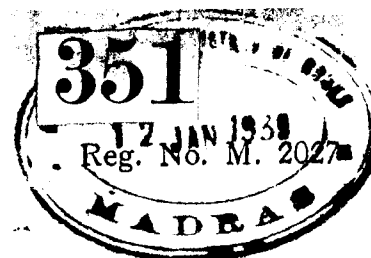
UNDER THE EXPERT SUPERVISION

OF

MR. V. ARAVAMUDA IYENGAR, B.A., L.T.,

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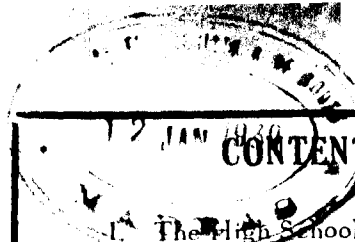


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THE
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MR. V. ARAVAMUDA IYENGAR, B.A., L.T.—*Managing Editor.*

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MADURA: NOVEMBER, 1938.

No. 11.

The Functions of High School Education
with reference to University and with
reference to Life.

By Principal S. U. SHUKLA, M.A., T.D.

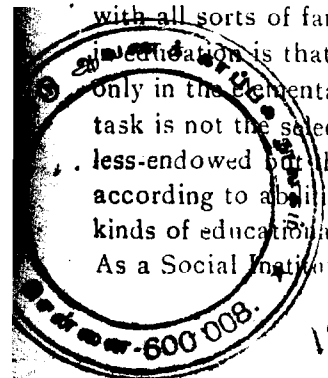
Introduction:— The importance of this subject to-day can hardly be over-stressed or exaggerated. In this modern world of ours where progress is noticable in every single branch of Human Knowledge and scientific advance has almost revolutionised the entire concept of life we find that Education as a Science has also received its proper share of attention and consideration. The subjects of philosophy and the researches of psychology have thrown considerable light on the problem of child growth and development and human behaviour. This has given us a great deal of guidance of immense value in reconstructing our programme of Educational work. Again the whole philosophy regarding the individual and society has also undergone considerable change during the last fifty years or so and on top of that industrialization, mechanical advances and scientific inventions have brought about changes of such deep significance that the Modern World thinks in terms of International relations and World Affairs instead of the narrow, isolated social group of the village or the district of the past.

Undoubtedly, even with this changed outlook, certain permanent values attached to the ethical and moral nature of man are bound to remain the same but the changed outlook has certainly affected man's sense of values of other matters in life. Man has been enabled through the cultivation of a scientific attitude of mind to look deeper and closer into all matters and his ideas of fair play, justice, social equality and other human attitudes have been reflecting this awakening of the inner man.

To-day we are concerned with man's attitude towards education and primarily we are concerned with the functions of High School Education with reference to University and with reference to life. Before we look into the problem of High School Education let us for a moment remind ourselves of the aim of all education. It aims at the modification of individual behaviour as a result of his reactions to his environment. In a narrow sense education is the modification through a controlled environment of individual behaviour in desirable directions, 'desirable' being interpreted in terms of changes in behaviour promoting at all times the maximum of individual development and social adjustment. It is guided or directed experience. It is a matter of self activity directed towards the attainment of certain goals, these goals being in harmony with the nature and needs of the individual on the one hand and on the other with the demands of his physical and social environment. From the standpoint of the individual it is growth or development appropriate to his capacities, interests and purposes; from the standpoint of Society it is development in the direction of effective participation in group activities in accordance with desirable standards and ideals. Hence one of the most pressing problems of the School at all stages is the amalgamation of the individual and the Social needs into a unified educative process.

Having the 'Aim of education' in mind, let us consider the problem of High School Education i. e. the Education of a pupil between 12 and 18 when he is an adolescent. The School must know the adolescent and the demands of Society in order to fulfil its function and utilise its knowledge in ordering its educational activities to meet the requirements of both.

Let us for a moment compare the Past and the Present in the sphere of education. The Past had its own isolation and seclusion in the sense that Education was then looked upon as the privilege and the monopoly of the few well-favoured, leisured members of the aristocracy or the affording classes. It was not meant to be for all and naturally with a restricted out-look it could afford to try and experiment with all sorts of fanciful ideas and methods. But the modern out-look is that Educational provision should be made for all not only in the Elementary school but also in the Secondary School. Its task is not the selection of the most capable and the elimination of the less-endowed but the differentiation and the distribution of its pupils according to abilities, aptitudes and purposes and the provision of all kinds of educational opportunities suited to the various type of pupils. As a Social Institution it should give opportunity to each pupil to reach



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his maximum development as an individual and to make his adjustments to the Social groups in whose activities he participates as a youth and will most likely participate as an adolescent. This includes also at all times the developments of an understanding and an insight into the nature of the physical world and its bearing upon the everyday activity of man.

To provide for such training it is absolutely requisite that the activities of school and those of life must have a fundamental and intimate relation. The school must be for ever adjusting itself to the activities, requirements and ideals of the community which it serves.

But we find that these Modern Ideas and fresh out-look have more often than not been talked about in theory or stated on paper only. If we examine through the workings of Secondary Schools the aims by which they might have been motivated, we might discover that they are hazy, vague and often meaningless, masquerading in such imposing titles as instilling of discipline and imparting of culture. Mainly the school goes in for preparation of each and every individual for Collegiate education, irrespective of his suitability, capacity, or interest. Discipline has not been regarded with reference to power in the analysis and interpretation of existing life situations and problems but in terms of mastery of certain subjects. Culture has usually had a narrow connotation limited to knowledge in a group of subjects of long standing and of traditional values rather than a sympathetic understanding and appreciation of the values and relationships of human activities to-day. So much for the practice in spite of the modern outlook on Education.

Let us now turn to consider our particular problem. Our Indian Schools have got special problems which require individual considerations through a sympathetic understanding of Indian conditions. The social, economic and cultural background of the past must ever be remembered and taken into consideration by any one attempting the Herculean task of reorganisation of the Indian educational system as a whole or in parts.

In the Elementary School Stage, the child is sent either to the neglected and overcrowded Municipal School or Local Board school or the private school with small numbers, catering to the needs or fancies of the leisured affording classes. The whole of this education is to a great extent in the most deplorable state. The foundations are all wrongly laid. The child runs through the allotted space of 4 or 5 years—the parent does not care because he thinks falsely that the only

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education of importance requiring close attention or a generous expenditure of money is the High School Education. Even educated Indian professors, lawyers, doctors, engineers, send their children to these overcrowded, ill-managed municipal or local board schools where no education worth the name is being imparted. The average child is certainly taught to recite tables, to read lessons parrotwise. The child does not form a single good habit due to the school's initiative; on the contrary, it is noticeable that quite a number of faults are beginning to show from this early stage. Stealing, copying, lying, ballying, cheating are just a few of those undesirable achievements due to neglect or unhealthy conditions. These are not imaginary grievances but commonly observed faults noticeable in a majority of children coming to Secondary Schools from these institutions. Their problem is mainly the problem of the badly brought up children who have already formed wrong associations. Parents require to be guided in these matters as much as children.

On inquiry into the state of the A. V. Schools we find that the majority of these also regard the period of training as a transition period between the Elementary and the High School stages. Naturally this stage is again at a discount. The child must somehow muddle through it. Even if it has shown weakness in some subjects, it is required to go up by a standard annually because it is imagined or argued that in the High School stage it will be required to repeat these subjects again and there it would do them in a more sound and thorough going fashion. During these important years between 9 and 14, when the pupils would be blossoming out from childhood to adolescence, when the body is growing at an enormous rate and new powers and functions are readily flowering forth, little or nothing is done in our A. V. Schools to utilise and direct these into the services of education. The child's development in character, behaviour, social habits, body building and physical control is sadly neglected. The schools mind only the teaching of traditional, formal subjects in the curriculum in a half-hearted manner and every one—the teacher, the parent, the child—sits back snugly and contentedly waiting for the miraculous moments of the High School stage to dawn when the child would of its own accord and native intelligence shine forth as a 'wonder hero'. This A. V. stage is neglected to such an extent that by the time the child proceeds to the H. S. proper it has contracted a number of wrong notions and habits, has begun to neglect and disregard the essential and vital matters, has already turned a deaf ear to all ideas of physical development, and he has begun to regard the school as a place where a certain number of

school subjects have to be learnt in order to go up for the Matriculation examination. The be-all and end-all of his Educational outlook is the Matriculation Examination as representing the magic door leading to Aladdin's lamp—the College.

Now comes the High School stage itself. It is a great tragedy of our modern education that the schools all over the presidency have in the main kept to the goal of preparing students for the Matriculation Examination. It represents a stunted outlook, stultified and unnatural. It is so narrow that schools and heads of schools have shut their minds to all exploration of the possibilities and value of new subjects and schemes of work. They have submitted meekly and unprotestingly to the dictation of the University or the Department and merely slavishly adapted their school work to it. The schools as institutions which are evolving should keep an open mind and keep on experimenting with the material they have, inquire into and attend to the social needs of the community they serve and wherever possible should expand, alter or add to the courses required by the two above named bodies.

But we find that the High Schools are tradition-ridden. The teachers of these institutions are the upholders of these worn-out traditions and having been in the line for a number of years or having been coached up in this routine way, they are chary of all change. They try to justify the inclusion in the curriculum of unpalatable H. S. subjects of doubtful utility to all pupils. Even though their unsuitability is commonly accepted, these specialist teachers would put up all sorts of arguments in favour of their particular subjects in the curriculum of the H. S. and University studies. One of the forces to contend with when attempting substantial changes in the curriculum will be the body of teachers who are no-changers and averse to all modern ideas.

Our High Schools have again been forced through circumstances or by design to serve a double purpose. The Government and other public bodies regarded and still regard the Matriculation Examination as a School-Leaving Examination and the pupils passing it are regarded as having reached a certain level of training and achievement. The University instituted this examination mainly with a view to testing and passing candidates fit to enter Colleges to pursue a higher course of academic studies. Now judging rationally and dispassionately, these two aims have not much in common and though they present quite different aims, the same examination has been regarded as a proper test for each. Perhaps 15 or 20 years ago when education was

looked on as a privilege of the favoured few, this may have been economically justified; perhaps even from a test point of view the examination could have been allowed as a suitable one as the students did not represent such wide social divergences noticeable to-day. At present when we talk of mass education and proper provision for education for every normal child between 5 & 15, individual differences, special aptitudes, divergent interests and differences in capabilities, to lay down hard and fast rules regarding examinations with rigid curricula and formal syllabuses where no options and choices of subjects are allowed, is to act in the most retrograde orthodox manner.

The present Education system as a whole has been severely criticised and condemned not by one or two disgruntled persons but by a large number of influential persons. Every convocation address of every important Indian University for the last few years contains some reference or other to the very deplorable state of secondary and higher education in this country. We find great educationalists fulminating over it. The newspapers and the journals have also much adverse comment to offer, every alternate day as it were, on the present, deplorable state of our Secondary Educational system. Recently even H. E. the Governor of Bombay, Lord Brabourne, had occasion to express his views on this subject and his sympathies were undoubtedly with the pupils who were going through the mill of such unnatural tests. Yet very few constructive proposals for mending matters have been made in quarters where something effective is expected to be done.

Other disquieting features of our modern University training are noticeable in the existence of a very grave problem of the educated unemployed. Surely, this by itself must demonstrate without further arguments the futility of this type of Secondary and Higher University education. A matriculate, an undergraduate, nay a graduate or even a professionally trained person finds it difficult at present to find suitable work. Persons in Industry, Commerce or big business have spoken out in no uncertain terms how the modern Indian University product has no suitability or adaptability required in their respective lines. The student finds that he has undergone training and education at great expense of money and exercise of talent and energy only to be disillusioned, in the end, to find that he has no value in the eyes of people that matter.

More disquieting still, is the mal-adjustment between the educational institutions and the University as an examining body. Surely any examination should be a test of what pupils have learnt or what they

have been educated in. The large numbers of failures at all examinations starting with the Matriculation show how whether the examiners or the schools and colleges are not fulfilling their functions satisfactorily. No doubt the University is justified in laying down certain requirements of candidates who desire to go up for further education but the institutions cannot all be in the wrong when percentages of results are found to be too low. The University passes adverse judgment on its own institutions and in any case, there is something amiss somewhere.

(To be concluded.)

The Temple that we need

By Prof. K. S. Srikantan M. A., F. R. Econ. S.

As one interested in the library movement I cannot but draw the attention of the readers to the remarkable work the West Tanjore District Board has done in promoting literacy among the villagers. Illiteracy is the greatest single stumbling block to India's progress and any work done towards killing this monster (which sometimes masquerades as religion) deserves the highest appreciation of the public. It is needless to observe that Democracy without mass education is unthinkable while mass education without a net work of libraries is impossible. To the Tanjore District Board goes the credit of realising this truth—to them belongs the glory of sowing deep the seed of Democracy.

The temple that India needs to day is not so much the temple of Idols, as the temple of books. *At present there is almost an unbridgeable gulf* between the educated few and the uneducated many. As a result, the villagers do not know what exactly the leaders of thought are thinking and until they understand and sympathise with these movements, progress is well-nigh impossible—for the soul of India is still in the village. As it is, the position of the 'Educated India' reminds one of the horse that bolts away leaving the carriage far behind. This gulf can be bridged only by means of libraries, for through the librarian and through the books alone can the villagers keep themselves abreast of the times.

The ideal, therefore, is a library for every village. I know no body will dispute the need for a library in every village but every one will ask the question—what about finance? My answer is simple. Let the

old temples which are groaning under the weight of gold give some portion of their wealth to these new temples. Who has not heard of the fabulous incomes of the Lord of the Palni hills, of Venkatachala-pathi of Tirupathi, or again of Viswanath in Benares? While the temples of learning are starving for want of funds, why should the temples of idols suffer from a plethora? Indeed, here is a paradox of poverty in the midst of plenty. The temptation to make an appeal for funds to these temples is well-nigh irresistible. Such a cooperation between the temples and libraries will also enhance the reputation of the temples. It is only too well known that many of our temples have lost their ancient glory. In the words of Fergusson, "The Srirangam temple is practically a bazaar, filled with shops where pilgrims are lodged, fed and fleeced. At Rameswaram, and more so at Madura, barbarous vulgarity has done its worst, and the traveller is only too fully justified in the contempt with which he speaks of these works of a great people which have fallen into the hands of such unworthy successors." The secret of the glory of these temples in olden days was that they identified themselves with the cultural activities of the times.

India, like other parts of the world, is passing through a social and intellectual crisis. Old ideas and old achievements are fast disappearing, yielding place to newer ones. We have to realise the truth of the statement that "Mahamad may have left detailed instructions for camel drivers, but he had nothing to say about drivers of Motor Cars." In short, we have to change the outlook of our institutions according to the spirit of the times. If the temple authorities do not come forward with their vast resources for nation building services, a situation similar to the one in Russia regarding the religious institutions might easily overtake us. If in Russia there was physical starvation, in India we are passing through a stage of intellectual starvation. The temples at present are pursuing a policy not very different from the Russian Churches some time back. People have every reason to look to the temples for help in the hour of need. In India particularly there is justification for this expectation. Libraries have been looked upon throughout her history as temples of learning. The Chola and other rulers had libraries inside the temples. Diversion of temple funds towards the libraries is the most legitimate thing to do, for if salvation is the right aim of Religion, the library movement deserves to be called a religion, for on it depends the Intellectual, Political and Economic salvation of a nation. The Tanjore temples, I hope, will lead the way like the Tanjore District Board by diverting a portion of their funds towards Rural Library Service.

School for all Ages in Sweden.

BY A CORRESPONDENT.

At the age of seven the young Stockholmer must, according to the laws of Sweden, begin school, and set out on that rough road to knowledge, which we shall now try to outline as briefly as possible.

Since 1919 there is an obligatory 7 year elementary school course in Stockholm. But when the 14 or 15 years old pupils have passed the seventh form, their learning days are not yet over: compulsory continuation schools—one day's instruction a week for two years, or another eighth full-time class—follow. The latter alternative is usually taken in Stockholm.

Other alternatives are offered, however, in place of these "normal" elementary school and continuation course. Like Hercules, the youngsters are repeatedly faced by a parting of the ways. The first time is on completion of the fourth form, when by passing an entrance examination they may transfer to the Lower Secondary School (Realskolan) of 5 years duration, a decision that can be put off for another two years, if the transfer is instead made from the sixth form of the elementary school to a 4 year course in the "Realskola". The Realskola ends with the Final Lower Secondary School Examination (Realexamen), which can also be taken by transferring from the sixth form of the elementary school to a 4-year course of the Communal Intermediate School. Vocational Intermediate schools are further established, also of 4 years duration: a Technical Intermediate School for boys, a Commercial Intermediate School for boys and girls, and a Domestic Science School for girls. The examination passed at the end of these courses is called the Lower Secondary School Final Practical Examination (Praktisk Realexamen).

Whichever road they have chosen, the youngsters are by that time about 17 years of age. Those who go on from the fourth or sixth form of the elementary school to the 5 or 4 years' course respectively of the secondary schools, often do so with the idea of continuing in the higher secondary schools. These can be reached either from the last form but one of the lower secondary or intermediate schools, in which case the course is one of 4 years, or from their last form, when it is of 3 years' duration. The higher secondary school leads to the matriculation examination (Studentexamen) entitling the pupils after 12 or 13

years' work on the school bench—to the coveted white undergraduate cap, an event celebrated by flowers, song, and rejoicings, and opening the doors to the high schools and universities.

The higher and lower secondary schools are State institutions, while the elementary schools and their superstructures are communal matters. In addition, there are also various private schools, most of them in receipt of official support, of which the usual secondary schools for girls deserve a special mention. They are organized in seven classes, where the first class builds on the four first years of the elementary schools, or on some corresponding "preparatory" school.

All these different school systems, these alternative methods of attaining the "realexamen" or "practical realexamen," with entrance examinations and transfers from one school to another, may seem rather confusing to an outsider. Even the children and parents, who have to choose between them, frequently think so. It must be remembered, however, that education in Sweden is at present in process of reorganization: the old forms are disappearing, and the present fundamental idea is to make the elementary school the first stage of an educational system giving to all, of whatever social degree, who can profit by it, a chance of continuing in various kinds of higher educational establishments, and giving to the girls—who formerly were almost exclusively left for the more expensive private schools to deal with—the same opportunities as to the boys. At the same time efforts are being made to raise the general standard of education, and to give a better theoretical grounding to those who intend to join some practical trade or profession.

Let us now return to the boys and girls at school, to those who, overcoming all temptations towards a learned career, have passed the regulation 7-year course of elementary school education. Most of them continue for another—the eighth—year, and then go on to some vocational school where they are given theoretical and practical instruction in some trade or other. These courses last from 11 months to 4 years, and after passing an examination the youths are ready for a job in some workshop or factory. In addition, there are evening apprentice and trade classes for such as are already employed, but wish to improve their knowledge.

The secondary school fees may be considerably reduced for people of small means, while no charges at all are made in the elementary schools. In Stockholm much social assistance is also given to the children in the elementary schools: food is provided at school for poor

children, usually a 2-course meal about 11 a. m. Boots are largely provided at the expense of the town, and all children in the elementary schools have their teeth attended to in special dental clinics, usually in the schools. Washing rooms, shower-baths, and swimming pools are provided, where swimming instruction is compulsory; there are gymnasiums, and an ample supply of material for outdoor games and for summer and winter sports. Finally there are special organizations to send poor children for a stay in the country in summer.

So much for the healthy children. For children with a tendency to tuberculosis special open air schools are provided in three of the elementary schools. Mentally backward children are taught in special classes, to which they are transferred after special medical examination and intelligence tests. Separate observation classes are arranged for psychopathic children, and mentally defective, but educable children can be given suitable instruction. Doctors with special orthopaedic training for the treatment of children whose locomotive organs are malformed, and specialists on impediments of hearing and speech, are also available.

Blind children are no more exempt from school than other children. They are not educated by the commune, however, but by the State, and the State has established a centre for the blind at Tomtebodavägen, just outside Stockholm, where children receive ordinary school teaching as well as vocational training in certain handicrafts and hand-work, music, piano tuning, etc. The education of deaf and dumb children at Manilla on Djurgården, Stockholm, is similarly arranged.

Visitors interested in our educational system might like to see some of the new schools built in recent years in Stockholm and its garden suburbs. We will only mention a few that may be found of special interest: the Angby and Olofslund new elementary and the Bromma secondary schools all in Bromma—and the Enskedefältet school at Enskede. In the town proper we note the South Communal Intermediate School in Hornsgatan, the new Girls' Secondary School in Sveaplan, and the gigantic building of the Stockholm Municipal Apprentice and Vocational Schools in Kungsholmen, which was opened in the autumn of 1937. The elementary school of Storkyrkan Parish in the "Old City" deserves special mention, being an interesting example, from a town-planning point of view, of slum-clearing and building operations among the densely packed mediaeval houses and narrow alleys there.

Students are registered at the various high schools in the capital. We have here the Caroline Institute (for medical students), the Veteri-

nary High School, the Institute of Dental Surgery, the Pharmaceutical Institute, the University of Technology for the advanced training of engineers and architects, the High School of Forestry, Commercial High School, the Social Institute, the Central Gymnastic Institute, the High School of art, the Conservatory of Music, and others. Finally, the several institutions of the Stockholm University (Stockholms-Hogskola) with its faculties of the humanities, natural science, and law, are grouped in the neighbourhood of Drottninggatan and Odengatan. (I. R. I. B.)

Educational Reconstruction.

Coordination of Secondary and University Education.

BY PROF. N. KUPPUSWAMI AIYANGAR, M.A., L.T.

THE ONLY SOLUTION.

At the last meeting of the Senate of the Madras University, to the question whether the University will consider the Wardha Scheme and the possibility of coordinating and integrating Secondary and Collegiate education, the Syndicate answered with an emphatic 'No.' (Qs, 35 and 37). Again, to the request of the Government that the University will consider in detail the proposals of the Government with regard to educational reconstruction in Madras, the reply was, "We are not prepared to make any change in our courses of study to suit your proposals; but if you remodel your High School Curriculum, we shall have our own Matriculation Examination" (Item 6 of the Agenda). This, in the language of the man in the street, amounts to saying "Go, hang yourself, I shall go on as merrily as ever." The Madras Government, true to the creed of Non-violence, at once showed the left cheek and promptly announced that they did not contemplate any reform in the University courses of studies now, whatever the 'now' may mean.

I hold no brief for the proposals of the Government. They follow closely the cow notorious Government of India Circular on Educational reconstruction. This circular was based on ideas and ideals held by Englishmen of the past generation. It is natural for an Englishman now employed in India to be influenced by ideas that were current when he was at school in England. But it does not follow that the present Congress Government which claims to be democratic should follow his lead and adopt a scheme which is considered by all modern

educationists to promote class education and therefore most undemocratic. I am not blaming the University for rejecting these proposals. But I do hold that the University failed in its duty in giving such a curt reply.

It is one of the functions of the University to disseminate knowledge—up-to-date, true, scientific knowledge, not only among young students but also among the members of the Government especially when they give you an opportunity to do so. The University should have considered the proposals seriously, explained to the Government where and why they were unsatisfactory and suggested modifications. It is in not doing this, the university failed in its duty and showed itself to be antediluvian in its ideas and most reactionary in practice.

PROPOSALS OF THE GOVERNMENT.

It is proposed to institute a post primary four year Middle School course for all, then separate the goat from the sheep, so to say, and educate them separately in two different kinds of schools—Pre-university schools and vocational schools. These proposals remind me of what Terrard Winstanly said as early as 1652. He said that there should be no special class of children brought up to book learning only. "For then through idleness they spend their time to find out policies to advance themselves to be lords and masters over their labouring brethren which occasions all trouble in the world." The idea of separating the goat from the sheep at the early age of 13 or so can come only from the superiority complex of those who were "brought up to book learning only."

WHOM ARE WE GOING TO DIVERT TO VOCATIONAL SCHOOLS?

Government proposes to divert two classes of pupils— (1) Those that do not desire to enter the University. The question is, "Are there such pupils?" Even if there be some, are there parents who do not *desire* their children to enter the University? Will any of the authors of these proposals divert by choice (desire) their own children from the University? So long as high emoluments and honours go to the University graduate the first choice for every pupil will be the University. Therefore, the University, whether you like it or not, will dominate the situation. The Educational Commissioner with the Government of India bears out this point. He found that the vocational bias schools were not popular. Therefore the only way of making this domination wholesome is to make the University responsible for both literary and vocational education and thus coordinate the Secondary with the University education. (2) The second set of pupils who are

to be diverted are those who are unable to benefit from a university course. On the assumption that our Intermediate and pass B. A. courses do confer some benefit on our students—which is questionable—the argument is plausible. But the trouble is, no educationist of standing will venture to say that he has discovered a measuring rod by which he could with any amount of fairness or justice, predict that a particular boy of 13 is unable to profit by a university course. This is one of the reasons why The National Vocational Guidance Association of America is particularly emphatic that

“care should be taken that the choice is made by the individual himself—absolute freedom of choice is his inherent right.”

From the point of view of both educational psychology, and sociology, the best educational guidance that we now have is, as Kilpatrick says,

“I have no right to fix my child's character irrevocably—I must do what I can to him ultimately to the place where he can and will intelligently decide for himself what ought to be done.”

Some of the American Universities carry this idea of freedom to such an extent that even when the candidate fails in his entrance tests admission is not refused. On the strength of his school records and the results of the tests, the candidate is *advised* as to what he should do. If he still wants admission, admission is granted: Can the democratic Congress government afford to do less?

SOCIAL POINT OF VIEW.

These undemocratic and uneducational proposals were born out of the traditional opposition between vocational and liberal education. It used to be said that the failure of Secondary Education was due to the fact that the University requirements were allowed to dominate the high schools and that the remedy was to make the high school courses independent of the University needs. There are two misconceptions in these ideas. It is assumed that all university education should be purely literary and that the secondary schools should do only what the University does. The possibility of the University being forced to build upon whatever the schools choose to produce is not contemplated. But these ideas are no longer held by educationists of repute, not even by English Educationists.

Lord Percy, in his book “Education at the Cross Roads” pleads for a uniform system of education for all. He wants the University to take up full control over all kinds of education and build upon whatever the school produces. He says,

“Every school should regard itself as preparing its pupils for a higher stage of education; every institution of higher education is to regard itself as setting a standard for the Schools below it, every pupil is to regard himself as pursuing a connected course of studies which will, if he so desires, carry him from childhood to manhood.”

He goes on to say that all forms of Vocational institutions should form part of the university. At no stage they should be considered separate institutions that are supposed to cater to the needs of those who cannot enter the universities. Really, no better brains are required to mug up Old English or Greek History than to make a good box. From the point of view of Education for a democracy, “No system of education can be satisfactory if one section of pupils is to be led, even subconsciously, to assume an air of superiority over other sections.”

ECONOMIC POINT OF VIEW.

Even from the economic point of view, if we want India to become industriously self-sufficient, the best brains should not be absorbed in purely literary pursuits too soon. As the Board of Education in England observes in their latest edition of the book, “Suggestion to Teachers,”

“Education must enable pupils not only to accommodate themselves to sudden changes of process and method in the occupation they are likely to take up but to transfer themselves from one occupation to another and from one part of the country to another including from the town to the country and from the country to the town.”

This is certainly not possible if we separate the so called goat from the so called sheep at the age of 13 or 14. The Modern Tendency, therefore, is to keep all the pupils in one school as long as possible till they themselves intelligently decide what ought to be done. Again, unemployment is only a very minor effect of our present system of education. As Rev. C. F. Andrews explained in his Convocation Address at the Mysore University, it is the indirect socio-economic effect that is really important. The English medium has separated the masses from the educated by a very wide gulf. The purely literary form of education has separated those that produce wealth from those that consume it by a wider gulf. The effect is the continual rise in the cost of living of the educated without any compensating benefit to the common people. But it is the common people that have to find the money for the high living of the educated. Any reform must take these factors into consideration.

A COORDINATED SCHEME OF EDUCATION.

How to implement these ideas in a practical system of education is the next question. I would have the whole scheme of education divided into three well-defined stages.

(1) BASIC EDUCATION; SAME FOR ALL TILL THE AGE OF FOURTEEN.

It is to be more or less on the lines of the Wardha Scheme; but not more than half the time should be devoted to the practice of the craft chosen.

(2) SECONDARY EDUCATION FOR THREE YEARS. THE SAME SCHOOL FOR ALL.

But every school is to have two parallel courses *equal in status*, one predominantly literary and the other, predominantly vocational. But both the sets of pupils are to have a definite amount of literary as well as vocational education in common. The literary man must acquire sufficient skill in the practical work chosen so as to be able to practise it at least as a hobby.

(3) A UNIVERSITY COURSE OF THREE YEARS LEADING TO THE FIRST DEGREE.

The University should offer both literary and technological courses of such a nature that even the one who has gone through the predominantly vocational course in the high school must be able to enter the University and continue his studies there.

I venture to say that this is the only scheme that would not only satisfy the main principles of a democratic education as well as those of modern educational psychology but keep out any form of undesirable 'Bolshevism'.

The Sanctity of Love.

BY SRI K. SRINIVAS, B. A.

Love effaces lust. Lust is violent and aggressive. But the light of Love emerges out of the Heart's Temple, never subsiding before the superb brilliance of the laughing sea. This world is illusory, steeped in vices and veiled fraud; lust, deluged by hypocrisy, reaches reckless disgrace.

Love is pure, serene and self-assertive. Love prompted by Nature and impelled by Nature's impulsive background raises the Shrine of Love in holy purity and isolated tenderness. Birds bill and coo; flowers perfume and irradiate the twin souls linked by Love's fragrant ecstasy.

Sakuntala, hungering for Dushyantha in a divine rapture of love, reveals the hearted holiness of exalted love; Nature yields them her secrets and also exposes their divine frankness in its high imaginative splendour. Indra's lust for Ahalya discloses his mean spiritual devastation.

Love heals the wretched ruggedness of life's thorny perils. God's best gift is the Woman: she is born and bathed in excellence. She is felicity incarnate, a spiritual focus of moral symphony, a temple of Beauty's pattern. But other types of women are not wanting, who prove disguised demons, painted pictures out of doors; their character is a thorough confusion, they baffle the lover and cheat him out of sincerity and truth. They smile and smile, pretend and threaten, till they totally lose their moral firmness. The woman's arrogance consumes man's sincerity, and his defeated soul flutters in vain, as a hopeless victim of frustration, sadly unfriended and unconsolated. She misses her rudder and the lover is wrecked. She frets and fumes and frowns; he loses the track and flounders.

Ancient love has been holy, serene, sublime and transparent; but modern love is gallantry, raving and reckless. "Kalithurai" in Tamil brilliantly reveals the excellence of rising ripening love between lovers. They have been playing from infancy; they are pure hearted, their love grows by leaps and bounds; after a lapse of seven years, they meet again with discoursing glances; he is thirsty and the girl brings water and, satisfies him; their language of love, gaining mystic infinity, baffles the girl's mother who cannot mistake their meaning. That is genuine love in Love's rare universe.

Ancient love has been enjoying spiritual acme and perfection with a purity profoundly sustained. Love has been seeking the heart and soul of partners dancing in the Eden of Emotion. The poets of old have painted love with a perfuming and prolonged sweetness on their lurid canvas of fancy and imagination; the poet's imagination in *Ahananuru* and *Purananuru* intimately discloses sublime intricacies of interlaced love. Lovers revel in the overflowing sweetness of overwhelming solitude, and taste the languor of ambrosia.

Pure love swells to serene heights; it is love pure, profound, prolonged in perennial felicity. Modern love is entangled in gallantry and civilisation, in the fetters of mode and pattern, and in the violent clutches of voluptuous lust: glances are gall, words are fetters, and tears, those of a crocodile. They smile to stifle all sincerity, and poison the sacred springs of emotion and instinct. The woman of lust lies at large, blackens and breaks her conscience. Shelley has realised how love is one heaven, one hell, one immortality, and one annihilation; to him Love is the very Metaphor of Spring and Youth and Morning. Shakespeare feels "the Lover, sighing like furnace, with a woeful ballad made to his mistress' eye-brow". Again he says: "Love surfeits not; Lust like a glutton dies: Love is all truth; Lust full of forged lies."

Nursing as a Career.

By SRI S. M. DUTT, M. A., B. T.

Great credit is due to Miss Florence Nightingale who exalted the profession which was purely confined to women of lower rank in society in her time, and glorified it by personal sacrifices. She once cherished the idea of visiting India to be of service to the women of this country but her desire could not be fulfilled. It is a good sign of the times that the profession which was the monopoly of Anglo-Indian women is being gradually pursued by the Indian poor class women though it is not looked upon with so much honour as it ought to deserve.

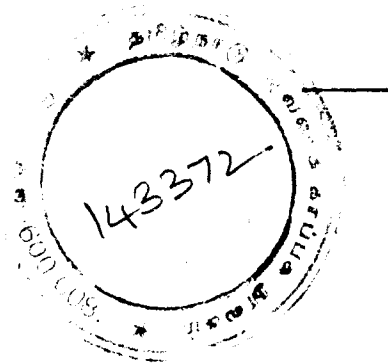
With the break-up of the Hindu joint family where widows nursed ungrudgingly their relatives who comforted them in their distress and removed their physical wants, nursing as a profession is coming to the fore-front. Every family has become a separate unit now-a-days and the circle of relations has become narrower than before. Now that it is

difficult to get the services of female relatives, it has become imperative on the middle class people to call in nurses for patients having protracted illness or where the nature of a disease requires careful handling to prevent any kind of infection spreading. Considering the heavy charges of a nurse which vary from 9/- to 6/- per diem, the gentry can ill afford to engage one. In several cases Indian women will not prefer nursing a male member of a family as it offends against their sense of decency and decorum. Women will generally prefer a female nurse while a male person will like to be attended by a trained male nurse. Once I found it extremely difficult to secure an Indian female nurse for a young man who suffered from no infectious disease of any kind. It was equally difficult to get a male nurse for an old person. As far as I am aware, facilities are offered by Carmichael Medical College for the training of male nurses. Those who are trained there are engaged in the work of the Hospital attached but the public cannot avail themselves of their services. There are practically few regular Institutions for the training of male nurses. In these days of unemployment, if nursing classes are held in connection with the Medical Schools all over the country for the training of the male members of our society, provisions may be made for a small fraction of the unemployed. These trained nurses may prove to be useful in village hospitals where there is dearth of nurses owing to the paucity of Municipal funds.

Now and then complaints are received from the relations of patients admitted in the local Hospitals that the nurses do not treat all persons alike and are sometimes rude in their conduct or negligent in the performance of duties. It is wrong to expect that they will be able to satisfy different kinds of patients, who sometimes claim undue attention from them. Hence means permitting, a trained nurse will be welcome in a private residence provided her charges are not heavy. As a rule, a nurse has meagre education. If the qualifications of a candidate for nursing be stipulated as nothing short of a matriculate, better work may be expected from him or her. The period of training should not be less than at least two years. That the profession of nursing is gradually growing in importance cannot be gainsaid. A number of nursing homes under the control and supervision of Doctors have been established in the Metropolis. In the west nursing homes are popular and as soon as one is ill, he is sent to a home. Conditions which were not anticipated in the past are taking place here in India and some of the popular Institutions of the West will gradually come into being in spite of the prevailing prejudices against them. The duty of a nurse is sacred and though it may carry a small allowance, its sanctity cannot thereby

be lost. If the profession of a Doctor is liberal, the profession of a nurse, upon whose care and attention depends considerably the life of a patient, is equally so. Mere diagnosis of a disease will not effect its cure but proper steps must be taken to supply the deficiency of the materials which the system requires for its up-keep. In this kind of dieting the nurse is extremely useful.

Mrs. Bejoya Lakshmi Pandit, Minister of U. P., has recently advocated the necessity of introducing nursing as a subject in girls' schools and regretted that the *role* of a nurse was not appreciated in this country. In our educational system only the qualities of the head are applauded while the cultivation of tender feelings is not emphasised. The spirit of self-sacrifice for the welfare of one's country cannot be generated unless men and women learn to work for the poor and distressed from their younger days. If nursing is made compulsory in girls' schools, many homes may be saved from extra expenses incurred for illness in a family. In American Schools intellectual attainments are not alone in receiving recognition. Character cards extolling any good deed or adventure performed by students are equally valued. In no way can a boy or girl win the admiration of others so effectively as by nursing. In the B. M. Institution of Barisal (Bengal) whose founder was the renowned patriot Aswini Kumar Dutt, boys learnt practical nursing and rendered excellent services to the poor people of the locality. A branch of the Barisal Seva Samiti which is doing good work in Calcutta is reminiscent of the activities of his old school. It is in contemplation, as far as I am aware, to start training classes for those who intend to adopt nursing as a profession under the auspices of the above Society.



Regional Geography to little children.

By SRI A. V. V. NARASIMHA MURTHY.

What is Regional Geography? It is the study of the earth when it is divided into a number of regions, each one of them having definite characteristics of its own which mark it off from neighbouring lands.

Why should we teach Regional Geography to little children when some educationists go to the extent of saying that World Geography has no place in Class III, IV & V? It ought to be taught, for the confinement of the teaching of Geography to home locality in elementary schools narrows the field to an undesirable extent. "Side by side with the geography of the home region must come another kind, the geography of the world as a whole, either according to political divisions or regional units. Moreover, it is necessary to see that the courses of study are rounded off at whatever stage the pupil may leave the school. It is better to give the pupil a general idea of the world as a whole than to give him scrappy and fragmentary knowledge, and moreover it is necessary to remember that 'Home Geography' is more a method of approach to the subject than a subject by itself.

But it may pointed out that it is based on a logical plan. Yes, it is; but in the case of children we must take into consideration not the logical requirements of the subject but the psychological development of the child. Then how best are we to introduce the subject to little children? For this we must proceed from consequences to causes—from human responses to physical controls. For this we must know in what things children are mostly interested. They are interested in stories in journeys, in children of other lands, in heroes etc. They appreciate the human side of the subjects. Hence 'The perspective will present man in the fore ground with the physical features as a setting' (Holtz). We have got to know any of the above and chalk out a definite plan.

Now we have to consider into how many regions the world may be divided and what procedure we may adopt in each case. The following broad divisions may be made.

- (1) Lands of ice & snow
- (2) " cold forests
- (3) " Broad leaved forests
- (4) Temperate grass lands.

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- (5) Mediterranean lands.
- (6) Desert lands.
- (7) Equatorial forests and tropical grass lands.
- (8) Monsoon lands.

But in this article I confine myself to 'Lands of Ice and Snow'.

Then in what part of the year is the teacher going to give the lesson? It is better for him to do so in winter i. e. in the months December or January when he can make them imagine the terrific cold of these parts or early in the school year when the pupils see ice being vended in shops which will give them a better idea of the conditions there. To rivet the attention of the pupils the teacher should change the caption of the region and from here and thenceforth he should call it the 'Eskimo land'. The teacher must be able to take the pupils to the 'barren lands'—in their imagination—and make them follow Stefansson, the explorer, under his leadership. The teacher should also remember that the success of a lesson depends upon the number of apt associations that he brings forth and so constant reference to 'home region' should be made. The topic may not be finished in one lesson but it may take two or three periods. The teacher should have a clear plan and the lesson should abound in concrete details.

Having thought out all the above things, he has to pitch upon the concrete materials, in which the children are interested. In the first place, the globe is indispensable and 'on no account should a map be ever brought into a class of little children which totally destroys the conception of the earth as a ball-like thing.' He should not introduce too many concrete articles at a time nor should he satisfy himself with the mere exhibition. The pictures must speak for themselves and the teacher should elicit as much as possible. He can use the following materials.

Objects: 1. Leather boots 2. Gloves.

Models: 1. Model of an igloo 2. a skate.

Pictures: 1. Penguins 2. Seals 3. Dog carts 4. Mothers carrying children on their backs 5. Eskimo 6. Reindeer 7. caribon and some stereographs along with a stereoscope.

Having secured all the concrete materials required and thought of arranging the lesson in the form of a story with Stefansson as the hero, it is left for the teacher to proceed along a definite plan so as to present the story in the best form to the little explorers. The story should have a head, a body and a tail. The journey to the country

constitutes the head, the human responses and climatic conditions the body and the return trip the tail. Where the cause-and-effect relation is too difficult for the immature brains it is enough if the teacher states the facts only.

Then in actual presentation he should propose a journey to the 'Eskimo land'. Suppose he starts at a certain place (his native village or town), he should take the pupils in his imagination to Bombay by train. Then in a ship to Liverpool via Gibraltar and finally he should land at Port Churchill. At this stage the pupils should feel that they are near the 'Eskimo land'. Having landed in Port Churchill, he should take them to the actual barren lands. All the while constant reference to the globe should be made and the path traced out. Now he should begin to work back i. e., from consequences to causes, from human responses to physical controls. He should tell them the habits, customs, food etc. of the inhabitants and trace out the causes for such modes of living.

The people living there are generally short but those who are living more to the south are a bit taller than their northern neighbours. This can be directly attributed to the general climatic conditions and can be associated with the tallness of the people of England who are farther south. They wear skin clothing, leather gloves and boots. This is also attributable to the climatic conditions and can be associated with our covering with a rug, wearing a sweater etc. in winter. There he may show the objects. They live in skin tents in summer: this is also dependant on the climate and can be associated with our old people and their portable hearth which they always keep near by to keep themselves constantly warm.

Then their food may be taken into account. Their food mainly consists of the milk of reindeer, their flesh when dead and also fish, birds and animals which they happen to catch and hunt. They also hunt after the penguin and seals (he may show the pictures) and utilise them as food: it is necessary on the part of the teacher in such cases to show the pictures first and then elicit by means of questions what they see and then explain to them later. There the teacher should explain to the pupils the necessity for such food materials and also explain them the absence of vegetable life. He may tell that the only vegetable life that exists there are Lichens, mosses, numerous flowering plants, berry bearing and other bushes etc. Here he may contrast the abundance of vegetable matter in the home locality. He may associate the food of the Rishis viz., sweet potato etc. in the forests where nothing can be had. The pupils are acquainted with this information in

their myths. The abundance of vegetable food in the forests and the absence of vegetable food in the 'Eskimo land' can be well impressed. He should also point out how the women, as part of their duty, store fish for winter when the rivers become frozen and may associate with 'Salt fish' of the locality. He may also tell them that the people obtain tea and tobacco by bartering fish-bones etc. and explain to them that the people in such a country need them in so far as they are stimulants to keep themselves active. He can associate this with toddy and drunkards and show how stimulants keep people active momentarily, and also incidentally mention that they are very inimical to health and such things should not be used so that the pupils may not be carried away with the impression that stimulants are also good things.

Then he may turn his attention to the animal life viz., the Reindeer, caribou etc. (He may show the pictures). He should explain the multifarious uses to which a Reindeer—a semi-domesticated animal—both when it is alive and dead, is put. He should give them the food of the animal, its extraordinary sagacity in finding out mosses like a dog whose odoriferous sense is remarkable. He may point out that the skin of the animal is used for clothing, the flesh for food, the horns and bones for tools and implements and sinews for thread. The possession of a few reindeer means that a man and his family have most of their needs supplied. This can be correlated and associated with their historical knowledge of Aryans who called 'cows' their 'Sommulu' (wealth). He may mention that the Caribou has not yet been domesticated. The Reindeer may be compared with our 'cow', a fully domesticated animal—in every respect. He may also point out that there are a number of insects e. g. Butter-flies, dragon flies, blue-bottles etc.

Then he may turn his attention to the 'nomad' character of the people and explain that the people move southwards in winter where fishing is possible. In this connection he may mention the way in which they move from place to place. The dog-carts may be introduced here and the picture may be shown. The reindeer, he should not forget to mention, is also a beast of burden like the ass. The old and the sick are left to perish. Children take delight if the teacher tells that children are kindly treated and that the mothers carry little babies on their backs. (Picture may be shown). In winter they live in Ice-huts known as 'Igloos' to protect themselves from polar bears and this can be compared with the abode of a snake. It will be interesting to children if the teacher tells that the women lick away their plates instead of washing owing to scarcity of water.

Then the teacher may proceed to tell some general conditions prevailing there e. g. 'The summers are short, winters are long, rain is scanty and they enjoy half year day-light and half-year darkness.' But the reasons should not be stated as they are beyond the pupils' intellect. He may also tell them that the snow never thaws below a depth of one foot.

Afterwards he may point out the whole region on the globe and say that the same conditions prevail throughout. Some differences between the tundra-dwellers and Eskimos may be pointed out for e. g. the tundra-dweller dwell away from the coast and the Eskimos near the coast.

He may tell that there are gold mines in Alaska, coal mines in Spitsbergen, oil mines in the lower valley of R. Mackenzie, pointing all of them on the globe.

Afterwards he may propose the return journey by air giving description here and there. He may casually mention about the prophecy of Stefansson.

After the whole region is thus dealt with, the teacher may give some practical work, some imitative exercises. He may encourage the pupils to make models of a Skate and an Igloo and draw diagrams of a skin glove and a leather boot.

Bonn University.

BY HEBERT GUENTHER.

The student at Bonn enjoys one peculiar advantage the like of which is not to be had at any other German University. When he steps out of the main University building and crosses the old court-yard gardens, he has a view of the Rhine as far as the distant Siebengebirge "Seven Mountains"—a view which the much travelled Humboldt declared to be one of the most beautiful in the whole world.

In Bonn there prevails an air of genuine distinction, which the centuries have not been able to erase, and both town and university have retained their aristocratic and intellectual character through all the storms of time. The town is a veritable paradise of beautiful gardens and handsome villas, and is it not in entire keeping with this aristocratic atmosphere that the University is housed in what was formerly

the palace of the Prince-Bishops? These archbishops of Cologne gave the city its high tone, and their place has been taken by Bonn University. Evidence of this is seen in the style of the new buildings belonging to the University, which has closely followed that of the old palace.

The Faculty of Agriculture, comprising 15 institutes and collections, is the second largest in Germany, and the only one in Northern Germany with the exception of Berlin. Its headquarters are close to Clemensruhe Palace, formerly the residence of the Prince-Elector. A broad avenue connects this Palace with the main building of the university, while round about lie the lands and desmesnes now devoted to the raising of fruit trees and vegetables in connection with the university's School of Agriculture.

Bonn was originally a Celtic settlement, and afterwards the site of a Roman fortification built by the Emperor Drusus in 10 B. C. and mentioned by Tacitus as the *castra bonnensia*. Many evidences of the city's long history are to be found in the excavations, where relics of the Roman era were found in abundance, and are now on view in the Provincial Museum. The late-Romanesque Minster, one of the most perfect specimens of basilica on the Rhine, dates back to the 11th Century, and its beautiful "via crucis" from the 12th Century. The two baroque palaces were built about 1700, and the Rathaus and fountain are in rococo style. In 1770 Beethoven was born in Bonn, and the house and even the room in which his birth took place are still in existence, and have been transformed into a Beethoven Museum. In the Bonn Cemetery, the mortuary of which is now also used as a museum, are buried celebrated men and women.

By the terms of the Peace of Vienna in 1815, Bonn became Prussian, and three years later King Frederick William founded the "Rhenish Friedrich Wilhelm University" after the model of Berlin University. Bonn soon acquired in its faculty such famous scholars of philology and history as A. W. Schlegel, Niebuhr, Arndt, beside many other noted men of learning. The study of history and philology still constitutes an important part of the Bonn curriculum, including courses in General History and History of World Culture, beside the History of Economics and the History of the World's Principal Wars. A special institute is devoted to a study of the History of the Rhine country and another to the History of Religion, the latter being the only course of its kind in existence. The History of Art has a seminar of its own with a library of over 25,000 volumes and 36,000 photographs, the largest collection in Germany. In the Art Seminar, special attention is paid to foreign art, French architecture and Dutch painting.

Bonn University feels the effects of its geographical position, for of the 23 universities of Germany, Bonn is one of the three situated in Western Germany, and the only one on the left bank of the Rhine. Its propinquity to the junction of the two great international railway lines, Berlin-Paris and London-Rome, is also reflected in its plan of study. In the Seminar of Modern Languages, in addition to French and Spanish, there are courses in Portuguese and Roumanian, as well as one on the subject of the Social and Intellectual History of France, given by the scholarly professors Ernst Robert Curtius and Hermann Platz. The English Seminar also includes courses of a similar character with respect to England and its people. In the Seminar of Germanic Languages, there are courses in Dutch and Low German, as well as a study of the literature in those two languages.

The Department of Oriental Languages is next to Berlin the best equipped in the country. Bonn offers courses in the Semitic languages, including Arabic, Hebrew and Tramaish, as well as such oriental languages as Syrian, Ethiopian, Koptic, Armenian, and Georgian; also Turkish and Sumerian. Bonn is the only university which maintains a chair of Indology and one in Assyrian-Babylonian Culture. The chair of Egyptology now embraces courses in Chinese and Japanese, the latter being taught by native professors, so that students may have instruction in Chinese and Japanese, the latter being taught by native professors, so that students may have instruction in Chinese and Japanese conversation, as well as the grammar of those two languages.

The Faculty of Law and Jurisprudence has as a special department a seminar of International Law, where courses are also given in French law and the judicial systems of France and Luxemburg. There is also an institute of Sociology and Economics, a seminar of Industrial Law, and a special course in the Law of Taxation.

The Faculty of Mathematics and Natural Science include in their equipment an astronomical observatory, a school of applied geology, a bacteriological laboratory, and a Roentgen laboratory. From the last two mentioned the Faculty of Medicine derives much benefit, as this Roentgen research laboratory is the only one to be found in Western Germany. Much of the work done here is directly connected with the researches being carried on in the Psycho-pathological Institute.

In a city where four-fifths of the population is Roman Catholic, it is quite natural that the University Chair of Theology should be filled by Catholic scholars of eminence. As part of the Faculty of Philosophy, there is also a seminar for so-called "Old-Catholic"

theology. The seminar of Musical Science is especially appropriate in a University situated in the city in which Beethoven was born, and where the well-known Beethoven Festivals are held. The department includes courses in conducting, orchestration, harmony and composition and acoustics.

The Academic Foreign Student Society connected with Bonn University looks after the requirements of all foreign students during the regular terms, and also provides for them summer vacation courses in languages, German grammar and composition, etc. The German Foreigners Club, which has its headquarters at Students' House, Lenne-Strasse 26, arranges for pleasant social contacts between German and foreign students, including courses of formal lectures on interesting social, cultural, and scientific subjects.

The University's "Association of Friends & Promoters", as it is called, have been generous and active in raising donations for the University, which have enabled the Trustees to provide the various departments with all the technical equipment and apparatus they require so that in this respect Bonn is second to no other German University.

As Bonn and Cologne are only 45 minutes apart on the railway, the students of Bonn can readily visit Cologne University to hear lectures, while Cologne students also frequently visit Bonn for a like purpose. Cologne University is especially noted for its Faculty of Economics & Social Science, and it also has the largest Commercial School in Germany.

Bonn is situated on the most travelled part of the beautiful Lower Rhine, so that its environments are abundant in romantic scenery, land-scapes of peculiar grandeur, and numerous landmarks of German history. Within easy reach of Bonn to the south lies the picturesque old Benedictine Abbey of Maria Laach, while to the north stands the famous baroque Bruehl Palace with its wonderful Balthasar Neumann stairway. The Eifel Mountains are not far away, nor is the delightful river Moselle with the historical old town of Trier (Treves). Bonn lies, then, in the heart of the most beautiful region of all Germany—an ideal site for this historic center of German culture.

Gleanings

1. Reliability of Examinations.

By Sri M. R. PARANJPE, M. A., B. Sc.

In April 1936 I worked as a moderator in Algebra at the Bombay Matriculation Examination. About 12000 answer-books reached me—about 600 each day from *ten* examiners—and I had to re-check 5 per cent of them at least, I checked 750 and observed that 80 percent of them needed alteration in marking, the alteration being about 4% either side. The cases where bigger alterations were necessary were few and were in most cases, due to haste. These latter disappeared when the examiners learned the importance of avoiding haste in checking but the former persisted.

The variation is, in my opinion, inevitable. I have published in the *Progress of Education*, August 1936, a few samples of the errors that give rise to this discrepancy. It is difficult to say if they are slips and if examiners should condone them. Some do; others do not and both arrive at their decisions after deliberation. I had asked the examiners to observe the rule that if a slip was made in the beginning, it should be penalised; if it was at the end of a sum, it should be condoned. But there was a third factor which needed to be noted, namely, the other answers of the candidate.

It was also the year when there was a great row about the English paper; it was responsible for a surprisingly large number of failures and I said to myself "If in Algebra answer books I find about 80% of the markings requiring alteration, in English the condition must be much worse. In Algebra it is easy to guide the examiner, in English it is nearly impossible. I will tabulate the Matriculation result and see if the tabulated result discloses the variation." It did not. On the other hand I noticed that the results approximated our expectations to a much greater extent. The superior group was markedly so; the inferior group was also markedly so; the inferior group heavily collapsed; and the mixed group showed clearly that it consisted of the superior and inferior candidates.

I then analysed the earlier results, those of 1934, and 1935 and one thing that struck me was the constant median value. That set me thinking and the paper "Reliability of Examinations" (*Progress of Education*, July 1937,) was the out-come. It will be easily noticed that the paper does not attempt refutation of the conclusions in the "Examination of Examinations", Report of the International Inquiry Committee. In fact, as I have said above, I am inclined to accept them. But my contention is that it is not fair on that account to call our public examinations lotteries. I cannot say if any responsible person says it, but the effect of the above publication has been to intensify this feeling and the pamphlet "Reliability of Examinations" was written to counteract that impression.

Examinations, as they are conducted at present, are defective I admit. Not only do they not tell us all that we wish to know about the examinee—self-help, tenacity of purpose, grasping power, character—but even what they tell us is not complete. Yet there is no doubt that examinations have been serving a useful purpose; they have been a valuable teaching aid and there is little possibility in the near future of their being displaced by a less faulty method of testing candidates. So long as the examinees and examiners are thinking beings, not machines, individual judgements must vary and about 4% variation is inevitable. A good plan is to accept it as the inevitable concomitant and try to counteract its effects rather than condemn examinations wholesale. Let us point out their faults certainly, but let us point out also how far one may rely on their results, if the examinations are conducted with due care.

The Bombay University Matriculation is in my opinion a tolerably well-conducted examination and this impression—which is shared by the heads of the good schools in this province—is verified in my paper. The chance element in the examination affects some and they need special attention. The condoning ordinances are found to be unsatisfactory; they condone some who may well fail, while they ignore some who ought to pass. Such cases are however few—less than 1%—and if only the problem is handed over to a committee of experts, it can be satisfactorily solved.

Our examinations do not aim at *accurate* estimation. They broadly divide the examinees into two groups, — Passes and Failures—and the minimum required for a pass should not be regarded as a clear line sharply dividing the two groups. On either side of the minimum are ranged candidates about whom a definite opinion cannot be given. The tendency is to treat these cases leniently as far as possible and assume that in two or three successive examinations only the deserving are carried over to the group of Passes. I think that the assumption is nearly correct.

Secondly, I believe it will be correct to say that the variation of judgment noticed among the examiners is nearly absent in answers which are correct or those which are obviously wrong. That is at least the case in Algebra and may well be in Geometry if the candidates are well drilled in the language of Geometry. The variation is to be noticed particularly in incomplete or inaccurate answers and examination will be freed from the chance-element if the examinees are better prepared for the task. The attack should, therefore, be against school-teaching and not against examinations. It is, for instance, not fair to expect every pupil to attain in a foreign language, the proficiency and the appreciation one may have in one's mother-tongue. In India every Matriculation candidate, however, is expected to write English correctly and appreciate English poetry. His performance is bound to be imperfect leaving large room for variation in the examiner's judgment. In other heads similarly, questions too difficult or too easy, catch the candidates into a trap as it were and that leads to a variation in marking. The highly strung

attitude of mind, particularly at the first public examination, is also responsible for numerous errors and inaccuracies which one may not be inclined to condone but which would certainly be avoided in more peaceful environments of the school-room.

These are some of the lines along which reform of the examination machine is possible and the International Inquiry Committee will do great good to schools and examining bodies if it offers a few concrete suggestions for improvement. The Committee does not mean it, but its publication "Examination of Examinations" is generally interpreted to mean wholesale condemnation of present examination and that has had an unwholesome effect on the lay public and the students. They demand a higher percentage of passes on the plea that a large number of deserving students are probably ploughed by the Examiner's devil, instead of realising the need of securing better teaching in schools.

(The Karnatak School World)

Polytechnisation in Education

BY MISS KAPILA KHANDWALA, M.A., T.D.

I have been, practically speaking, round the world visiting different schools and institutions of learning and studying various systems of education. Many things have impressed me but the thing that impressed me most is polytechnisation in education as introduced in the Soviet educational system. It forms a part of the aim of education in Soviet Russia. There education means three things; (1) intellectual development, (2) physical development and (3) polytechnical education. In this respect it differs from all the other systems of education that are in force in other countries.

The Soviet school is a polytechnical school. "It is intimately connected with the whole of life outside the school. The school trains for life, and since the foundation of life is labour, it is held that the school cannot be separated from labour..... All schools are so organised that all children do some manual work which must be closely related to the academic work carried on in the classroom. The children are expected to understand the industrial organisation as a whole, its place in the social economy etc. Polytechnisation gives an understanding of all the productive processes and also gives an elementary knowledge and practice of tools of all branches of production to the school going children. Thus it connects education with life and also prepares children to be skilful workers. (The term worker has a different connotation in Russia from what we have here. He is to be the new intelligentsia of Russia). A worker there is not merely interested in doing his one job well enough to earn the money he is earning merely being clever with his hands—but he has to be many-sided. He must understand the material he is using and also understand the significance of his product in the economic scheme of the country. He must learn to be a good producer and understand

the scientific basis of production as economic forces shape society and methods of production affect the society. Russia wants all her workers to be intelligent and skilful workers. An intelligent worker must have a wider knowledge for mechanised production. For instance, electric processes are introduced in industries and so it is necessary that workers should know all about the science to be able to understand and do the work more intelligently and more efficiently. Do our workers know that? Do workers of America or Japan know anything about the science? No. They do not and do not even understand the significance of their products in the economic schemes of their countries.

In India as well as other more industrialised and more progressive countries of the West where polytechnical education does not form a part of the education of the children, a qualified worker is one that becomes skilled in any kind of work through years of practice and that too only in that one craft or art. A tailor for instance doesn't know calculations and drawing or a builder cannot do the simplest sum. He doesn't have an elementary knowledge of geometry which is so essential for his work. Soviet Russia demands a totally different training — "One that can link up productive labour with scientific knowledge." This means that the Soviet system emphasises the interdependence of education, economics and politics. Thus the workers will understand the underlying principles of modern production, its organisation and distribution; they will know the science of their materials and tools." It is their aim to produce all-round developed workers who would be better fitted and equipped to work. They will naturally have more leisure and more time for pleasurable pursuits. One must be, however, clear that polytechnical education does not mean technical or vocational training which comes at a much later stage in the educational system of Russia. It is given only for its educative value and not as a training for a trade. Every child and adult has to go through it irrespective of the trade or profession he is going to select in the future. This is what is meant by polytechnisation in education.

Polytechnical education is made compulsory in all Soviet educational institutions by a special decree of 1931. The decree issued made it compulsory for every school to be attached to a productive unit near by. In one village a school was attached to a barber's shop as the nearest productive unit. The attached unit is generally a factory or a farm. And the existing connection is a real one. The school workshop is generally equipped by the factory or the farm. The instructor for polytechnical education is also generally provided by them. The equipment of the school workshop depends on the level of the factory. If the factory is up-to-date in its equipment and production so is the workshop and vice versa. Some of the schools have as many as four or five different workshops like carpenter's, blacksmith's, engineer's etc. with full equipment. The factory has its own elected representative on the school council. Sometimes the factory provides the school clothing or meals or sends poorer children to summer camps. It is as if it is their school and their

factory. Children visit the factory and workers visit the school. Children visit factories to study workers' conditions. Sometimes they visit them in the lunch hour and give a "Living Newspaper" of current events. Older children help in factory dramatic clubs, in libraries or sports. In this way the school is united with the factory or the farm as the case may be and the factory is united with the school.

When a child has finished his elementary and secondary schooling he has a knowledge of the Socialist organisation of the chief branches of industry, national economy, individual undertakings, shops industrial aggregates, etc. He must also understand the fundamental difference between Socialist and Capitalist production, Socialist organisation of economy etc. This forms the theoretical background and it is correlated with practical experience in industry as seen above, in the school workshops and in the productive units attached to the schools. Energetics plays a very important part in polytechnisation. A wide spread knowledge of electricity is also included.

It seems very improbable to us, who are not used to getting such an education, that little children could understand and get familiar with all the terms. It is not so. Children in Soviet Union get familiar with the industrial and economic terminology as our children get familiar with sport or film terminology. Information is given in an elementary form and a bare outline of polytechnical knowledge begins at the age of twelve or so. I know from personal experience that Soviet children of 12 and 13 intelligently understand terms like "Socialist organisation, electrification of industries mechanisation, collectivisation" etc.

How do they introduce polytechnisation in infant nursery classes? It is impossible to make a detailed study of the subject here but I shall try to give it as briefly as I can. It is introduced in its simplest forms in the lowest classes. Children are taught to use tools like hammer, chisel, saws, nails etc. These are kept in cupboards. Children take them out when they want to use them and place them back there after they have done with them. There are small benches provided for them in a corner for working. These children learn to use these tools and make big articles too. They had made excellent models of aeroplanes, motor cars, trucks, sewing machines, fans etc. Even simple cooking is included in polytechnical education. They make soup or vegetables, cakes or simple pastries. Materials used are paper, clay, wood, plasticine, food stuffs etc. Generally children work and are encouraged to work collectively. The finished article bears the names of all the children who helped in making it. Even in the case of these very young children the social significance of work and its connection with economic and political life outside is always brought out. Some good American, English or Japanese schools do teach handwork to the children but that differs from this considerably. There isn't that link between education, economics and politics that you have in Polytechnisation. Then the models in the Soviet schools are very much bigger and tools used are not toy tools. The other schools would consider it very dangerous to give such tools to their children.

In Primary Schools (8 to 12 year ones) there are workrooms and materials used are cardboard, paper, clay, wood, textiles, wires, tin etc. Both boys and girls do needle work, darning, mending, cutting and sewing simple garments on machine, carpentry etc. as polytechnical work. Articles made are such that they can be used either at home or in the school. They generally spend 2 to 4 hours a week for such work.

In Secondary Schools (12 to 18 years.) practical work is done in the school workshops. They spend 4 to 6 hours a week.

All who graduate do not necessarily go to a factory or a farm to work. Some become doctors, engineers, professors or follow any particular profession they like, but all irrespective of sex, will have learnt a practical knowledge of economics, industry and production in general. "They will have learnt the interdependence of all types of work and workers. This it is hoped will prevent the gulf that has hitherto existed between manual and intellectual workers."

Soviet Educators have provided well trained teachers for the job. They had great difficulty in the beginning and is not altogether over now. It is difficult for the instructor provided by the factory to have the educational approach and to link up theory and practice. To be a perfect teacher he has to be an educationist, an economist and an engineer. The Soviet Government has succeeded amazingly well in training such teachers in such a short time. There is a special department that is only concerned with the training of such teachers. It arranges for short or long term courses and also organises district or All-Russia conferences for the spread of polytechnical education amongst teachers and workers. It has research departments where student-teachers experiment on the suitability of material for different age groups, improvement of tools and apparatus. One section deals with methods and syllabuses. They try to relate one subject with the other, theory to the work in the workshop. This department is busy in urban as well as rural areas.

This is enough to give a rough idea of polytechnisation as carried out in Russian Schools. The aim and the results prove the usefulness and the urgent need of its being introduced in all schools of the world. We too need it in our schools and colleges where we learn nothing of the practical side of learning.

(The Bihar and Orissa Teachers' Journal)

Notes

The Education Week in our Presidency.

By Prof. C. A. KRISHNAMURTHI RAO, M. A., F. R. ECON.S.,
Associate Editor.

It is a well-known fact that the Education Week owes its origin and celebration every year to the premier Educational Organisation of this province, the South India Teachers' Union. It gives prominence to a particular idea in the field of education which is made the topic of discussion in various centres during the Week, and even non-educationists show interest and enthusiasm in the celebration, as education is not a matter concerning teacher and pupil alone but almost every class of citizen. The movement has been organised with a view to keeping the teacher thinking in terms of modern progress as his work is so important from the point of view of social benefit. A certain amount of freshness is in evidence in the speeches made on the occasion year after year as the public would easily detect repetition and platitudes in the course of their being reduced to cold print. Teachers in particular feel gratified that this annual function has beneficent results to themselves and to the public.

While discussing aims and methods of education, teachers are often apt to give expression to certain disabilities which stand in their way of doing their best in their line of work. Being often called "*the noblest of professions*", they take the expression at their face value and are tempted to enter freely into discussions in public on matters educational and non-educational but nevertheless of interest to the body politic; nor are instances wanting where teachers have distinguished themselves in public life even in our own land by such a participation. To abruptly turn round to the teacher and tell him not to engage in controversies or offer unsolicited opinions on matters even of educational interest, is calculated to damp the enthusiasm and affect the sense of self-respect which is so essential for securing good and efficient work especially in a profession whose function is to educate the young and even the adult.

It is not conceivable that teachers in our land, conditioned as they are, can ever develop a spirit prompting them to be extravagant in thought, word, deed, or even in appearance. It is still really the noblest of professions, in whatever spirit the expression might be used by certain people on occasions; and in the Secretary of the S. I. T. U. we have one who commands wide and great regard. His suggestion for the creation of a Board of Education, thoroughly representative and entrusted with responsible functions, cannot be brushed aside as something of Guild Socialism or anything out of the way, as the Premier appeared to suggest in the speech inaugurating the Education Week this year at Madras.

Again, in asking teachers to refrain from taking part in controversies, the Premier should have had in his mind certain ugly tendencies found in some places. He could not have forbidden legitimate, elevating, and helpful contributions made by the teacher to the discussion of matters affecting the public of which the teacher is an integral and vital part. The Premier's observations, as those of a layman, are entitled to regard and have done us the good of reminding us of how we are apt to be looked at sometimes, even from an angle of vision which we might not appreciate.

At almost the same time, H. H. the Yuvarajah of Mysore was addressing the Mysore State Education League on the problems of education, in the course of which he went from the beaten track and gave out most refreshing ideas on education which teachers and administrators would do well to peruse and lay to heart. His survey is from an eminence and of a world rapidly and wonderfully changing in which the teacher is shown his right place and proper function. The teacher is to discharge his duty where everything about man is new, "new ways of of life, new codes of morals, new ways of warfare, travel, forms of government, even new ways of dying through new forms of misadventure!" The teacher cannot be old in a world where everything during every minute of existence is becoming new! Again, inventions are coming upon us so fast and thick before we have time to learn things already with us. That the teacher must prepare the community for such understand-

ing—how heavy a task! Other such onerous duties of the teacher are placed before us in an inimitable manner by one of the most widely-travelled and enlightened Princes of India as H. H. the Yuvarajah of Mysore is.

Educating the parent in planning the family life, the formation of public opinion, developing the average level of intelligence and knowledge within a democracy where universal suffrage is demanded, the formation of character which is apt to be overlooked in the multiple devices like the radio and the cinema with which the world has been flooded by modern inventions, and the development of a valuable professionalism by securing the proper training of teachers who could address themselves to such a task as has been envisaged above—these must allure the progressive teacher to "fresh fields and pastures new" in education. The Yuvarajah is most up-to-date and on right lines when he pleads for the Rotary principle in education by getting together all types of pupils, from the prince to the peasant and the artisan class, to talk on familiar subjects so as to guide them in the choice of a profession and to increase their knowledge of common things. These are ideals towards the realisation of which the earnest teacher must strain and strive.

Reviews.

1. Pathways to Prose and Poetry: Books I and II: By G. S. Krishnayya, M. A., Ph. D. (Columbia) and B. M. Meemamsi, B. A., B.T. Teachers' College, Kolhapur. Price As. 15 each. (1938)

The two books under review serve to teach both the literary and language aspects of English to pupils of the upper forms. The extracts chosen possess a varied and lively interest, and have been culled from standard authors. Many of the prose pieces have been adapted in the modern garb. All forms of prose and verse, from Indian and English writers, have been included, giving a wide choice to teachers to enable them to cater for different capacities and interests. One special feature of the books is the carefully planned exercises for detailed study which would lead pupils to acquire habits of clear narra-

tion and correct grammatical ordering of words. The exercises in the poetry section dwell more on the appreciation side. Compiled by experts in intimate touch with the training of teachers, the series should prove useful text-books for the higher forms of Secondary Schools.

2. Elementary Inorganic Chemistry: By S. J. Smith. Published by Macmillan & Co., Ltd. Price: 4 sh. 6 d.

This neatly executed book, though primarily designed to meet the requirements of students of the School Certificate Course preparing for the London and other English Universities, would be found greatly helpful to beginners in Chemistry of the Intermediate classes of Indian Universities. The book includes a large proportion of chemical theory, which presumes a decent grounding in introductory chemistry at an early stage. The chapter on atomic and molecular theory has received simple and interesting treatment, and chemical symbols and equations have been used in representing chemical reactions. The fundamentals of Chemistry have been presented lucidly with experiments. The neat and instructive diagrams, the questions added at the end of each chapter and the test questions, enhance the value of the book.

3. Sir M. CT. Muthiah Chettiar High School Magazine: Madras: Vol. 3, No. 1. Sepr., '38.

Madras schools are vying with one another in bringing out school magazines, which have become a regular feature of school life. The magazine under review is one of which the school may well be proud. Its contents are as attractive as its title page picturing the beautiful mansion which speaks volumes of the munificence of its donor. The record of the school activities in its various phases, besides being highly informative, makes interesting reading both to the public and to its *alumni*. A prominent place has rightly been given to honour the hallowed traditions and legacy left by the retired Headmaster and to the sumptuous recognition accorded by the management to its devoted worker, which others may well emulate. Due place has been given to contributions in English, Tamil and Telugu of the pupils, which are of a high order. Plenty of latent talent in the school seems to have, however, been left out untapped for want of space, as the Editor observes. School magazines being primarily vehicles of self-expression for pupils, it is for the present Headmaster to devise measures for making it at least a Quarterly, straining though it may be to the staff, if not to the resources of the school.

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Issued by Madras S. S. L. C. Board, 2nd June, 1937.

BY K. S. RAMACHANDRA IYER B.A., L.T.,
Senior Science Assistant, Town High School, KUMBAKONAM.

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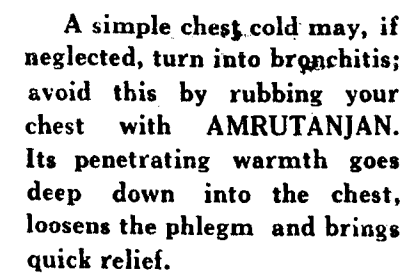
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