
PRINCIPLES OF EDUCATION

BY

ANNIE BESANT

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*With a scheme applying them to
National Education in India*

DEDICATED TO
PARENTS, GUARDIANS AND TEACHERS

BY
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GEORGE S. ARUNDALE,

January, 1918.

Registrar.

PRINCIPLES OF EDUCATION

THE principles of Education, its natural bases in the human constitution, are permanent, while their applications must be local, adapted to the conditions of time and place. Hence while the Natural Law of Education must be recognised, there should be freedom in experiment and flexibility in application, so that we may discover the best methods available to us for the moment, and use them until we

find better ones. By following the Natural Law, we shall facilitate the evolution of the child into the adult, working with Nature not against her; that is, Education will be recognised as a science, and not a haphazard dragging up of youth, consisting chiefly in forcing into them knowledge from outside, instead of helping them to unfold and utilise the capacities they have brought with them into the world. As Happiness increases the life-forces and Pain diminishes them, as Love energises and inspires to Right Action, while Fear paralyses faculty and inspires Hate, Happiness and Love should be the atmosphere inbreathed by the young, whether in the Home, the School or the College.

As man is a spiritual being, manifesting in the external world as Intelligence, Emotion and Activity, the Education of the young must help the inspiring Life to unfold itself, and must train the organs of Intelligence, Emotion and Activity ; that is, must be religious, mental, moral and physical. Any so-called education which omits any one of these four departments of human nature is imperfect and unscientific, and its outcome will be a human being deficient in one or more of the groups of capacities on the balanced evolution of which the extent of his usefulness to Society depends.

But the introduction of the word "Society," reminds us that Education is not the training of an isolated

individual, but of an individual living within a social order, the happiness of which depends on the recognition by each that he is not an isolated but an interdependent being. Society is a congeries of interdependent individuals, every one of whom has his place and his functions, and on his due discharge of the latter the right working of the whole depends. Hence Education must consider the youth as the embryonic citizen, with social duties and social responsibilities, must see him in relation to his environment—the Home, the School, the College—and from his earliest years must train him, as boy or girl, to feel himself as a part of his country, with his duties and responsibilities to the Motherland; that is, he

learns to serve the Motherland in the Home, the School, the College, as a foundation of, and as a preparation for—not as apart from—the wider and fuller service, as man or woman, in the larger world. We must evoke the sense of duty by showing the pupil that duty is a debt he owes, first to the parents, the brothers and sisters, the servants, who have protected him in his helplessness, have surrounded him with affection, and on whom his nurture and happiness still depend. We must evoke the sense of responsibility by showing him how his thoughts, feelings and actions affect his environment, and then react on himself. Needless to say we do not teach these principles to the child, but they must be understood

and practised by parents and teachers, so that they may base their education of the child on knowledge, and vitalise it by example.

○ This duality, the evolving life and its environment, must be borne in mind throughout education, as its subject-matter will be distributed under these two heads.

The first includes the evolution of the individual *qua* individual, the drawing out of all he has in him, thus raising him in the scale of evolution. The second is that which the old Greeks called Politics, a word which has been narrowed down in a most illegitimate fashion in our modern days to the strifes of political parties, a degradation of a noble word which used

to include all the relations of a man to his environment; in that older sense we shall use it here, in order that the unity of the relation of man to his environment may be realised—the unfolding consciousness recognising, and therefore becoming related to, a larger and larger environment, the Home, the School, the College, the City, the Province, the State, the Race, Humanity, the World. There is no break in principle; the first three are a preparatory stage for the second three, and this whole six for the remaining three; the infant, the youth, the young man is the embryonic citizen, to be born into the outer world truly, but shaped and nourished in the womb of the mother, himself all through.

Let us first consider the objects of each department of education.

OBJECTS

Religious Education.—The object is to clear away the obstacles which hinder the natural instincts of the unfolding Life—Love to God (Life-Side) and Service of Man (Politics-Side). These obstacles are summed up in the idea of separateness, the essence of spirituality being Unity.

Mental Education.—The object is to develop and train the powers of Intelligence as an aspect of the evolving Life. On its Life-Side it develops and trains those powers, such as observation, memory, co-ordination, reasoning,

judgment, the clarity of thought and its lucid expression. Its Politics-Side is a knowledge of the evolution of Society to its present condition, and a clear vision of the next stage of its progress.

Moral Education.—The object is to develop and train the powers of Emotion as an aspect of the evolving Life. Morality is “the science of harmonious relations,” and on its Life-Side it is Truth, harmony between the smaller and the larger Self in Will, Emotion and Action, showing itself in the virtues of accuracy and honesty in intellectual matters, and in the effort to realise the ideal intellectually chosen. On its Politics-Side, it is Love, and includes all the social virtues, the sense of duty and responsibility.

Physical Education.—The object is to develop, train and co-ordinate the nervous, muscular and glandular elements into digestive, respiratory, circulatory, reproductive and nervous systems, with their special organs of action as an aspect of the evolving Life. The Life-Side is to provide a sound and well-balanced and well-controlled body, as the physical basis for religious, mental and moral activities. All of these are conditioned by the physical body, are distorted, or rendered excessive or deficient, by physical disturbances, mal-co-ordination, excess or deficiency of physical vitality. The Politics-Side is the use of this for service in such of the nine stages above-mentioned as are embraced in the individual consciousness.

NATURAL FACTS

The early evolution of the human being falls into three natural periods of seven years each, ending at the ages of 7, 14 and 21. Pupilage and Studentship ought to cover these, and at 21 the young man and woman should be fit to face and profit by the Education of the outer world.

First Period, Birth to 7.—Chiefly Physical. The Senses predominate, and the passions are stimulated chiefly by the contact of the sense-organs with external objects; hence the Education should train the senses by accurate observation of natural objects and of the happening of definite sequences, leading later to the evolution of the

reasoning faculties, for the training of which the brain has not yet developed—but is preparing—the necessary physical basis. The greatest possible freedom should be given to the child, consistent with protection from serious injury to himself or others, so that he may show his natural capacities, and they may be drawn out by opportunities provided for them. The passions, hardly yet to be called emotions, must be gently trained. The nutrition of the body is all-important, as serious errors in this vitiate and shorten the whole future life.

Second Period, 7 to 14.—Chiefly Emotional. The Emotions predominate, and the mental faculties are excessively coloured by them; hence the

Education should be directed chiefly to their training and control, so that when the period of puberty arrives the boy and girl may understand the broad facts of human physiology, and may have gained a mental control of the emotions. The reasoning faculties are germinal and should be developed but not overstrained, the mental education being mainly the accumulation of facts, gained by observation and experiment, and the training of the memory by their co-ordination, the acquiring of languages, formulæ, and the like—studies which depend largely on memory.

Third Period, 14 to 21.—Chiefly Mental. The mind, accustomed to observe and well-stored with facts, has the materials of knowledge. It is now

to work upon them. This is the period for the developing and training of the reasoning faculties of co-ordination, of judgment, passing to the serious study of Logic, Philosophy, Science and Art.

A GENERAL SCHEME

FOR

NATIONAL EDUCATION IN INDIA

GENERAL SCHEME

IN all schools the medium of instruction will be the Mother-Tongue of the District. English will be taught as a second language throughout the Secondary and High Schools. The hours at school should be from 7 a.m. to 6 p.m. Tuition 7 to 10 and 2 to 4. Food, Rest and Games 10 to 2 and 4 to 6. (The hours will vary in different parts of India. The principle is to have rest, not brain-work, after the chief morning meal.)

The day's work should begin and end with a short religious service with singing.

School Education is divided into *Primary*, class I, A and B, ages 5—7. *Lower Secondary*, classes II, III and IV, ages 7—10. *Higher Secondary*, classes V, VI, VII and VIII, ages 10—14. *High*, classes IX and X, ages 14—16. *The Higher Secondary* will be closed by an examination, and from this point boys entering on crafts and industries should pass into Technical Schools. The *High* will also be closed by a school-leaving examination. Those who enter professions such as engineering, the higher grades of agriculture and of business and commerce, teaching, arts, science, medicine, etc., will pass an additional year in a University Preparation Class, whence they enter a College by passing an Entrance

Examination, taking their degree in three years, *i.e.*, at 20 years of age, and entering on post-graduate studies thereafter.

Girls' Education will be the same as that of boys in the Primary and Secondary stages, except that needlework, music and cookery will form a part of the Manual Training in the Secondary stages, and in the Higher Secondary, household economy, hygiene, home science and first aid will take part of the time devoted to literature, history and geography by those who intend to pass into High Schools. So many girls leave school at 12 and 14 years of age that it is necessary at present to make these modifications. Thus we have :

PERIODS

1. Birth to end of 7th year (English, 7th birthday).—*Primary Education.*

(a) Birth to end of 5th year—Home.

(b) 6th and 7th years—Primary School.

2. 7th to end of 14th year (English, 14th birthday).—*Secondary Education.*

A sound general education, without specialisation, closed by a certificate examination. The education should be a judicious balance between theoretical and practical instruction.

3. 14th to end of 21st year (English, 21st birthday) or beyond.—*Higher Education.*

(This branches out into three sub-periods according to the future chosen by or for the student.)

(i) 15th to end of 16th year (English, 16th birthday) High Schools, either completing the School Course, or leading to the University, of various types :

(a) Ordinary High Schools, including a practical department, and offering various alternative subjects according to the career chosen by the student.

(b) Technical High Schools, including schools of agriculture, trade, business, etc.

Both closed by a school-leaving certificate examination.

Students passing on to the University do not go up for this examination but

take a further year, with the examination at its close.

(ii) 17th year, in a Preparatory Class for admission to the University, at the end of which there is an entrance examination.

(iii) 18th to end of 20th year—the University, including business, agricultural, teaching, science, arts, engineering and other departments in appropriate Colleges.

Closed by degree examinations, and leading to post-graduate studies.

GENERAL OUTLINE OF STUDIES

[Parents and Teachers should acquaint themselves with the systems of Froebel, Pestalozzi and

Montessori, and the investigations of Binet.]

FIRST PERIOD, CHIEFLY PHYSICAL

Home. *Life-Side.* The care of the
 body must dominate all
 other considerations,
 and for the poor and neglected,
 pre- and post-natal clinics are essen-
 tial. From birth, regularity of
 habits should be formed, and the
 infant should be carefully watched, but
 not be constantly in the arms or lap.
 He should be left to crawl about and
 surrounded at a little distance with
 brightly coloured or shining objects.
 awakening curiosity and exertion to

reach them. He should not be put on his feet nor helped to walk ; his own efforts are best and safest. At about 3, increased opportunities of choice should be put in his way, to draw out his faculties and aid originality. He should be encouraged to observe and to make his own little experiments. He should learn to know the parts of his own body, arms, legs, hands, feet, eyes, ears, nose, mouth ; should count his fingers and toes, to his own great amusement.

At 4, his play may be a little organised, but the organisation must never be forced on him, but rather offered when he feels a want, and begins to grope for its satisfaction. Above all, a little child must never be harshly spoken to,

nor frightened. Fear breeds deceit, because of the helplessness of the child, surrounded by people bigger and stronger than himself. The great virtue of Truth will be naturally evolved in the absence of fear. Little outbreaks of temper should be met by catching the attention with some pleasant object.

Politics-Side. Home Politics is the evocation of the love instinct, and the gentle direction of it to find pleasure in sharing, and pain in holding for itself alone. Every movement of the child to *give* should be met with smiles and caresses, while grasping as against another should result in sadness of look. The play of children together should be used to help them to feel their interdependence, the happiness of

harmonious relations and the pain of discord. The opportunity for doing little services should be given, and the child encouraged to help all around it, to be kind to animals, plants, etc., to be clean, neat and orderly, because these habits make the home pleasant for everybody.

Primary School. *Class I, A and*

Years 5—7. B. Life-Side Play is

the method of teaching, largely based on the observation of objects, and on their inter-relations, their number, their shape, their colour, their use. Dexterity of finger should be developed by the making of objects. The school-room should be scattered over with attractive objects, which stimulate curiosity and desire to

imitate, and thus evoke the creative power of dawning intelligence and shaping touch. The child should wander about freely, and choose for himself the objects which attract him. The teacher should watch him, should help in only when eager effort begins to be discouraged by failure. The child will learn largely by imitation. He will learn exactitude by discovering that badly made things won't work. He will learn that success waits on obedience to conditions, and that impatience, anger, petulance, do not change the nature of things but only ensure failure. Reading and writing will be learned by play, if the opportunity be given as soon as the child wants to do either. It has been found

by experience that if a child is given cut-out written letters to play with, and is guided to trace them with his finger many times, the desire to imitate awakens, and he asks for paper and pencil and repeats the motions so often made, thus producing the letters ; he teaches himself to write. Reading may begin with short nouns accompanied by pictures, the word being pronounced by the teacher and thus associated with the picture. If the word and its picture are on a block, the blocks may, after a time, be jumbled together and the child picks out any word named.

Stories should be used as means of teaching religious and moral lessons, and class singing of stotras and bhajans. It is very desirable that each school

should have one or more shrines according to the faiths of the pupils, where the children could go as a part of their religious education, and be trained in their own forms of devotion. Drawing and modelling should be encouraged. The four rules of simple arithmetic should be taught by objects.

Politics-Side.—Primary School Politics are only an extension of Home Politics, of usefulness and helpfulness, now showing these to people who are at first strangers. The circle of service is enlarged. The child should put away neatly in their own places all the objects he has used, that others and himself may find them easily next day. He should clear away any rubbish he

has made, and help to leave the room neat and clean.

The school should have a compound for games, exercises, dancing and class movements with descriptive songs. All these help the child to see and feel that co-operation and harmony make the exercises pleasant to all, while the absence of these in any spoils them for all. Little gardens should be given to the children, and they should be led to observe birds, insects and flowers.

The child will, unconsciously, practise in the home the ways learned in the school, school and home thus reacting on each other.

Great care must be taken not to tire the child, to see that he is properly nourished, that he develops no bad

habits, and, remembering his imitative-ness, his teachers should be chosen with scrupulous attention to their manners, accent, and general refinement and gentleness. During these years and during the second period, the child is chiefly receptive, and his whole life is strongly influenced by his surroundings. Character appears and tendencies are developed. No later efforts can wholly eradicate impressions made during these plastic periods.

SECOND PERIOD, CHIEFLY EMOTIONAL

Lower Secondary School.
Years 7—10.
Classes II, III, IV.

Religious Education.

Life-Side.—The idea of God as a loving Father, who has shared His Life with us and with all things. Stories, stotras and bhajans.

Politics-Side.—This sharing of life as a reason for helping all around us, shown by stories taken from the lives of great religious Teachers and philanthropists.

Intellectual Education.

Life-Side.—A good foundation for knowledge of the Mother-Tongue, by reading, composition (story-telling by teacher and reproduction by pupil, observations of simple objects, etc.). Samskrit, Pali or Arabic, very elementary. The classical languages of India, Samskrit, Pali, Arabic, should be

taught (as English now) from the standpoint of such modern teaching methods as Berlitz, Gouin and similar methods. No declensions and rules should be taught at first. The child should first learn the names of the objects which surround him, then simple phrases concerning the life which he actually lives among these objects, leading on to simple conversation. Only after real interest is aroused in the language as a *spoken* language should rules of grammar be begun. English, by conversation, and telling easy stories. Nature-study, such as life-history of plant and animal, observations and experiments. History and geography, by pictures of places in India and stories about them, the

making of models and maps, beginning with school compound, immediate surroundings of houses, roads, fields, etc. Arithmetic, easy problems, Indian money, weights and measures, simple bills, simple geometry and measuring. Pictures and models to be plentifully used, and to be carefully chosen to develop the sense of form and colour, and the appreciation of beauty.

Politics-Side.—Constant reference during teaching to the interdependence shown in common languages, history and geography. Duty to those nearest to us as service of Motherland.

Moral Education.

Life-Side.—Stories, illustrating truth, devotion, courage, honour, fortitude, etc.

Politics-Side.—Laying stress on all around us as our larger family, with stories of self-sacrifice, of duties to elders, equals and youngers, of kindness to animals and plants. Inculcation of duty of service by examples of it, and of love and pride in country by stories illustrating these from Indians great in literature, art, science, wars and social service.

Physical Education.

Life-Side.—Care of bodily cleanliness; value of healthy body; self-control; orderliness; reaction of anger, jealousy and other passions on health. Drawing and modelling. Gymnastic exercises. Breathing, elementary manual training.

Politics-Side.—Concerted exercises with music; drill; games wherein

co-operation is necessary to success. Duty and pleasure of using knowledge and skill to help the more ignorant and clumsy.

Higher Secondary
 Years 10—14. **School.** *Classes V, VI,
 VII, VIII.*

Religious Education.

Life-Side.—Outline, illustrated by stories, of the chief doctrines of the pupil's religion.

Politics-Side.—The fundamental unity of religions. Sufferings caused by intolerance and bigotry.

Intellectual Education.

Life-Side.—More advanced teaching of Mother-Tongue, literary and colloquial. Samskrit, Pali or Arabic. English, by reading of simple modern

stories with plenty of dialogue, letter-writing, copying extracts of good modern authors. Nature-study, including anatomy and physiology of human body, dissection of plants, and their growth. Physical geography including elementary physics and chemistry, Indian history and historical geography, including preliminary outline of Indian political, economic and industrial geography. Indian life in different periods of history such as Chandragupta I and II, Mughal, etc. Outlines of the geography of the world. Higher arithmetic. Elementary algebra and geometry.

Politics-Side.—Here, again, the unity of the Nation under superficial differences must be the spirit of the

intellectual instruction. Stress should be laid on the political, economic and industrial conditions. Pupils in these classes should learn to help and teach those in the lower classes.

Moral Education.

Life-Side.—Fuller teaching on the virtues needed to make the good man, and

Politics-Side.—The good citizen. Civics and æsthetics will be introduced.

Physical Education.

Life-Side.—Instruction in the physiology of sex—plant, animal, human. The individual and national need of Brahmacharya in student life. Danger of errors in the great transition from boyhood to manhood. The body to be trained in muscular strength, hardness

and athletics, before the danger-zone is entered. Indian exercises to be practised daily. Carpentry, basket-work and the use of tools to be practised. First aid to be taught.

Politics-Side.—Continuation of Lower Secondary. Duty to the Motherland of making and keeping vigorous health. The self-control of true manliness. The training of the playground in co-operation, discipline, obedience and the leadership of merit all-important.

THIRD PERIOD, CHIEFLY MENTAL

Years 14—16.

High School. Classes
IX, X.

Religious Education.

Life-Side.—Fuller teaching on chief doctrines of the pupil's religion.

Politics-Side.—Mutual respect among religions. The special value of each of the great religions. Their relation to each other in India.

Mental Education.

The type of education during these two years of school life will to some extent depend upon the after career the pupil is expected to adopt. There will be a certain specialisation, in the sense that boys studying in different High Schools will study different subjects according to the careers for which the High School is a preparation. On the other hand, certain

subjects will be common to all High Schools.

Life-Side.—Common Subjects: Further instruction in the Mother-Tongue. English, by composition, reading of suitable classical prose writers, *e.g.*, Ruskin, and poets, and including readiness of expression in reading and writing. General science, including further physics and chemistry, applied physical geography, further anatomy and physiology of human body, with more detailed instruction in first aid. Further Indian history and historical geography. Further algebra and geometry. A short course in elementary psychology.

Special Subjects to be included in the curricula of

(1) AN ORDINARY HIGH SCHOOL

(a) *Arts Division*.—Samskrit, Arabic or Pali. A more specialised course in (i) Mother-Tongue, (ii) English, (iii) Indian history and historical geography. History of the British Empire.

(b) *Science Division*.—Samskrit, Arabic or Pali. A more specialised course in (i) Mother-Tongue, (ii) English, (iii) Physics, chemistry, etc., (iv) Algebra and geometry, including trigonometry and mensuration, with the elements of surveying. Further nature study.

(c) *Teachers' Division*.—Pedagogy, further psychology, school management. A course in the principles of physical training. Domestic science.

Where possible, practice in teaching.
Further nature study.

(2) A COMMERCIAL HIGH SCHOOL

Commercially useful foreign languages, business forms, book-keeping, commercial arithmetic, office methods, commercial law, typewriting and shorthand, commercial history and geography.

For girls, food supplies and cooking.

(3) A TECHNICAL HIGH SCHOOL

Same as in Science Division of an Ordinary High School, omitting Sanskrit, Arabic or Pali, and adding :

(a) Industrial history, (b) Elementary engineering, (c) Mechanics, (d) Electricity.

(4) AN AGRICULTURAL HIGH SCHOOL

All subjects to be taught with special reference to their bearing upon rural daily life. Mathematics, including book-keeping, land surveying and mensuration, Experimental science (physics and chemistry) with special reference to agriculture (boys), domestic science (girls). Elements of mechanics, with special reference to agricultural machines. Nature study and gardening. Elements of sanitation and engineering.

The above courses indicate in outline the kind of education suggested. But other types of High Schools might also be useful, *e.g.*, Art High School, for music, drawing, painting, etc.

Politics-Side.—The various subjects should not only be taught from the point of view of their value to the individual, but equally with reference to their constructive value as regards the growth of the Nation. The elements of Social Science should be understood in outline.

Moral Education.

Life-Side.—Further training in æsthetic development, including artistic appreciation.

Politics-Side.—The encouragement of the chivalrous spirit. Elder boys

who show signs of the true political spirit should be appointed monitors and prefects.

Physical Education.

Life-Side.—Manual training, shop-practice and laboratory work constitute the physical side in the case of scientific and related subjects. Continuation of the instruction under this head as given in earlier years.

Politics-Side.—A fuller understanding and practice of the work in the Secondary stage. Parliaments, Debating Societies, Social Service Leagues, Night Schools, etc., are invaluable media for the expression of student-citizenship. Emphasis should be laid on the value to the community and Nation of the special profession

for which the student is preparing. The teacher will continually lay stress on the essential dignity of all true labour, of whatever kind.

Year 17. Special preparatory
class for College
careers.

Attached to each High School there will be a preparatory class for students proceeding to the University. The University will comprise all types of colleges—business, agricultural, arts, science, teachers' training, etc.—and in the various preparatory classes the students will be grounded in such special knowledge as may be required to be known before they begin the three years' College Course. These special classes lead to an Entrance

Examination to be conducted jointly by the University authorities and selected members of the various school staffs.

SCHOOL AND COLLEGE POLITICS

It will be seen that School Politics should form a natural daily part of the school life, consisting in co-operation and in all forms of service. The students in the High Schools should learn to take interest in the life of the poor of the town, and should be trained to give help in festivals, in town and village accidents, and in the teaching in the primary and night-schools. They should be encouraged to seek and utilise opportunities of service, and

learn to see in all service of the poor, the suffering and the younger, the Service of the Motherland, and to use these also as the training for higher Service by practice and by the gaining of knowledge.

Boys at School should be encouraged to join the Indian Boy Scouts Association ; at College, Cadet Corps should be formed for regular drill.

In the College, they should continue in the path of Service, and should also attend public lectures on sanitation and kindred topics touching the health of the people, on social reforms, legislative problems, on the condition of the masses and how to help them, on the questions with which they will have to deal when they leave the College for

the wider life of men. Equipment for public life must be largely gained in pre-graduate and post-graduate studies, for to rush into action unprepared and unequipped is folly.

VILLAGE DEPARTMENT

Schools in small villages need to be arranged in a fashion somewhat different from those which are intended to send their pupils on into Secondary and High Schools. The Village School is usually all the School the boys and girls enjoy, save in the exceptional cases of brilliant pupils.

The day's work should begin with the singing of a bhajan by the children, and a short prayer. Reading as before

explained, and writing, the lessons very short, with drill, dances or games between them. Simple arithmetic, as before, by objects. A lesson on flowers, leaves, grains, seeds, animals, brought by the children, to be chatted over. Geography by a map of the village in damp sand, fields, houses, well, tank, temple, and the paths and roads leading away to other places. Gardens, how to prepare the soil, to sow, to weed, to water, to train plants. On wet days the making of baskets, learning to sew, to knot, to drive in a nail, a screw, to mend utensils, etc.

At 8 or 9 years of age, half the school-time should be spent in the working sheds attached to the school, where the village trades should be

taught. The gardens lead up to agriculture, to be taught in land set apart; in the school, the growth of the plant, why it drains the soil, and how to make the loss good; in the field, examples of plants in manured and exhausted soil. How to dig deeply, to graft, to prune. The care of animals, and kindness to them, will be part of the training. The carpenter's shed takes some of the boys, and they learn to make tools and simple articles used in the village. Others to the weaving shed, learning the use of simple improvements that increase output.

Both boys and girls from about 10 should learn how to bind up a cut, where and how to put on a ligature to check dangerous bleeding, how to

bandage a sprained wrist and ankle, how to make and apply a poultice, what to do in cases of the bite of a dog, horse or snake, the sting of a scorpion, hornet or wasp, a bad scratch, a burn. The need of scrupulous cleanliness in all dressing of wounds.

Sanitation, domestic hygiene, cookery, washing, house-cleaning, should be learned and practised by the girls, while the boys are in the work-sheds.

The teachers should mark any pupil with special gifts, that he or she may go on to a Secondary School, but the large bulk will have all their schooling in the village, and the instruction should aim at making the village life interesting. The school-house should form, in the evening, the village club,

and lectures might be given to help the adults, often eager to learn.

It is suggested that these village schools should form a separate department of the Board's work. Boys in the High School of a neighbouring town should be induced to help the villagers and their children as a way of serving the Motherland. For instance, round Madanapalle six Village Schools are growing up, built and managed by the boys.

NOTES ON SECONDARY EDUCATION

BY G. S. ARUNDALE. M.A., LL.B.

THE following subjects are to be studied during this period, some being taken up later and others from the beginning.

Religion.—From the standpoint of the individual, religious instruction should acquaint the pupil with the lives of great spiritual teachers and with his duty to reverence them according to their advice and example. By means of stories the virtues of devotion,

kindness, etc., should be strengthened. The details of ceremonial and other aspects of religion do not come within the province of the Secondary School. Religion must also be taught as a unifying force and therefore as a motive for social service, through the example of the great spiritual teachers, all of whom lived and worked for others.

Physical Instruction.—The purpose of physical instruction is to enable the pupil to build a healthy body, by means of exercises and games, so that the body may be a servant and not a master. The purpose and value of a healthy and well-controlled body should be clearly explained, and theoretical study should lead up to the elements of physiology and hygiene. Singing

might usefully be included under this head. Pupils should be trained to realise the value of a healthy body as an essential factor in success and happiness in life, and the teacher should study the value of rhythmic exercises as aids to self-control.

Politics.—The pupil should begin to learn that he is a member of the social order, depending upon it for his well-being, and sharing with others the common heritage of the past. The beginnings of the conscious realisation of his membership in the community will be gained when the child first goes to school, and this later period is a connecting link between the home and the wider surroundings, with which he will later on come into contact.

Individually, the study of politics removes selfishness and narrow interests from dominating motive; while, socially, the study of politics shows him how to become an intelligent and responsible member of the community in its varying aspects—*i.e.*, home, school, college, village, town, province. Nation, etc.

Nature Study and Science.—The basic value of Nature Study and later on of more formal sciences is (1) to enable the pupil to understand the life around him, and his relation to it, through observation and experiment; (2) to co-operate with Nature intelligently, so that the various kingdoms of Nature may live and grow harmoniously together. By the study of Nature the

pupil learns also to appreciate growth *qua* growth, and gains a sense of the majesty and grandeur of life. He learns to realise the essential unity of life and of his part in the mighty whole.

One of the special values of Nature Study is that the pupil becomes encouraged to emulate the observed inventiveness, resourcefulness and adaptability of Nature.

From about eleven years of age the pupil may take up physiography, including the necessary experimental physics and chemistry. These studies should also arouse in the pupil a sense of the value of industry in human life and in the dignity of productive work.

Indian History and Geography.—First in the form of stories, and

gradually leading to local history, with excursions. Preliminary outline of Indian political, economic and industrial geography. A study of Indian life at different periods of history, and under the varying geographical and other conditions of modern life. Outlines of the elementary geography of the world. Indian history should be taught so that it gives the student a full sense of the value and dignity of the National characteristics, and awakens a pride in the history of the country's past.

Each Province might be allowed to lay stress on its own provincial history.

Mother-Tongue.—Apart from the need of all subjects being taught in the pupil's own Mother-Tongue, efforts should be made to lay the foundations

of a good knowledge of the Mother-Tongue, both from the literary standpoint and from the point of view of the language as a medium for the expression and communication of thought. Careful study of the Mother-Tongue influences refinement of speech and accuracy of expression.

English.—Conversationally from eight years of age, and more definite study during the last three years of secondary education. The object of the study of English is not merely to facilitate intercourse, trade, etc., but to introduce the Indian pupil to the spirit of the English race, so that the useful elements in the growth of the English-speaking peoples may be assimilated in the life of India.

Mathematics.—Practical geometry from the age of seven years, as also arithmetic. The object of the study of mathematics is partly to discipline the mind and partly to train the reasoning and classifying faculties, training the student also to enter and understand the world of abstract thought. The study of mathematics leads to the understanding of the laws of Nature both as they affect the individual and as they affect society.

Manual Training.—Including drawing, modelling and possibly painting.

Carpentry, basket-work and the use of tools, gardening, etc., might all come under this head and a graded course should be established. For the pupils who leave school at the age of fourteen

years, and especially in rural schools, great importance should be attached to this subject.

It should be added that all study is but a preparation for service, whether in the narrower surroundings of the home, in the wider surroundings of the school and college, of village or town, or the even wider service of the Nation or the Empire. Teachers should encourage their pupils to give of that which they have learned. The elder children should help the younger, the less ignorant should teach those who have few if any opportunities for acquiring knowledge. The school thus becomes a centre for giving as well as for receiving, and vitally benefits its surroundings. From early years the

child should therefore understand that every subject of instruction is not only a means toward self-development, but an avenue through which service may be rendered to others, just as he himself is helped by parents and teachers.

