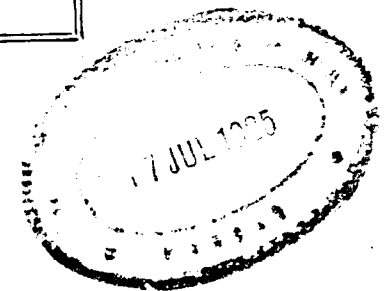


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Christian Education

Second Quarter, 1924



Do our Children have a chance to
become Christians?

Youth and Vocational Counselling.

The Arcot Mission Experiment in
Tests : II

Field News, Notes and Comments
Light on Books

CHRISTIAN EDUCATION

ORGAN OF THE EDUCATIONAL COUNCIL
OF THE METHODIST EPISCOPAL CHURCH IN
SOUTHERN ASIA

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E. L. King, Jubbulpore.

Contributions and Reviews.

Associate Editors:—C. B. Hill, Ajmere; Miss U. Montgomery,
Madras.

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HELPING THE DHOBI

Helping the Dhobi

SUGGESTED QUESTIONS FOR USE AS A PICTURE LESSON IN ANY CLASS.

I. Can you tell us a story about this picture?

What work does *your* father do?

(This can be made a revelation in the nobility of labour but must be delicately handled; if, as each child answers, the teacher calls to mind how necessary that particular kind of labour is to the comfort and well being of the community, it brings out vividly our interdependence and makes the child proud to be the son of even the sweeper.)

II. What is it that really makes our clothes clean?

Which is better for the clothes—acids and beating, or soap?

Opportunity for simple project in soap making out of village materials (directions sent on request).

When planning to send one's clothes to the dhobi, what kinds of cloth are wisest to buy?

Opportunity for scrap book project—children binding books of cheap brown paper and mounting samples of cloth that they themselves have seen in the bazaar and compared, with regard to durability—evolving an understanding of *real* economy.

III. Can disease be spread by the dhobi?

How can this be avoided?

What is our personal responsibility in the matter?

Note.—The series of pictures at present appearing in Christian Education is an attempt, on the part of a committee of the Teachers' Conference of the U. P., to meet the need in our schools for more pictures having the activities and interests of Indian children as subject matter. They are available at one anna per copy from Mrs. H. W. Lindsey, M. E. Mission, Budaon, U. P. She will with them, upon request, send additional suggestions for use, such as colouring and framing ideas from Indian materials, individual scrap book plans, suggestions for use in higher grades, etc.

Christian Education

Verified in

Do our children have a chance to become Christians?

DONALD MCGAVRAN, M.A., JUBBULPORE

IT has been customary in many quarters to think of education as learning the three "Rs" and other necessary "subjects". To-day people are realizing that education is placing a child in such an environment as shall practically determine what and how he *thinks* about most important subjects; what he feels about country, home, ideals, and God; and what habits of action he forms. True, this ideal of education is often realized chiefly in the intellectual field but the ideal remains. Education is placing about the child an environment which will largely form and mould him.

In a similar way people have thought that a knowledge of what was in the Bible made one religiously educated. But in the light of this new concept of education, Christians are beginning to think in like terms, and to see that the church can place its children in such an environment as shall give them the truth, form in them Christian love, and mould them into Christian characters. To the extent that we place our children in such an environment we give them a chance to become Christians.

THE INDIANA SURVEY OF RELIGIOUS EDUCATION—a four-volume work which is being published by Doran of New York—has undertaken to investigate the kind of environment which the Church is providing for its children, that is, to see what chance our children have to become Christians. The Survey is destined to have a profound and far-reaching influence on the whole



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educational policy of the Church throughout the entire world. There are several reasons why this should be so.

In the first place the Survey is scientific and accurate. It portrays conditions as they actually are, not as some one thinks they are. It deals in facts. The methods used in the Survey compare well in regard to statistical accuracy with the methods of the educational surveys carried out by the U. S. Government. The work was done by surveyors specially trained in survey methodology, in the science of statistics, and in the history and organization of the educational agencies to be surveyed. The material gathered has been interpreted and organized by W. S. Athearn and other leading authorities in religious education. In short these volumes in regard to the facts are scientifically accurate, and in regard to the opinions and recommendations give the counsel of the accepted leaders of Christian education.

In the second place the Survey is broad and comprehensive. It represents the Church's effort—the big church and the little church, the rural church and the urban church, the agricultural church and the industrial church. And although the Survey was made of Indiana churches only, Indiana is a typical state. What is true of Indiana is true in large measure of all the other forty-seven commonwealths. Furthermore what is true of Protestant Christianity in Indiana is true of Protestant Christianity all over the world. Every phase of the church's educational activity is reviewed, excepting only the church's influence on religious education in the home and the effort of the church to teach Christianity in connection with the public schools. The Sunday School, the Christian Endeavor, the Epworth League, Missionary Societies, Scout Troops, the church plant, the denominational and inter-denominational plans of supervision, all are reviewed. It is true, quite naturally, that the Sunday School occupies the center of the stage.

Wherever folk are teaching religion in a systematic way they will find that they can learn much from the achievements and failures of the Indiana churches, from the methods and systems of religious education portrayed by the Survey, and from the comprehensive standards which are set forth. Through all of the volumes shines the vision of the co-ordinated and all-embracing *Church School* by means of which the Church shall pass on to her children all that is best in herself. It is one of the most stimulating visions which 20th Century Christianity has caught

and compels a recognition of the educational task of Christianity as one of the greatest and most glorious works to which the Church is called.

Now the Survey was made in order to give to religious workers (1) *facts*, (2) *tools*, and (3) *methods*, in the realm of Christian education. We need facts. If once we know what kind of environment and how much of an environment the Church is giving her children we shall be in a position to build church, state and national programs of religious education, or in India to build station, mission and inter-mission programs of religious education. This very information, of a startlingly interesting character, constitutes a large portion of Volume I. It reveals a situation which is rather gloomy. The *Literary Digest* recently carried an article, entitled "Two Cent Schools—and the Result", in which, drawing on the facts recorded in Volume I, they present a scathing indictment, as may be judged from the title, of the Protestant system of religious education. And conditions revealed justify the article. It is a fair one. Nevertheless we shall find the most valuable part of the Survey to lie in the recommendations which grow out of the situations which are there revealed, and not in the facts themselves.

To begin with, the church buildings of Indiana,—i.e., the plants in which the religious education of the Church children proceeds—were carefully surveyed and measured according to accepted standards. The typical church building was found to score about 500 out of a possible 1,000 points. Many of the churches have old, inefficient, and dangerous systems of heating, lighting, and ventilation; in many the sanitary conveniences are exceedingly primitive, and many churches are located poorly. The great defect however is this: That time has arrived in American civilisation when the church must provide a wholesome Christian social life and educational environment for its members, especially its younger members. Most churches are beginning to recognize this and yet are trying to do their work in a church whose principle virtues are its appearance and its seating capacity. It is because of the failure to adapt the building to the growing needs of the Christian community, especially the need for religious education, that American church buildings score so low.

The standard, by which the Survey has judged churches, was prepared by a large number of experienced and successful ministers and represents the best in present day church erection.

It provides a score of a thousand points which are distributed among the six major divisions of a church plant: site, building, service systems, church rooms, religious school rooms, and community service rooms. It will be an invaluable aid to all who, in America, are thinking about building or remodelling a church. And it will be suggestive to all church builders everywhere.

The interest of this section for India lies largely here. The Church in India has a function, which depends upon the social, economic, and religious conditions, and traditions of the people. The church building ought to make it possible for the Church to carry out that function. What this function is and how it is to be met is a matter for all Indian churches to decide. The present heterogeneous haphazard system of church erection in which styles range from Gothic to "meeting house", in which limitations imposed by climatic conditions are often ignored, and by which a western building is all too often imposed upon an Eastern people is radically wrong. The church building in India must fit the Indian church and the Indian Christian community. An enterprise in which love and money are poured as they are into building churches ought to be regulated by carefully worked out and generally accepted standards and not according to the tastes and desires of individual Indian ministers and foreign missionaries, no matter how intelligent and consecrated they may be. Let there be a standard prepared for Indian churches.

The Condition of Religious Education In American Churches is rather exhaustively treated under the following heads:—

First, the organization and administration of religious education in the local church. One of the most astounding facts revealed is that only a small per cent. of the churches have recognized that they as churches are responsible for the religious education of their own children. The Sunday School—not to mention the Scout Troop, the Young People's Society, and the Missionary organizations—is looked upon as an independent enterprise. Indeed one case was found where the church charged the Sunday School rent for the use of the church building. As a rule the church fails to realize that the Christianizing of its children is one of its major tasks.

As far as the Sunday School goes the following facts are of interest. A majority of schools are small schools. All the Sunday Schools together fail to reach 59 per cent. of the urban and

67 per cent. of the rural population. 43 per cent. have an enrollment of less than a hundred pupils, and 65 per cent. have an attendance of less than a hundred pupils. 72 per cent. have an enrollment of less than 200 pupils and 86 per cent. have an attendance of less than 200 pupils. The four-teacher school is most frequently found. Furthermore 70 per cent. of the Indiana Sunday Schools are completely ungraded; that is, the same section of Scripture is, on a given Sunday, taught to all both old and young. Only 3 per cent. of the schools are completely graded.

The Devotional, Missionary, and "other" organizations which are so frequently found in a church and which provide a large part of the religious education which the children of the church receive, are discovered to be in a wholly uncoordinated and confused state. "Four different independent church boards are often trying to operate educational programs in one local church. Overlapping, confusion, waste, misunderstandings are the fruits of this division of the educational responsibility within the church". More than 46 per cent. of the churches surveyed had no organizations for the children and youth except the church school. If programs of missionary training, scout training, devotional training, are not operated by this one organization for which the church can provide leaders, then in these churches the youth will go without training in worship, in expression, and in the missionary aspects of the Gospel. In addition to the church organizations there are many independent agencies, like the Boy Scouts, Campfire Girls, etc., who are putting on what is in many respects the most vital part of the educational work of the church. They are doing an excellent and needed work, but most of them are controlled and directed by their own official organizations. Their programs cannot be made to fit in with the educational programs of the church. When it is seen that nine out of ten boy scouts are from Sunday Schools, that eight out of ten scout masters are church members and that eight out of ten troops meet in church buildings, "it is clear that church leaders should give serious consideration to the program and policies of organizations which go to the church for their members, leaders and housing."

Church school finance is very enlightening as to the emphasis which most churches give to religious education. One-fifth of the church schools surveyed were permitted to keep their records so loosely that they were either unfit or unprocurable for statistical

purposes. Of the money which the church raises to carry on its essential works, only 2 per cent. goes to the maintenance of the "system" of religious education. "Forty-seven cents out of every municipal dollar goes for the support of the public schools; but only two and three-tenths cents out of every church dollar goes for the support of church schools." So it happens that, for the most part, the children have to raise the funds for their own education. This sum is necessarily inadequate. The median expense for each Sunday School for the support of itself is \$100.00 a year. Therefore we may say that the cost of operating the typical Sunday School is slightly less than \$2.00 a week. Or to put it differently the median cost of educating a pupil religiously is 99 cents a year.

One of the evils noted in connection with the financial aspect of the school is this. That the Sunday School, *an educational enterprise*, is looked upon by most church boards, and by the local church itself, as a fertile field for *raising funds*. One American brotherhood plans this year to raise \$500,000 from its church schools. It has been said that the local church gave 2 per cent. of its income to the support of the Sunday School, but even this meagre support is really not given, because for every dollar which the church gives to the Sunday School, the Sunday School gives back \$11.00 to the church. Children need training in giving, but it looks as if they were being exploited.

"Three sentences might appropriately close this inquiry into the finances of the church schools in Indiana.

"The churches are not spending enough money on their schools to guarantee the perpetuity of Christian ideals.

"These churches are not getting full value out of the little which is expended.

"A system of standardized accounting will systematically present to church leaders the facts upon which they can build a system of schools which will rest on a firm financial basis and be free from inefficiency, extravagance and waste."

The major conclusions which this section of Vol. I has for builders of the Indian church will probably be these:

Let the Indian churches recognize that they are responsible for their children becoming Christians. Christian education is the task of the local church.

Let the Indian church build a united program of Religious Education which shall include instruction, training in expression, and training in worship.

Let a major portion of the church's money as well as its sentiment be spent upon the Christianizing of its children.

A section of 90 pages is devoted to Child Accounting in the Sunday School. It is a complete review of the children—their number, kind, sex, race, and so forth—reached by the Sunday School and of the way in which the Sunday School does—or rather does not—record and tabulate the significant facts about its pupils. It is interesting to note that the place of greatest recruitment is among children between the third and fifth year. On any given date however more twelve year olds are enrolled in the Sunday School than children of any other age. The school has great difficulty in keeping children after they pass the twelfth or thirteenth year. However the Sunday School retains its children better than the public school. Pupils attend approximately one half of the Sundays on which the school is in session. That is most of them get only about 13 hours of religious instruction a year. As to the way in which records are kept only one out of three schools has any regulation as to the number of days a pupil must attend before his name is placed on the roll. Only one out of eight has any requirement that a pupil's name be dropped from the roll after he has been absent a prescribed number of Sundays. Nine out of ten schools consider this important enough to record, namely the pupil's full name and his absence from class. Only one school in twenty maintains a modern pupil's record system.

The interest for India in this section lies here. We, too, need to know what children the Sunday Schools are reaching; to what extent they are reaching them; where the Sunday School movement is strong; where weak; how much non-Christians are affected; and so forth. Efficient child accounting would give to us information for lack of which our progress is much handicapped. That should be recorded, and how records can be used are probably the most constructive and helpful suggestions in this section of the book.

The section on Teachers and the Supervision of Teaching, dealing as it does with people and with an ever-present problem, is an exceedingly interesting one. We find that the typical Indiana teacher is a church member, a married woman, 37 years

of age, and that she has two children. She is led to teach because of the most fundamental and praiseworthy motives, and as a rule she is shouldering the burden of two other types of service in the local church. Sunday School teachers are worthy of all praise. They do the best they can.

As to their qualifications for teaching we find this. In the field of general education 25 per cent. have had less than 8.8 years of schooling; 46 per cent. are high school graduates or better, 54 per cent. have, therefore, had less than 12 years of schooling. As to professional training 52 per cent. of the teachers have had less than ten weeks of teacher-training work, and only 7 per cent. have had a three-year community training course or its equivalent. In experience Sunday School teachers make a favorable showing. 71 per cent. have had 3 years or more of teaching experience and only 7 per cent. have had less than a year. However, the value of this teaching experience is greatly reduced because there is almost no supervision of their teaching. "Unsupervised teaching experience generally tends to confirm bad teaching habits." To sum it up it may be said that "compared with the rural public school teachers of Indiana 88 per cent. of all the Sunday School teachers of Indiana fall below the lowest standards which are accepted by the state for rural public teachers in Indiana." It is a significant statement.

The recommendations for this deplorable lack of training vitally concern Indian Christianity which is face to face with an even greater lack of trained leadership. It is recommended that: "(1) A systematic campaign be conducted by the churches to enlist high school graduates and college trained men and women in the teaching services of the local church. (2) Denominational schools make much more liberal provision for training the educational leaders of the local church of the state. (3) High grade standardized teacher-training courses for present and prospective teachers be prepared and vigorously promoted. (4) The untrained voluntary teachers are entitled to close, sympathetic, and continuous supervision by trained experts. Of these four the last two are especially applicable to India and are immensely important.

The all important matter of the Township County and State Sunday School Associations and of the denominational agencies for the promotion of R. E. is dealt with in a section of ninety pages on the Supervision and Promotion of Protestant

Christian Education. In brief, proceeding from a demonstrated lack of these things, it argues for a unification and co-ordination of the interests of the denominational and interdenominational agencies, for a unification of the denominational agencies, and for a distribution of funds in such a way that the local church schools may receive that supervision which they so desperately need.

The Indian church, being poorer than the Indiana church, must in a similar way reduce friction, overlapping, and waste in the overhead organizations and must closely supervise and help the local schools and the individual teachers.

The first volume very properly concludes that "If this Survey is to be remedial and not merely diagnostic a constructive application of its findings is necessary." It then proceeds to outline seven points which should form parts of a "Better Church Schools" Campaign. They are buildings, extension, organization, teachers, supervision, standards, and finance. . . . The second aim of the Survey was "to provide 'tools', that is a group of generally accepted scientific standards, tests and norms, for measuring and directing the processes of religious education". As it is we cannot tell how the children and educational plant of this church compare with the children and educational plants of other churches, whether we are providing as good education as is possible or not, or even whether the per cent. of pupils who become Christians is normal or less than normal. The need for Standards, tests, and norms is great. Volume II entitled "Measurements and Standards" will be of interest to all whose work is directly in the field of religious education, and will enable them to ascertain how their work ranks. The publication of Vol. IV entitled "The Curriculum in Religious Education" will be eagerly looked forward to by all those who are teaching religion. It will represent the ripened judgement of the most highly trained men in the world concerning how Christianity should be presented to the growing child.

The third aim of the Survey is to present standard methods for guiding local churches, missions, or denominations in surveying conditions, building programs, and determining budgets. Parts of Vol. I and II and all of Volume III entitled "Religious Education Survey Schedules" have been prepared to meet this aim.

The Survey has been characterized as "an unparalleled and authoritative source book of well ordered and significant information on religious education that will furnish religious and educational leaders everywhere with weapons to combat the menace of spiritual illiteracy". That is true. Because it shows that American churches are not giving their children a fair chance to become Christians, it will stimulate religious education all over the world. And because it points the way to better education in the field of religion it will be used as a guide book by all religious leaders.



YOUTH AND VOCATIONAL COUNSELLING

RALPH D. WELLONS, M.A., Bloomington, Indiana

Vital points in the Nature of Youth

Relation to Vocational Counselling

I: PHYSICAL

1. Organic and functional development.

1. No matter what the nature of the occupation may be into which the youth is to enter, his vocational counsellor should make sure that either through the home, the church, or the school, the nature of this fundamental change is made wholesomely clear to him.

2. Outburst of growth. Uneven development of fundamental and accessory muscles.

2 Overstraining should be avoided in both play and occupations. Proper adjustment of the school schedule to aid in establishing the correct relationship between the two groups of muscles. Girls should not be placed in occupations where they have to stand for long periods.

a. Clumsiness of body, changing voice, tendency to blush easily.

a. The counsellor must be a sympathetic and understanding friend as well as an expert in occupations. Certain forms of athletics, dancing, manual training, and even singing may aid in correcting these.

b. Fatigue comes easier and sooner.

b. Variety in curriculum exercises calling forth the exercise of fundamental and accessory muscles in proper proportions. Monotony to be avoided in school, play and shop.

c. Individuality becomes more dominant.

c. Individual differences to be cared for by the school in greater adaptation of work. Vocational education provides a longer tether for this individuality. Employers should observe young people in various phases of shop work and try to give each individual the type of work to which he is naturally best fitted.

d. Pride in physical prowess.

d. A point to be utilized by the director of athletics. Often made use of to keep boys longer in school.

II: MENTAL AND EMOTIONAL

1. Instability, irresponsibility, and excitability.

1. Sympathetic treatment on the part of adults is needed. Harshness and sarcasm will drive youth to extremes. Play much.

2. Dawn of reason, with introspection and reflection.

2. To counteract any tendency to moodiness, teacher, friend and parent or employer should be careful to be a real friend on a level with youth. Speak to youth no longer as a child. Time for group play and social activities.

3. Passion to make plans for the future, a consciousness of self, and the development of individuality.

3. An occupation is not to be forced. All the counsellor can do is to *advise*. Recognize instinctive desire to build for the future. The time to present a view of a variety of occupations, and encourage him in breaking away from the bondage of the present. Ideals of great men and women to be made prominent. Both study and practice in occupations is desirable.

4. New sensations and feelings arise.

4. These should be assured proper outlet and tone.

a. A new sensitiveness to adult praise or blame.

a. The beginning of this to be watched for, noted, and treated sympathetically. Growth or stagnation may result from the nature of adult treatment. The employer will take advantage of this to increase the efficiency of the employees.

b. The imagination blooms.

b. The dream is worth while even though it does not materialize. The Swedish ideals in gymnastics will aid this development.

c. Love of nature is born.

c. Time for the presentation of those occupations which are close to nature. Very often this becomes the foundation for a deeply religious life, if rightly guided.

d. Music is felt in a new and more inward way.

d. Employers of youth should provide a music room to be used during rest periods. Concerts for training this feeling may be arranged by the shop owner or by the school. Music may be taught both in the school and the home though an excess may seriously impair proper muscular development.

III: SOCIAL

1. New interest in adults. A passion to be treated like a grown-up. Desire for adult appreciation and understanding.

1. Youth should be given closer contact with adults and taken into their confidence. Parent, teacher and employer should be more on a level with youth. Real association.

2. Altruism begins to dominate selfishness.

2. Recognize the "for others" spirit in youth as real and sincere. Give them credit for being "big-hearted". This is not to be exploited!

3. Desire to be with others of same age or older.

3. The time for team games with element of competition in them. In shops workers should be grouped as much as possible.

4. Desire for money for money's sake.

4. Youth should be given true conception of money and stewardship. Honesty can best be implanted here.

5. Solitude apt to be desired as outgrowth of mediocrity, horror of mediocrity, introspection, apathy, irresolution, and subjectivism.

5. Definite effort on part of employer, teacher and parent to bring the boy or girl into wholesome social relationships with those who can understand him. Tactful, sympathetic treatment will bring results.

The Arcot Mission Experiment in Tests : II

J. H. WARNSHUIS, M.A., VELLORE.

THE MEDIAN.

THE *Average* or *Arithmetic mean* i.e., a measure or central tendency is so commonly understood as to require no explanation. It is the sum of the scores divided by the number of subjects. It is not much used in mental testing as it gives too much weight to extremes. The Middle score or *Median* is a more useful measure of the normal or central tendency of the group. If you conceive of all your subjects as lined up in a row according to their rank by the score, the score of the middle child in the line would be the Median. If we had 9 boys in a group the 5th boy would have four boys above and below him and his score would be the Median score. Hence the simplest formula for finding the Median score is.

$$M = \frac{n+1}{2}$$

In this M = the Median, n = the frequency or the number of children in the group.

However, the matter is not usually so simple as this. We may find, probably will find, that the middle child possesses the same score with several other subjects. In this case this score is regarded not as a mere point on the scale but as having dimensions. Its spread is equally divided among all the children who earned the same score. For example, suppose we find the middle boy in the Form Board Test has a score of 20 seconds and that 4 other boys also earned a score of 20 seconds. In this case the score of 20 seconds represents a time better than 21 seconds and extending all the way up the very beginning instant of the 19th second. This one-second interval is to be regarded as subdivided into as many intervals as there are children holding that score, namely fifths of a second. Now our middle boy

who defines the Median score may be any one of these five boys. Hence the Median score may be 20·8, 20·6, 20·4, 20·2 or 20·0. We need to ascertain exactly which one of these scores is the Median.

Let us take an imaginary case and work it out. Our first step is to arrange our results in a progressing order such as the following table which represents the supposed results in a Form Board Test.

TABLE I.
FORM BOARD TEST

Score. Seconds.	Frequency = no. of subjects earning each score. or n.
40	1
38	1
32	1
28	2
26	1
25	2
22	2
21	3
20	4
19	2
18	2
17	1
15	1
	23
$M = \frac{n+1}{2} \text{ or } \frac{23+1}{2} = 12$	

The 12th boy defines the Median score, counting down from the top we find he is one of the 3 boys who earned a score of 21 seconds. In many cases we may rest satisfied with this result but in our method of combining the scores in all the tests of the group we are describing we are obliged to find a more exact value of the Median. In counting down we find when we come to the end of the 22nd second that we have used up 10 of the children. If we take the 3 children in the next step we shall get 13 which carries us beyond the 12th or middle child. The 10 may be

called the "Partial Sum" that is the number of children up to the step in which the Median score is to be found. Obviously if we divide the 21st second into 3 intervals and distribute the 3 scores equally among these intervals we get the following:—

Score	n.
21·66 seconds	1
21·33 „	1
20·00 „	1

Our middle boy is the second of these three boys and the median score is 21·33.

But we must note that this 12th boy's score also has dimensions. Actually the score represents a time extending from 21·659 plus to 21·33 seconds. Hence the Median in strictest accuracy is the middle point of the 12th boy's score or 21·5. If we take for our formula $M = \frac{n}{2}$ rather than $M = \frac{n+1}{2}$ we shall find that the result is 21·5 seconds. This apparent contradiction often leads to much confusion and expert statisticians have fallen into error on this point. But there is neither contradiction nor confusion if we distinguish between the middle or Median person and the Median score. The formula $\frac{n+1}{2}$ locates the middle person and for many purposes we may take his score as the Median and go no further. But when we require greater accuracy we use the formula $M = \frac{n}{2}$ which yields us the exact Median score.

There are many situations in which the finding of the Median becomes a complicated matter. One must always define for himself the range of each score unit and its beginning point. For example, if we are dealing with ages and our unit is one year what do we mean by an age of 9 years? Is it from 9 years 0 months to 9 years 11·999 months or is it from 8 years 6 months and extending just up to 9 years and 6 months? Here a score of 9 means generally 8·5 to 9·5 etc. Again we sometimes find gaps in the distribution. Suppose in the sample above that the 2 scores at 22 seconds stood at 23 seconds. In this event we regard the interval 21 seconds as extending not from 22 to 21 but from 23 to 21 spreading the 3 scores at 21 seconds equally over the interval of 2 seconds.

THE NEW REPUBLIC (May 2, 1923) contains a most interesting article on the admission tests now being experimented with in Dartmouth College. The aim of the test is to furnish the College with a student body which shall be a cross-section of the life of the nation as a whole both geographically and occupationally, to select students on a leadership basis rather than one wholly intellectual (entrance examination) or the old first-come-first-served type, and to exhort those who for their own good ought to go to technical or vocational schools rather than to college. We cannot go into the plan in detail but pass on to our readers two passages which grew out of the discussion in the NEW REPUBLIC and which may be suggestive for India:—

"One aim of a college is doubtless to give wise leadership in each of the great group activities that make the sum of national life. The Lord agreed to save Sodom if fifty of the right sort could be found and under the nagging of Abraham, He reduced the number to forty, to thirty, and finally to ten. It takes a few men of real leadership to save a civilization. Have we the ten? By leadership we do not mean a measure of distance between the eminent individual and the trailing group. We rather mean the inspired individual who enlists associates in a common task".

"We wish men with qualities of leadership, with influence among men, and with outstanding character. So we call for a personal rating from the principal of the preparatory school and from an alumnus. The items reported on are intellectual interest, individuality, native ability, industry, faithfulness, originality, integrity, straightforwardness, clearmindedness, fair play, school spirit, interest in fellows and leadership. This is the famous personal rating system, modeled on the Columbia method, which was devised by such men as Edward Thorndike".

THE STATESMAN in a recent issue reports an interesting investigation:

"Inquiries are being conducted in some fifty industrial centres as to the use made of leisure time.

"Liverpool is the first city that has completed an inquiry carried out on comprehensive lines. Their report, just published, deals mainly with the leisure of grown-ups in the Mersey city. Liverpool has a population of over 800,000 people. It is well provided with amusements by private enterprise in so far as it possesses 11 theatres, 2 music-halls, 63 cinemas, 33 rooms licensed for music and singing, 1,433 public-houses, 18 billiard halls, one boxing hall, and 2 professional football grounds that will accommodate 114,000 people. There are also nearly 100 halls in which concerts or dances are held,

that are provided either by the Municipality or are attached to voluntary organizations.

The churches are also busy in providing amusements. Some 222 religious organizations are responsible for 85 adult clubs, 153 boys' organizations, and 135 girls' organizations.

One of the chief difficulties in Liverpool, as in other industrial centres, is the lack of playing fields. It has been calculated that one acre of open space will provide accommodation for 1204 persons playing golf; for 1955 persons playing football, for 3349 persons playing tennis; and 9384 persons playing bowls. That committee that made inquiries in Liverpool thinks the time has come for new games to be invented that will not need so much space. They, therefore, suggest that a kind of simplified "fives" which can be played with a soft ball against a ten-foot brick wall with two return walls ten feet in length, a base width of some twelve feet and a length of twenty-four feet, is needed."



"Twenty-five years ago.....Professors Coe and Starbuck..... found that the average age of the young people coming into the Church was at or about sixteen years. Since that time the church has been awakening to the value of religious education as one of the most vital features of our work, and that religion can be taught and understood so that, 'out of the mouth of babes and sucklings' the praise of God may be an effectual thing.

"These facts have been demonstrated that our children are now coming into the church very much earlier than they did, as the following figures show:—

"Professor Walter S. Athearn recently made a study of 6,194 persons in 43 States joining the church in a single calendar year, these cases being reported by the Methodist Episcopal, Congregational, Presbyterian, Baptist and Disciples churches. In each individual case the name, date of birth, and date of joining the church were given. Dates of birth were certified from court records or other verifiable sources, and dates of joining the church were certified from church registers.

Verified names were secured as follows:—

Methodist Episcopal	...	2,284 persons	from 29 States
Congregational	...	1,490	" 17 "
Presbyterian	...	1,183	" 26 "
Baptist	...	742	" 18 "
Disciples	...	545	" 14 "

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Fourth Quarter, 1923.

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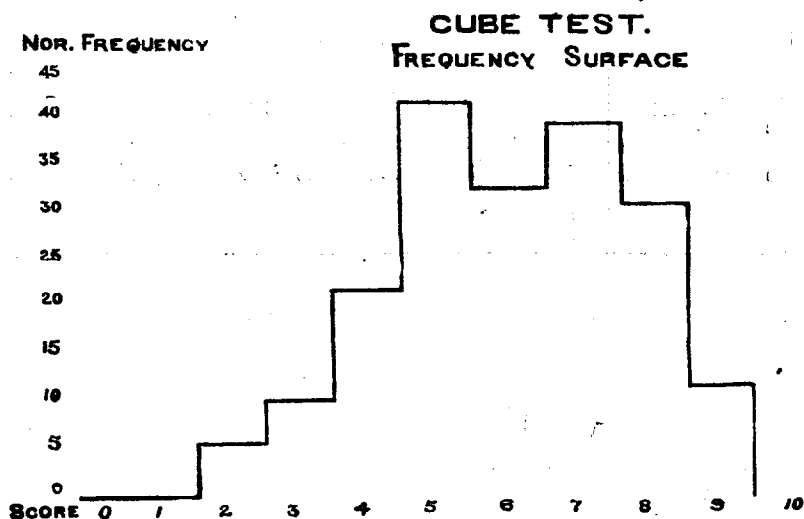
Table II

CUBE TEST

Illustrating Method of Tabulating Results

Score	6	7	8	9	10	11	12	13	14	15	N. Total frequency	d	d ²	d ² n	
0	...	...	1	...	...	...	...	...	...	...	1	-6.5	42.25	42.25	
1	...	...	...	...	...	...	...	...	...	...	1	-5.5	30.25	5.50	
2	...	1	...	...	2	2	1	...	...	...	6	-4.5	20.25	121.50	
3	1	...	...	3	...	...	2	2	1	1	10	-3.5	12.25	122.50	
4	...	...	5	1	5	3	4	2	...	2	22	-2.5	6.25	137.50	
5	1	5	3	2	6	6	8	6	2	3	42	-1.5	2.25	94.50	
6	...	...	1	5	7	3	10	6	...	1	33	...	...	8.25	
7	...	...	1	2	13	10	5	2	4	2	39	+1.5	2.25	87.75	
8	...	...	...	2	3	9	4	6	2	4	30	+2.5	6.25	187.50	
9	...	...	...	2	4	1	...	3	1	...	11	+3.5	12.25	134.75	
Total	2	6	11	17	40	34	34	27	10	14	195	...	...	$\sqrt{942.00}$	S.D.
M.	4	4.2	4.6	6.5	7	7.3	6.2	6.53	7	6	6.47	...	...	$\frac{195}{195}$	$= \sqrt{4.8303} = 2.15$

* For further steps in the procedure the Median is reckoned as 6.5 to simplify calculations.



Serial No. 10a 68.

Examination No. C. 11.

Hostel Entrance Examination, 1923.

SCORE CARD.

Applicant's Name:—Meenatchi Sundaram Ammal. Sex:—F.

Parents' Name:—Mary Sundaram.

Vocation:—Cooly.

Pastorate:—Vellore.

Village:—Korambathoor.

Date of Birth:—12-1-1913.

Age:—10.

Language:—Tamil.

Evidence of correct age:—Family diary (produced).

Highest standard passed:—I Standard.

Applying for what school:—Chittoor Girls' School.

Examination Place:—Chittoor.

Date:—3-3-1923.

Examiners:—Rev. J. H. Warnshuis, V.I.J., Miss M. L. B., Miss A. B. V. D., Miss J. W., Miss W. C. C.

Weight:—48 lbs; Height:—50 inches; Vital Capacity:—30 Cub. inch.

	I	Score.	M	d+	d—	S.D.	+ Final —
1. Arithmetic	...	9	12	...	3	7	...
2. Reading	...	11	17	...	6	10	...

II

3. Picture Completion	...	5	3.3	1.7	...	2	.9	...
4. Maze	...	6	5.5	.5	...	3	.2	...
5. Dot Pattern	...	2	4.7	...	2.7	3	...	.9

III

6. Form Board:—

1. 35; 2. 23; 3. 18 ... 18 22 4 ... 6 .7 ...

7. Manikin ... 2 3.7 ... 1.7 29

8. Cube Test:—

1. + 2. + 3. + 4. 0, 5. 0, 6.

+ 7. 0, 8. 0, 9. 0 ... 4 7 ... 3 2 ... 1.5

Sum ... 1.8 — 4.3

— 2.5

Final Score ... — 2.5

2147—4

Field News, Notes and Comments

EUROPEAN EDUCATION IN INDIA

Conference of the Association of Headmasters of European Schools in India.

The Fourth Annual Conference of this Association was held at Bangalore in January. Over 60 European Schools located in Bengal, Bombay, Central Provinces, South India, Punjab and the United Provinces are members.

Among items of importance transacted at the meeting were the following:—

A delegation, to interview the Secretary of State for India and to take such measures for the improvement of European Education as might be deemed necessary, was appointed. Mr. W. H. Hammond, Cathedral High School, Bombay, and the Rev. G. Barne were asked to undertake this duty.

A Handbook, showing possible avenues of employment in Government and Railway service as also in private employ, open to youths educated in European Schools, is to be printed.

A Teachers' Register, giving a list of teachers satisfying educational conditions, was approved; and Heads of schools were invited to encourage their teachers to register.

The Preliminary Cambridge Examination for Schools in India did not meet with the approval of this Conference.

Vocational Training was the topic of a paper prepared by Mr. Clay; and, in the discussion which followed, it was suggested that Headmasters should endeavour to include a healthier and wiser public opinion amongst Anglo-Indians, by insisting that apprenticeship is a continuation of education.

A system of Central Examinations was recommended, in view (1) of frequent transfers of parents and (2) consequent need of a uniform standard of examination throughout India and (3) with a view to raising the standard of a Leaving Examination. This system should include examinations equivalent approximately to the Intermediate Arts, High School and Middle School Standards.

From the report presented by the Honorary Secretary, we gather that, excluding Bangalore and Burma for which there were no figures, there are 300 European Schools in India educating 35,564 children. It was reported as well, that the Association had written to the Governor in Council of each Province, sending a copy of the letter for the information of the Secretary of State for India, advocating a centralised control of European Education, with the following suggestions:—

- (a) An Inspector-General of European Schools at the Headquarters of the Government of India, who would not only administer but also make tours of inspection, to be put in charge of European Education for the whole of India. He would be an educationist by profession and one with first hand experience of our schools and a knowledge of the Anglo-Indian community and its characteristics. A man straight out from Home, no matter how good, would not be suitable.
- (b) Inspectors in subsidiary circles with Head-quarters near the centres of their circles, which would not necessarily be coterminous with a province.
- (c) The Cambridge Local Examination to be the sole Leaving Examination for all the schools; and the Government scholarships be given on the results for the whole of India and not, as at present, reserved for certain localities.
- (d) A Provident or Pension Fund for the whole of India, thus obtaining the advantage of a "service" without its disadvantages.

This Association appears to meet a much needed feature of European education in India. Its programme is progressive, even if it appears somewhat ambitious. Why it should be called

an "*Association of Headmasters*", when several important Girls' High Schools are members of the Association, it is difficult to understand?

We heartily call the attention of all European Schools in India to the value and necessity of affiliation with this Association. The Honorary Secretary is Mr. W. H. Hammond, Principal, Cathedral High School, Bombay.

St. George's Homes, Kaity, South India.

The Tenth Birthday celebration of these Homes for orphans and other children of European descent occurred on May 23rd, when His Excellency Lord Goschen, Governor of Madras, presided.

This institution was first located at Kodaikanal; but, about two years ago, it was transferred to a breezy, sunny, undulating tract comprising three hundred acres, on the southern slope of the Kaity valley, near Ootacamund.

The Cottage system of housing some 120 children, mostly girls, is followed. Five attractive and commodious cottages are each under the care of an English House-mother, who is assisted by older children in managing the domestic arrangements. No Indian servants are employed in these cottages.

Midway, between the girls' cottages and those occupied by the older boys, on a knoll which dominates the beautiful Kaity valley, the school house has been erected, containing in addition to several class rooms an assembly hall with a clock tower. The instruction afforded in these Homes extends from Kindergarten to the High School standards. The school song is suggestive.

We have no past to cast its glamour o'er us,
No founders old, no records writ in stone;
An unknown future stretches out before us,
But courage, friends! the present is our own
To mould and fashion while 'tis yet to-day,
In strength and loyalty and in a happy way.

Educational Conference and Exhibition, Godhra.

The Educational Inspector of the Northern Division of the Bombay Presidency paid a visit to the Godhra Normal School a short time ago. He has recently returned from his studies in England, and is keenly interested in educational problems and new methods of teaching.

He took special interest in methods of teaching nature study, hand work, drawing and reading. In the nature study classes he observed particularly the charts made by the students, the seeds germinating in the glasses on the window ledge, and commended the use of the individual garden plots.

The features of the handwork, which attracted his attention, were the clay modelling, representing nearly every imaginable thing which can be modelled; sloyd work and paper-cutting for illustrating lesson studies.

He was especially pleased with the mass drawing which has been recently introduced throughout the Practising School and Normal School. He remarked that the mass drawing created a love for drawing, as evinced by the interest manifested in the subject throughout the school.

In speaking of the hand work, he noted that it was original, practical, and correlated with other subjects.

He showed much interest in the use of the Beacon method of teaching reading in the beginning classes. It was his first experience in observing Gujarati children learning to read by a phonetic-story method and he commented as follows:—

"The Godhra Beacon Method of teaching reading is a combination of the old and the new and it certainly has been successful. The children in Standard I read with a fluency not usually found in other Primary Schools."

During this visit he conceived of the idea of making use of this institution, to demonstrate methods of teaching these and other subjects; and asked for the privilege of inviting the teachers from the Government schools of Panch Mahals and adjoining Districts for a Conference. The result was that, a little later, a three-day Educational Conference and Exhibition was held in our school. About three hundred teachers were present of whom fifty were women.

The first day was spent in examining the exhibits of work. These included clay modelling, paper-cutting, paper-folding, story illustrating, mass drawing, nature study, geography charts, knitting, crochet, embroidery and sewing.

The geographical exhibit included four girls dressed in Japanese, Chinese, Singalese and Mountain Tribe Costumes.

The second day was devoted to demonstration lessons in teaching, reading, drawing, handwork, nature study, singing and drill.

An opportunity was given for discussion and questions, and Mr. Vakil showed unusual skill in meeting objections and left the teachers with a desire to overcome the difficulties and to improve their methods of teaching.

The third day was spent in discussion and obtaining photographs of the visitors and the exhibits. Nineteen different photographs were taken and the accompanying plate shows one of them.

The mid-day intervals on each day were spent in special intercourse between the teachers of the different parts of the province, and of different castes, races and religions. Our common aim—better methods of teaching—united us all.

The whole project was inaugurated and managed by the Educational Inspector and his Assistants with the help of the Principal.

It was a most interesting and helpful experience; and it was good for our staff and students to have a part in making their institution of use to the general public and to give this larger service to the educational work of their community.

M. E. NEWTON.

Annual Conference Boards of Education.

One of the objects of this section is to keep the various parts of the field informed as to activities of common interest. The following extracts from the minutes of recent meetings of the Annual Conference Boards of Education will be interesting and suggestive, especially in view of the approaching mid-year sessions of the Boards.

SPECIMENS OF HAND WORK CLAY MODELLING
Made in the Practising School connected with the Godhra Normal School.



North India Conference.—It was recommended that the Board of Education be increased to twelve members, six to be elected from each society. The six members elected by the Annual Conference should be selected from the membership of the "Educational Committee," and should constitute the Educational Service Committee.

It was recommended that the Conference Epworth League, and Sunday School Boards be merged into a "Board of Religious Education," which should give its entire attention to the religious phases of the educational work.

A committee was appointed to frame a common policy or plan for the village educational work.

A separate Budget for the village schools was approved and referred to the Conference Budget Committee.

The Treasurer's report showed total assets of approximately Rs. 3,510.

It was recommended that the educational endowment funds raised in connection with the Centenary by the Conference, be transferred from the Branch Treasurer to the Conference Treasurer; and that the Area Educational Secretary and the Presidents of the Area Boards of Education be a Committee to administer the Educational funds.

North-West India Conference.—The request that the Muttra Boys' School be conducted as a Conference Community Middle School, using the Government Curriculum, was approved.

The development of the school at Agra into a Central Day School for boys and girls was approved.

It was decided that in sending boys and girls for higher education to other institutions, school authorities may pay board and tuition fees and that the parents pay fare, clothing, pocket money and all other expenses.

A letter was read from Miss Durrant of the Women's Industrial Home, Fatehpur, in which she expressed her willingness to take difficult girls and rescue cases from our mission, on condition that their fees be paid: whatever they can earn at industrial work being deducted from the fees.

It was recommended to Managers of Schools that the Bible Tests prepared by Rev. E. L. King be given in their schools.

The Treasurer reported that the Children's Day Fund Endowment amounted to Rs. 1,296-15-1.

Lucknow Conference.—It was resolved that Cawnpore and Rae Bareli be affiliated districts for Girls' Schools, instead of Gonda and Rae Bareli.

that must necessarily be accorded them in order that their contribution may be at a maximum, just so is it conceivable how objectives in teaching may be attainable apart from an accurate evaluation of the nature of the human material upon which teachers are working. Obviously, this analogy can be carried on indefinitely. But for our specific purpose it may be pushed further with profit. For example, it is futile to attempt to varnish or paint any surface which has grease or oil of any kind on it. The surface, in other words, must be prepared for treatment. Some woods are susceptible to high polish, others can scarcely be polished at all; therefore, the futility of trying to work in or with woods without knowledge of their working properties. How many sticks of solder are wasted annually by novices in sheet metal and plumbing because novices do not adequately appreciate the necessity of using cleansing and fluxing materials! The point which I wish to make is this:

1. For a teacher to determine his objectives without giving due consideration to the inherent nature of his pupils is fatal to success; likewise
2. For him to devise and use methods of selecting, organizing and presenting subject-matter without giving due consideration to the nature of his pupils in whose interests presumably these methods are devised and on whom they are to be tried, is equally fatal to success.

Now let me refer once more to the exceedingly important principle mentioned above. I wonder if, possibly, close proximity to this principle from day to day may have lessened regard for it. What does this principle mean anyway? I gathered from one or two of the sample lesson plans examined that unfortunately it means little, that somehow or other its fundamental (ness) had not penetrated, so to speak, the teaching life.

It will be helpful to examine certain of these statements more closely. Note that it at once throws the emphasis upon pupils' aims or, in other words, that it strongly suggests that pupils rather than subject-matter is what you are to teach. It advises you that your prime objective should be "to challenge and inspire your pupils to realize their own legitimate aims and to help them time these aims to fit both their needs and their capacities to realize them". What an ambitious yet entirely worthwhile and largely attainable objective!

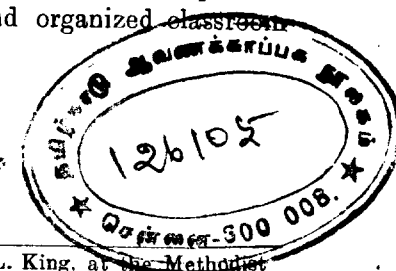
Upon you devolves the all-important duty—or shall I say obligation

1. Of finding out what your pupils' legitimate aims are;
2. Of helping them to time these aims to fit both their needs and their capabilities to realize them; and, finally,
3. Of challenging and inspiring them to realize these aims.

Surely these call for a life of continuous exploration and adaptation, for a dynamic, progressive, pioneer state of mind rather than a static, non-progressive, settled one. I think they do, and rightly so. For the only truly established, standardized element or item in teaching is its unestablished (ness) or unstandardized (ness) so to speak. Did you ever stop to think how we must be continually changing the content with which we attempt to have our pupils modify themselves, and that because of the varied and constantly varying nature of those we try to teach, our methods must of necessity be and remain flexible rather than fixed?

And if so, then what?

Just this, and nothing more, as I see it. If teachers are going to help pupils realize their own legitimate—which I interpret to mean worthwhile—aims, they must know these pupils. Intimate knowledge of them, of their likes and dislikes, of their desires and ambitions, of their friends and friendships, of their occupations and recreations, both past and present, in short, of the things they are up against from day to day is imperative. Otherwise teachers cannot but work more or less in the dark in trying to organize and put into effect a program which will be of maximum assistance. When reduced to its lowest terms, the main means of helping pupils to realize their own legitimate aims rests in the inspirational character of the teacher's personality and in the helpful influence he can bring to bear upon his pupils by means of a properly selected and organized classroom environment.



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greater than the norm, minus if less. Care must be taken in reckoning the deviations in the case of the form board, for here the lower the time record the higher the score and a time record less than the norm becomes a plus deviation. In the fifth column enter the S.D. for each test. The S.D. is calculated for the whole test only, not for each age. Now divide the deviation by the S.D. and enter the result in column six or column seven according as it is plus or minus. Add both column six and seven and find the algebraic sum. The result is the final score of the individual. This score may be carried out to two decimal places but one decimal place will be sufficient for most purposes.

The above process needs a little explanation and we must also describe how it may be simplified. It is clear at once that we cannot get much benefit from our tests until we have found some way of expressing their findings in a single quantitative measure. If all the tests were of equal value we might get this by the simple process of adding the raw scores in the first column. But a total success in the manikin test gives the pupil a score of 5, while a total success in the reading test gives him a score of 28. This at once gives the reading test five times as much weight in the final result as the manikin test. If the two tests were of equal value the pupil's raw score in the latter should be multiplied by 5.6 to equalize the difference in score range. But we may feel that success in the manikin is only half as valuable an index of intelligence as success in the reading test. So we may arbitrarily fix weights and be justified in doing so. But a better plan is to use the S. D. as an index for the weight to be given to each raw score. In our own work we found the S. D. of the reading test to be 9.59 and of the manikin 1.75. To simplify our calculations we called these respectively 10 and 2 and divided the deviations by these weights. In this way the one point in the manikin scale equalled five points in the reading scale. Thus the manikin credit counted a little less than its full equivalent in the reading scale which on the basis of score range would have equalled 5.6 or the reading scale units. Instead of dividing the reading score by 5.6 we divided it by 5 to equalize the two scores.

By treating all the tests in this way we were able to compare the scores with one another, and add them up to get a single index of the pupil's work. The exact value of the S.D. need not be used as the decimals would greatly increase the labor. By

inspection we can recognize the approximate ratio and if we have greater confidence in one test as compared with others, or if our purpose in giving the test, for example, requires us to assign greater weight to the reading and arithmetic tests, we may arbitrarily alter the weights. This last is, perhaps, a dangerous recommendation and unless we clearly understand what we are doing and why we are doing it, it will be better to adhere closely to the weightings as determined by the S.D. Of course it is a simple process to invert these ratios and secure our weighting by multiplication rather than division. The result will be the same in the end.

WEIGHTING AGE MEDIANS.

The Age Median we secure by calculation is sometimes obviously not the true median. This is usually due to too few cases in some age groups or to a particularly backward set of children in a certain age group. For the purpose for which we used the test we found the ten-year old group particularly bright and the fifteen-year old group especially dull. This meant that the ten-year old child had to do comparatively very much better than the fifteen-year old child. Moreover the ten-year old child was the age group we wanted above all others to admit into the hostels, while the fifteen-year old child we did not care to admit at all unless he was an exceptional case. Again in some tests the age median instead of progressing steadily from age to age would sometimes drop back where it ought to have gone forward. Our first step was to interpolate what we considered the true median in places where the calculated median was obviously not as high as it ought to be if we had been dealing with larger numbers and a more representative group. If for example,—as was actually the case,—the Arithmetic Median for the eleven-year old group was 16.5 and for the twelve-year old group was fourteen and for the thirteen-year old group was 17, it is clear that the eleven-year median is too high or the twelve-year median too low. The ten-year median was 15.1, so the eleven-year median is scarcely too high. It is obvious that the twelve-year group is backward and its median far too low, being less even than the ten-year median. If we calculated deviations on the basis of these medians, we should be giving the twelve-year old group a great advantage over the ten and eleven-year groups. For our purposes we wanted the advantage to be the other way.

It was decided that little orphan girls supported by the Mission may, at the discretion of the Principal, go to homes of near relatives, such as aunts, uncles, and grandparents, until they are twelve years of age.

It was decided that teachers in our Girls' Schools are not to be permitted to do any regular remunerative work outside of the school during the school year, not including vacations, without permission of the Board of Education.

A grant of Rs. 50 was sanctioned for the Intensive Teachers' Training course to be conducted at the Lucknow Christian College. Provision was also made for the awarding of Rs. 100 as Loan Scholarship for needy candidates desiring to take this course.

It was recommended that the Isabella Thoburn College conduct a similar Training course and Rs. 50 was sanctioned for the course, on the condition that North India and North-West India Conference Boards each contribute a similar amount.

A request was made to the Annual Conference to have all Children's Day Funds sent direct to the Treasurer of the Board of Education.

Bengal Conference.—Bishop Fisher was requested to try to secure a Library for Bengal Conference, and also to ask Dr. Eric North, if possible, to make provision for a Board Library in Calcutta.

H. M. Swan, the Chairman of the Programme Committee, of the Educational Conference, made the following report :—

An educational Forum was held at Asansol on January 2nd, from 3 to 5 P.M. and from 5-30 to 7 P.M. The subjects discussed were (1) Primary Schools. (2) High and Middle Boarding Schools. Each subject was presented by three special speakers and then thrown open for general discussion. The Forum was well attended by Indians and missionaries. The discussions were illuminating and profitable and the evening was an enjoyable one. It was proposed to hold another educational Conference next year the day preceding the Annual Conference.

It was decided to appoint a sub-committee of three members, with H. M. Swan as Chairman, to arrange for a Training Conference of all the teachers of the Conference.

Miss Swan was appointed Chairman of the Committee on Vocational Training, with power to select a committee of three representing both boys' and girls' schools.

Miss Carpenter was authorized to deal with the subject of Reading Courses for the teachers and to select her own committee.

Recommendations of Findings Committee : Primary Education.

1. That better foundations be laid for our Educational Work by improving our Primary schools. Employ some of the *best* teachers in these schools and do everything possible to make Primary schools more practical and efficient.

2. Employ as far as possible *only trained Christian* teachers. That a Conference Summer School for the intensive training of those teachers who have not had normal training be held for two weeks.

3. Develop community centres in the villages—the Primary school being the nucleus of these centres which shall aim to improve village conditions and arouse in the pupils an interest in and a sense of responsibility for their communities. Let sanitation be carefully taught, gardening even on a small scale introduced, also handwork.

4. Wherever practical let District Boarding Schools be opened where village children may receive more and better training than is given in day schools. Then the most capable and promising only should be sent to the Town Boarding Schools for higher training.

5. That better buildings and better equipment be provided for village schools.

6. That careful attention be paid to the text books which are introduced into the schools, and none be used which contain matter contrary to Christian principles. If possible, that text books be prepared by Christian educators.

7. That more emphasis be laid upon the religious education given in Primary schools. That a Conference Bible Course for Primary schools be prepared and printed in the Conference Minutes.

M. L. EDDY,

Chairman Findings Committee.

Recommendations of the Findings Committee : Higher Education.

1. That some sort of manual of Industrial training should be given in connection with our Boarding schools. This will look not so much toward vocational preparation as toward the development of character, the training of the hand for useful employment and the teaching of the dignity and respectability of labour.

2. Christian teachers should be employed as far as possible in our schools.

3. Teachers' Association should be organised, if possible, either in each school or each district with one central organisation for the Conference.

4. Teachers should be encouraged to pursue reading courses, and suggested courses should be made by the Board of Education.

5. Systematic instruction in Bible courses should be carried on with suitable text books in the vernacular.

6. Headmasters, housefathers, matrons, and teachers should be encouraged to keep in close personal contact with students in order to help them in their spiritual life and for the development of the spirit of service.

D. H. MANLEY,
Chairman Findings Committee.

Intensive Teacher's Training Course, Isabella Thoburn College.

The notice of the Training Course was sent out to different schools early in March, and by the end of the month, an unexpected response was received from the Principals of Christian and one or two non-Christian schools. As this class was to be only an experiment this year, twelve teachers were admitted from the following schools:—

Gonda	...	...	...	2
Mirzapore	..	...	...	1
Budaon	...	...	...	5
Allahabad	...	...	...	1
Sitapur	(	...	...	2
Fatehgarh	...	...	...	1

One of these is a Matric-trained, one an untrained Matric, six are Middle trained, and four teachers are only Middle certificated.

The teachers arrived on the fixed date and were accommodated in a large dormitory of the newly built college hospital. Special privileges were given to them and they were exempted from the ordinary hostel rules. They dined in the college dining-room at any one of the three grades of tables, which they liked best.

Class work began punctually at 6-30 A.M. on the 2nd of April. The daily time table has been as follows:—

6-30—7-15	...	English Methods	...	Miss Dimmitt
7-15—8-00	...	History and Geography	...	
		Methods	...	Miss Roy
8-00—8-45	...	Mathematics	..	Bacon
8-45—9-30	...	Demonstrations	...	
9-30—10-40	...	Breakfast and Chapel	...	
10-40—11-15	...	Hygiene and Sanitation.	..	Bacon
Three times a week—Scripture study				
			...	Bacon

Before going further, I should like to explain that the demonstrations have been given by different people on different subjects. The chief ones have been on Public Speaking by Miss Reddick; embryology

by Miss Townsend; music by Miss McMillan; electricity by Miss Mason. Besides these, two girls of the graduating Normal Training Class have given lectures on the Alphabet of the Race, and the Rational Method of Reading. Miss Wallace has given lessons on Physical training.

Our regret is that the term of the class has been so short that none have been able to accomplish all that they would have liked to; and we hope that next year it can be a little longer.

The teachers have had the free use of the badminton and tennis courts and have had full access to the students' drawing room, where they have enjoyed their leisure hours listening to choice records on the Victrola or some piece on the piano.

Outside the college—the teachers have had the pleasure of attending five evening lectures delivered in the Lucknow Christian College by prominent educationalists. Some were also able to attend lectures on present day economic problems delivered by the University professors.

The other aim of the class was to learn by visiting places of interest. Accordingly, either evening or morning excursions were arranged to see the Residency, the old tombs, the museum, the picture gallery, the horticultural and other gardens. The most interesting visit was to the exhibition of the handwork of the United Provinces Schools. Here, some very fine specimens of skill were exhibited which have suggested to many teachers the idea of introducing industry and handcraft in their schools in future, especially among girls who cannot do much intellectual work.

With such a busy programme, the days have flown away and the three weeks are over, and we feel sure that the change of environment, new friends, new ideas which Chand Bagh has so lovingly offered to our friends of the Extension Class, will enlarge their ideas, stimulate their ambitions and will fill them with new hopes for their schools.

Throughout the term, our visitors have shown a fine spirit of interest and willing co-operation to get as much good from their visit as possible. Some of them came with the idea of taking up only one or two subjects; but on seeing the plan of the proposed studies every one of them eagerly joined and enjoyed every class that was arranged. This, their appreciation, has been a great joy to their teachers who conducted the classes. They have all worked hard and conscientiously and though some of them have had the old dread of taking a credit test at the end of their course, we all feel sure that they have gained much from their work and play.

In the end it is necessary to add, that these teachers, some of whom have enjoyed the privileges and joys of full-fledged teachers for years now, have won our admiration and esteem for going through the proverbial "woes" of a student's life with such sunny smiles and cheerful faces, and we hope they will feel members of Chand Bagh ever after, and will swell the numbers of the old girls on Founder's Day.

Conference on Industrial Education.

The limited space in this issue, precludes the inclusion of a suitable report of the Conference on Industrial Education held at the Allahabad Agricultural Institute, March 25th to 29th, under the auspices of the National Christian Council, but the matters discussed are of such fundamental importance to the general question of Christian education, that it is felt that the Recommendations made by the Conference should be published without delay. Most of the missions in Northern India, as well as many in Bombay, Bengal and Central India were represented in the Conference, thirty delegates being present.

RECOMMENDATIONS.

1. The Conference records its conviction that the present time is one of critical importance in the development of industry in India, and that the great amount of public attention now directed to the subject demands, that the Christian Church should face with a new seriousness its responsibility and opportunity with regard to it. The Conference has observed that industrial education, as carried on by missions, has too often been confined to the succor of orphans or applied to pupils, who have shown no aptitude for other types of training. It has been regarded as a legitimate and indeed a necessary part of Christian education. The Conference considered that it is the duty of the Churches and Missions in India to do all that lies in their power to advance Christian Standards in industrial life, and to enable Christian boys and girls and men and women, to take a useful place in the growing industrial life of India.

2. *Definition of Industrial Education.*—The distinctive function of Industrial Education is that of trade teaching, that is the preparation of boys and girls for specific occupations, so far as possible under conditions which will enable them to take their place, in due time, in the industrial life of the country, whether in the village or in the city.

3. *Importance of Manual Training.*—The foundation for Industrial Training must be sought in the school or schools through which

the pupils have already passed. A pupil who has had no manual training and has not learned to use his hands is at a serious disadvantage in learning a trade. We consider that the greatest obstacle to the improvement of industrial education lies in the nature of the curriculum of the ordinary Indian Primary and Middle School, which gives no opportunity for development of the wonderful manual aptitude found in so many Indian children. It is essential, both from the point of view of pure education and as regards preparation for later vocational training, that in the Primary and Middle School, educational handwork should find an adequate place.

4. *The Community Middle School.*—The Conference considers that the Community Middle School, whether urban or rural, should be the place where a child's natural ability is tested and from which he would be passed on to some specialized training, for instance, agriculture or teaching, in the case now under consideration, industry.

5. *Age for beginning Industrial Training.*—It is generally held that pupils should not devote themselves to specifically industrial training before the age of thirteen or fourteen. By that time, normal students should have passed the second class in the middle school, but it will frequently be necessary for pupils who have only reached the upper primary standard by the age mentioned to pass direct to the industrial school.

6. *Curriculum.*—The task of drawing up curricula for the industrial school is one which needs the attention of experts, conversant both with sound educational principle and with the nature of the several studies and processes required. The Conference urges the National Christian Council to take steps to secure that such detailed curricula may be prepared.

It is, however, convinced that two types of industrial school may usefully be defined:—

1. The first looks towards the village needs and industries, and should be located in rural areas. It will teach such subjects as weaving, the manufacture of clay products, cane and bamboo work, leather work and rope making, village carpentry and blacksmithing.
2. The second type looks towards the trades and industries of the city and the developed industrial regions. Schools of this type will teach such subjects as the following:—Carpentry (including cabinet and pattern making), blacksmithing, fitting, motor mechanics, work in sheet metal (including copper and brass) foundry work, engine driving

and printing. It is not suggested that all these subjects should be dealt with in each school, but that a selection should be made in accordance with the needs of each district. The curriculum should include mainly work at the trade but time should be devoted to drawing, book-keeping and mathematics related to the work in hand. In some areas, it may be advisable to give some instruction in English by the direct method. Wherever possible business methods, related to sales, purchase of materials, etc. should be taught.

7. *The procuring and training of teachers.*—Teachers for industrial schools should have passed through the full practical course in a school of the type, whether looking towards village or urban industries, in which they are to teach, and should in addition receive teacher training, not of a merely general character but related to the industrial subjects they will have to teach. In view of the scarcity in India of persons, whether Indian or foreign, who have experience in training teachers of industries, it is highly desirable that institutions for industrial teacher-training should be on a co-operative basis. In several places excellent Government industrial training institutions exist and Missions should wherever possible make use of these.

While we recognise that many industrial schools owe their inception to the enterprise of the evangelistic missionary, we consider it necessary for permanent success that the supervision of industrial education should be continuously in the hands of those who, whether foreign missionaries or Indian Christians, are properly trained for the work.

8. *The following up of Industrial Education.*—It is essential that the pupil shall be trained in an atmosphere of real work, that he shall remain long enough to be adequately trained and not leave the institution as soon as he has begun to acquire a small market value, and that he shall be equipped on leaving with a sufficient capital in money or tools to enable him to start life for himself. Our report contains examples of ways in which these ends can be achieved. The institution of the finishing school seems to us to offer an excellent means of advancing these ends.

It appears to us that the reasons urged against the conduct by missions of industrial commercial concerns, apart from industrial education, are very strong. (We do not include the very special case of Mission Presses). There has rarely been a continuous supply of

expert management. There is a grave danger of creating and continuing in the Christian workman the spirit of dependence upon the mission, and further, of engendering a Christian caste, segregated from the currents of national life. All assistance should be given to trained pupils to set up in business for themselves.

9. *Hostels in Industrial centres.*—The Conference desires to draw the attention of missions and churches to the great need for hostel accommodation in the large industrial centres for young unmarried Christian artisans, including many who pass through Christian industrial schools, and urges that steps should be taken to provide such hostels, where necessary by united action.

It is further suggested that steps should be taken by the Provincial Christian Councils to arrange for information as to places where Christian workmen are welcomed, and as to facilities for scholarships, etc., for Christian boys in industrial schools, to be made generally known.

10. Steps should be taken to arrange for special courses (which might be short and intensive) in the manual arts to be given to the women teachers in girls' schools.

(NOTE.—A course of two weeks has been arranged to be held at Allahabad Agricultural Institute in the latter half of October 1924).

11. *Survey.*—The Conference considers that in order to assist Missions and Churches in forming decisions as to the places in which industrial training should be developed or strengthened, it is necessary that a thorough survey of the ground should be made including all existing Christian institutions for industrial education, their success and failure; the facilities for industrial education and the training of teachers afforded by Government, the economic needs and tendencies of the country so far as they be on this subject; and urges that such a survey should be undertaken by the National Christian Council.

12. This Conference, composed in the main of missionaries, records its conviction that the advance in industrial education which it desires can only be achieved if the Indian Christian Community is heartily convinced of the wisdom of the plans proposed and if its co-operation is given. It observes with pleasure the opinions recorded by representative Indian Christian Conferences in favour of an extension of industrial education, and trusts that the present prejudices against industrial training, some of the reasons for which have been already admitted, may vanish.

13. *Finance*.—Pupils during the earlier stages of learning a trade cannot be self-supporting, and therefore no institution in which a real training is given can be financially independent except so far as it be of the nature of a factory rather than a school. But in Industrial Schools every effort should be made to make the conditions of work during the course increasingly approximate to the actual conditions under which the pupil will eventually have to practise his trade.

The Conference has given careful consideration to the cost of industrial education, and includes the costs of several types of education in its report. It urges Missions and Churches to revise their attitude towards the subject of industrial education, to regard it as having a claim on Christian resources not less than other departments of education, and to make regular and increasing provision for it, both in money and in personal.

14. *Christian ideals of Industry*.—The Conference considers that the contact of Christian Missions with the industrial life of the country should have as its final end the application of Christian principles to industrial conditions and the avoidance of the failures of the West; and it holds that one value of Christian activity in industrial education is the opening thereby made for influencing on the social side the new industrial development of the country.

15. The Conference considers that this meeting marks only the beginning of the work that is needed in the field of industrial education, and urges upon the National and Provincial Christian Councils that they should apply themselves to the problems involved, both by carrying out the survey already mentioned and by aiding the Churches and Missions to make plans in co-operation with one another and where possible with Government and other agencies, for energetic action along the lines indicated in these recommendations.

Light on Books



I. BOOKS

JEREMIAH: George Adam Smith, Doran, New York, 1923, pages 394, \$3'00

To one who has read, and been exhilarated by, Principal Smith's great *ISAIAH*, this book will be something of a disappointment. One feels an absence of the large spaces, the tremendous sweep of spiritual vision, which characterized that great work. That this is partly due to the much more difficult material which had here to be handled is of course evident, but still one looked for something less technical, less patchy in treatment, than is *JEREMIAH*. Nevertheless, the new translation is suggestive and the picture of the greatest of the prophets not lacking in vivid touches.

Material on Jeremiah is largely increasing at present and those who have to deal with Biblical material would do well to get in touch with it.



FROM AKBAR TO AURANGZEB: W. H. Moreland. MacMillan, 1923, pages 364, about 15 shillings.

The author of *INDIA AT THE DEATH OF AKBAR* has continued his study to the close of the great years of the Moghul period. Like its predecessor this book is a model of painstaking research and clearcut arrangement and statement of a great mass of facts.

Thorough as he is he calls attention to the large field still open in Indian libraries for a study of this period. One of the chief values of studies such as this is the lead they give Indian students and politicians for study and further research. Another is the importance of the sidelights and supplementary material they furnish the teacher of history. Yet another is the emphasis they put on the economic side of history, the significance of the *people* as against the court, the rise and fall of the standard of living, the economic and social bases of great historical developments. Why India is what it is today is made far more clear in Mr. Moreland's pages than in any history of the usual type, where only the surface of the national life is dealt with or, apparently, at all realized. We most earnestly commend these two books of Mr. Moreland to makers of missionary reading courses, teachers of history, and all students of the real life of the Indian people.



MINIMUM COURSE OF STUDY: Moore and others. MacMillan, 1922, pages 402, about \$2.

This book originated in a conference of California school superintendents called during the war to consider the part the schools might play in it. The amount of attention then being paid to conservation turned the minds of the members of the conference to the possibilities of conservation in education: "the mental rationing of our children". The elimination of waste from the program of the school seemed a task well worthwhile and much overdue in the doing.

The co-operative method of study was decided upon and the teachers themselves were enlisted in the project. Each subject in the elementary course was assigned to a group of teachers for study and report. Each committee was asked to answer the following questions:—

First: What is your subject for? What is its aim or purpose? To what end should it be taught? What should be the objective of every teacher in giving instruction in it?

Second: What parts of it are of first-rate importance, as distinguished from the parts of it which are only of second-rate or third-rate value? What are its essentials? We ask you to skeletonize it, to outline its minimum essentials.

When reports came in they were printed for private circulation and subjected to classroom test. Then came revision, and then this book. Even yet the work is not thought of as finished. Each of us may carry it on a stage further.

We cannot indicate the minimums established in each subject, but one or two may be noted:

In Arithmetic three questionnaires were sent out—

1. The amount of numbering used in everyday life, (answered by 799 persons).
2. The amount of arithmetic used in everyday life with regard to subject matter, (314 persons).
3. The amount of arithmetic needed in business, (24 firms).

Summing up the results of these three questionnaires the committee recommended the following minimum essentials:—

A high degree of accuracy in:

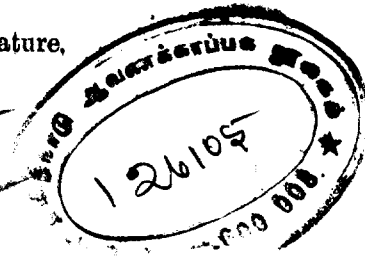
1. Addition of five addends, five digits wide.
2. Subtraction, five digits wide.
3. Multiplication, with a multiplicand of five digits and a multiplier of four digits.
4. Division, with a dividend of five digits and divisor of four digits.
5. Addition, subtraction, multiplication, of the following fractions; halves, thirds, fourths, fifths, eighths and tenths.
6. Decimal fractions of three places.
7. Simple interest.
8. Cash accounts and children's and family expense accounts.
9. Cash, checks, and bills.
10. Banking.

The committee therefore recommended the elimination of 39 items then in the course, and worked out the details of a suggested course.

Under Reading the committee states that the minimum essentials at the end of the eighth grade should be—

Mastery of the mechanics of reading
Ability to read thought into the printed page
Correct habit in oral and silent reading
An established library habit
The appreciation and love of good literature.

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Each of these is dealt with in detail and aims for each grade are established.

Other subjects taken up are Art, Civic and Social Education, English, Geography, History, Home Economics, Hygiene, Industrial Arts, Kindergarten, Manual Arts, Music, Nature Study and Agriculture, Physical Education, Spelling, and Writing.

Such a book as this is a necessity to missionary curriculum makers, but ought also to be in every High School library for consultation and discussion as well as the establishment of clearcut aims in subjects where Government requirements do not permit curriculum changes. Few recent books on education will so well repay the study of the Indian educationalist.



BUILDERS OF THE CHURCH: Tucker. Abingdon Press, 1924, pages 336, \$1.40.

This is the latest addition to the Week Day School series of the Abingdon Religious Education Texts. It is a Church history written around the lives of great characters—builders of the Church. Connecting links between each of the periods are furnished so the story is as continuous as necessary, but the treatment is primarily biographical—a method now coming to the fore in religious education, and all to the good. Dr. Tucker's pictures are clearcut, sufficiently detailed for his purpose, and backed up by Study Topics and additional references. The style is simple in the main.

As usual in this series the make-up of the book is most attractive.

Prior to the publication of this book the Epworth League in India and Burma had planned to issue one of its Topics Courses along this line. So, while some of the characters used here would not be of interest in India, this book will make an excellent background and supplementary reading for this League Course. We commend it for school libraries. In addition, even those whose knowledge of Church history is more advanced—missionaries for instance—will find much interesting and suggestive material in **BUILDERS OF THE CHURCH**.

The Builders taken up are Athanasius, Augustine, Hildebrand, Bernard, Francis, Huss, Erasmus, Luther, Grotius, Loyola, Williams, Wesley, Edwards, Asbury, Channing, Bushnell, Livingstone, Kingsley, Wallace, Miller, Booth, Miss Willard, Moody, Lee, Booker T. Washington, Dale, Taylor, Gladden, and Roosevelt.



THE SPREAD OF CHRISTIANITY: Hutchinson. Abingdon Press, 1922, pages 276 and eight illustrations. About \$1.50.

This also belongs to the Week Day School Series. It tells the story of the Church from another angle than that selected by Tucker—the angle of expansion. In the main it follows the traditional method of Church histories, simplified for use by young people. The treatment of India is perhaps as satisfactory as could be expected within the space limits, though it fails to give much of a picture. Comparing this volume with that by Tucker the superior effectiveness of the biographical method is apparent. In addition, we feel that more stress on the adventure element in Christian expansion would have made a more appealing book for youth.



WORLD FRIENDSHIP THROUGH THE CHURCH SCHOOL: Lobingier, University of Chicago Press, 1923, pages 91, \$1.25.

This little book is a recognition of the fact that the creation of an international mind is a problem of education, and particularly a problem of Christian education. It is adapted to the use of teacher-training classes, midweek meetings, workers' conferences and the like.

As an example of the method take the program for the High School age:—

(a) Instruction:—

(i) A course on the Church, its mission, problem, and machinery.

(ii) Debates

(iii) Plays and Pageants

(iv) Reading—as in **NATIONAL GEOGRAPHIC MAGAZINE**

- (b) Worship and expression
- (c) Giving
- (d) Personal service, participation

Program making for various elements in the local Church
References for further study.

A major criticism would be the paucity of actual material for use. Though suggestions are made under each head too much is expected in the way of filling in details. This is partly due to the fact that the book is prepared for various denominations, the entire propaganda of which could not of course be dealt with in detail. The main value of the book in India would be its guidance of the few who are making programs in religious education, or in study classes in English Churches. The main thing is the *idea*, and that ought constantly to be brought more to the fore.



DRAMATIZATION IN THE CHURCH SCHOOL: Miller (Mrs. J. A. Lobingier), University of Chicago Press, 1923, pages 89 and ten illustrations. \$1.25.

This Manual is supplementary to the author's THE DRAMATIZATION OF BIBLE STORIES. Each chapter takes the form of a lesson plan as the book is meant for use in Church Schools, Summer Conferences, etc.

The chapter headings are as follows: Educational Dramatics, The Method, Blocking out the Story, The Refining Process, Grouping, the Use of Color, Costumes, Dramatizing a Story, Biblical Material Suitable for Dramatization, Results of Using Dramatization as a Method. Two appendices present two plays worked out, the one by boys in a junior department, and the other by a group of junior girls. Study 7 in *World Friendship through the Church School* is another example of such work.

One of the chief values of this book is the fact that it insists on the *children making their own plays*. The educational value of this method is readily apparent. There seems to be, however, a growing feeling among missionaries against the dramatic method because groups have at one time or another introduced objectionable features into dramatic performances under Church auspices. The tendency seems to be to hastily and conclusively

condemn the *method* because it has been misused. The illogicality of this stand seems seldom to be realized. In essence this attitude is merely one outcropping of that missionary methodology which tends to condemn or ignore every program or method which will not *work itself*. A study of Mrs. Lobingier's two books may serve to set matters more nearly right in this respect. We shall not do well to close to the Church so valuable a method merely through loose thinking or a reluctance to spend time and effort on its working.



II. MAGAZINES

THE BLUE AND GOLD: We have received the first number of this new venture of Queen's Hill School, Darjeeling—an attractively printed paper of 12 pages with five half-tone cuts. Descriptive material regarding the school, alumnae news, information regarding the new buildings, and some features of the college Annual type make up the contents. The plan is to publish twice a year. We welcome the BLUE AND GOLD and commend the idea to other schools.

THE AMERICAN BOY: For the finest editorials in the field of boy journalism, as a source of first-rate story material (tried and not found wanting), and as an inspiration to continued boy-likeness we back this magazine to the limit. Its material is not too advanced in language for the upper High School classes and its value as a humanizing agent for Principals and Headmasters should not be overlooked.

WORLD'S WORK is publishing a remarkable series of articles on American schools entitled PLANNING THE UPKEEP. One, on the Pursuit of Happiness, appears in the January 1924 issue and is full of suggestiveness on an almost overlooked (perhaps *almost* is redundant in India) feature of a true educational policy. In this article Superintendent McAndrew tells of one city which employs a "joy disseminator"; of others which specialize in wonderful mural paintings of children's happy memories of books, of sheer beauty, of nursery tales, of historical events; of one superintendent who has a "happy hour" in which "the young citizens are given liberal doses of unadultera-

ted fun because it's good for their mental and bodily health", of others where service or music or recreation are prominent features, and yet others where training in making toys or in protecting parks from vandalism or other kinds of service are stressed. Another article, in the February number, deals with the service of the public schools in promoting citizenship. I wonder if there is a more urgent secular need in Indian education to-day than the development of good citizenship. No true ideal of patriotism exists in India today. What are the schools for if not to promote it?

This magazine is also reprinting a Life of Dr. Gorgas which bids fair to be a wonderful find for the biographist. Again, what is education for if not to commend high living and great achievement by popularizing knowledge of the life and work of great exponents of those qualities?

The TUSKEGEE STUDENT heads an advertisement of TUSKEGEE with this quotation:—

"A College that has its students devote one-half of their time to actual useful work is so in line with common sense that we are amazed that the idea had to be put in execution by an ex-slave as a life-saver for his disfranchised race. Our great discoveries are always accidents: we work for one thing and get another. I expect that the day will come, and ere long, when the great universities of the world will have to put the Tuskegee idea into execution in order to save themselves from being distanced by the Colored Race." ELBERT HUBBARD.—*In "A Little Journey to Tuskegee"*.

EDUCATION for March, 1924 has two articles of value to India educationalists:—*McNutt*: Case Study of Ethical Standards for Public Schools, and *Branom*: The Textbook in Geography.

WORLD NEIGHBORS, now in its third year, is a magazine Indian teachers would do well to get acquainted with. It is published by the Methodist Book Concern, Cincinnati, at 50 cents a year. Missionary projects, missionary material, and missionary programs are features of the April issue.

RELIGIOUS EDUCATION for February, 1924 has a most interesting article on *Family Life Ideals in Traditional Judaism and Today* by Abraham Cronback, much of which can be used by religious educationalists in the way of supplementary material in Sunday School work. A study of the Christian Ideal of Family

Life as expounded by Horace Bushnell will well repay study. This whole issue is devoted to The Family. When will Religious Education in India rightly stress the importance of this part of its field?

THE INTERNATIONAL REVIEW OF MISSIONS for April, 1924 contains an article by Alexander McLeish of Ajmer on The Distribution of Christian Forces in India. He there states that there are in Indian missions today 40 Colleges, 243 High Schools, 280 Middle Schools, 162 Industrial Schools, 113 Boarding Schools, and 12,699 Primary Schools. The pupils number 536,283 of whom 3,4,060 are non-Christians. That is to say, we are educating 91,837 more non-Christians than Christians. Of the total Protestant Christian Community, 1 in 10.5 is under instruction. Children of school age should be at least 25 to 30 per cent. of the country; 10 per cent. therefore represents a distinct falling off. On the proportion of evangelistic to educational workers we find that 8 provinces have an excess of educational workers and 10 of evangelistic. The average for India is an excess of 25 per cent. in educational workers. However, the evangelistic features of all true educational work should be kept in mind.

An article on A Medieval Tournament in the March SCHOOL ARTS MAGAZINE would prove suggestive to teachers of Indian History.

The March TEACHERS' COLLEGE RECORD gives a detailed report of a study in the general and specific effects of Training in Reading. Professor Thorndike presents an interesting study of the disciplinary values of studies in the opinion of students.

The April AMERICAN MAGAZINE lists, on the authority of Prof. W. W. Charters of the University of Pittsburgh, the following personality factors as a means of self-rating and development:—

Ambition	Cheerfulness
Industriousness	Good Judgment
Persistence and Patience	Sensitiveness to criticism (as opposed to over-sensitiveness)
Dependability	Ability to size-up people
Forcefulness	Memory
Effectiveness of speech	Neatness
Self-confidence	Health Habits
Friendliness	Discrimination
Adaptability	Economy (of motion)
Tact	Capacity to delegate work

The discussion is valuable. Our education deals with the development of personality only in a haphazard way, if at all.

Half of these 6,194 persons joined the church below the age of 14 years, 4 months, and 22 days. This represents what is called the **MEDIAN** age. The median age for the respective denominations is as follows:

Methodist Episcopal	... 11 years, 9 months, 4 days
Congregational	... 15 " 10 " 14 "
Presbyterian	... 14 " 8 " 18 "
Baptist	... 14 " 1 " 28 "
Disciples	... 14 " 0 " 6 "

The following shows the age range of greatest frequency, and the peak or age at which the largest number of persons joined the church:

PERIOD OF GREATEST FREQUENCY			PEAK	
Methodist Episcopal	... 9—10 years	16—11 years		
Congregational	... 12—15 "	18—14 "		
Presbyterian	... 12—14 "	12—18 "		
Baptist	... 10—13 "	11—12 "		
Disciples	... 9—13 "	11—12 "		
All denominations	... 10—14 "	18—14 "		

Table Showing Age of Joining Church of 2,234 Persons of Methodist Episcopal Church from 29 States:—

Total number of churches reporting	...	80
Number reporting verifiable information	...	61
Total number of accessions reported	...	3,834
Number of verifiable cases	...	2,234
Number of verified cases—male	...	1,006
Number of verified cases—female	...	1,228

Age of Joining Church	No. of Persons	Per cent. of Total Number
5	9	0.40
6	21	0.94
7	48	2.15
8	97	4.35
9	131	5.82
10	225	10.10
11	214	9.59
12	195	8.74
13	186	8.32
14	159	6.98
15	101	4.48
16	88	3.93
17	78	3.48
18	52	2.32
19	36	1.61
20	29	1.29
21	17	0.72
22	32	1.43
23	20	0.89
24	22	0.98

Showing By Five-year Periods.
(Methodist Episcopal Church).

Age of Joining Church	No. of Persons	Per cent. of Total Number
5—9 inclusive	356	15.96
10—14	979	43.73
15—19	355	15.82
20—24	120	5.21
25—29	99	4.44
30—34	91	4.45
35—39	83	3.72
40—44	60	2.69
45—49	32	1.43
50—54	15	0.67
55—59	20	0.89
60—64	10	0.44
65—69	6	0.27
70—74	2	0.08
75—79	2	0.08
80—84	1	0.04
85—89	2	0.08
90—94	1	0.04

STATISTICAL MEASURES.

First Quartile...	... 10.90	10 years 10 months 24 days
Median	... 11.766	11 " 9 " 4 "
Third Quartile	... 19.597	19 " 7 " 4 "

"Interpreting these statistical measures, it is interesting to note that one-fourth of the accessions to the Methodist Episcopal Church reported in this survey are under the age of 10 years, 10 months and 24 days; one-fourth are over 19 years, 7 months, 4 days; 5 per cent. are between these two ages. Half of these 2,234 accessions were under the age 11 years, 9 months 4 days.

"Comparing these results with those obtained nearly twenty-five years ago, there is peculiar pertinency to Professor Athearn's assertion that 'by adopting educational methods the Methodist Church has pushed the modal point (of religious awakening) forward six years' ".—*Selected*.

THE VOCATIONAL EDUCATION Magazine gives us the following:—

PRINCIPLES OF LESSON PLANNING FOR CONTINUATION SCHOOL TEACHERS.

(This article in the substance of an address recently given by Prof. D. J. MacDonald, Ohio State University, before a group of continuation school teachers in Akron, Ohio.)

We did not want to take in any more than the upper third of the twelve-year old children. So we made the following somewhat arbitrary alterations in the age medians fixing the medians so that we should give plus deviations to about two-thirds of the ten and eleven-year old children and only to about one-third of the twelve and thirteen-year old children.

Age Group.	Median.	Corrected Median.
10	15.1	12
11	16.5	15
12	14.0	16
13	17.0	18
14	20.0	20
15	18.0	22

Of course these corrected medians can only be called such by courtesy, for such manipulation no longer makes it the middle point. They become merely the "Passing Mark"

TESTING THE TESTS.

The work of a test is not determined by mere guessing. There are certain internal evidences that may be investigated. In the absence of an external standard such as the school record these are at present our chief reliance. One test we apply to ascertain the validity of a test is the degree to which it approximates a "normal distribution". If we measured a large number of subjects for some common characteristic, say height or weight, we would find that the greater majority would group themselves close to the norm or median and at the extremes the numbers would taper off very sharply. If we plotted the results on a graph, representing the height in inches on the horizontal line and the number of subjects for each height on the vertical line and connected the points by a continuous line the result would be as shown below.

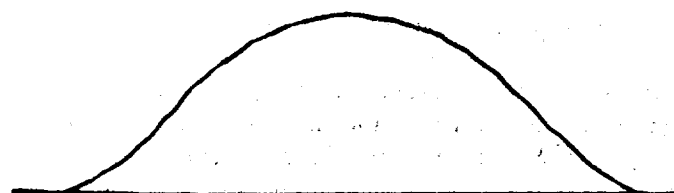


FIG.1., NORMAL DISTRIBUTION CURVE.

For such a definite trait as height in inches, if our number of cases is sufficiently large we can predict the curve beforehand. The height test is therefore a good test.

It is rather astonishing that this normal curve occurs with the regularity of a law of nature. We may pick a hundred leaves at random off a tree and measure their length and we shall find that we get the normal curve. We may throw dice a thousand times and count the spots and plotting the result we shall find again a normal curve. Now when we use a test such as those we have been describing and find a curve such as in Figure 2, we



FIG.2. ABNORMAL DISTRIBUTION CURVE.

know there is something wrong. It may be the test that is at fault, the examiner, or the group.

The Standard Deviation has already been described as one measure of the reliability of a test. If the S.D. is too large, it is most likely due to the presence of many cases at one or other of the extremes. Squaring these extreme deviations gives them greater weight than they would receive if we compute simply the Average Deviation.

Another measure of reliability is the Probable Error or Quartile Range. In the same way as we computed the middle point in the score ranks to get the median we may ascertain the quarter points both above and below the median. This gives us the fifty per cent. of scores nearest the average. These fifty per cent. of scores would on a normal curve be distributed over approximately equal distances above and below the median score. That is to say, if we were measuring height in inches of a large group and found the median score to be 60 inches and the first quartile score to be 55 inches, the third quartile score would be about 65 inches. If however, the third quartile fell at 62 inches our curve would be "skewed".

The Probable Error mentioned above is one-half the difference between the score value of the 75 percentile (third Quartile) and the score value of the 25 percentile (first Quartile). It means that one-half the scores will fall within the P. E. distance on both sides the median.

On a lesson plan form which is being very successfully used in one of Ohio's cities the following important statements are found:—

1. The teacher's aim is to challenge and inspire pupils to realize their own legitimate aims and to help them time these aims to fit both their needs and their capacities to realize them.
2. Plan each lesson so that it may be a logical step in the development of a series of lessons and, at the same time, a unit in itself without the "carry over" feature.
3. Summarize each lesson so that the salient points are "fixed".

The point of view expressed above, namely, that "the teacher's aim is to challenge and inspire pupils to realize their own legitimate aims and to help them "time these aims to fit both their needs and their capacities to realize them", is adequate in itself, if lived up to, to assure an excellent teaching corps. But when supplemented, as it is, by advice (1) to "plan each lesson so that it may be a logical step in the development of a series of lessons, and at the same time, a unit in itself without the "carry over" feature, and (2) to "summarize each lesson so that the salient points are "fixed", the assurance of a competent and progressive teaching corps is beyond question, provided these excellent principles are observed. For these principles are fundamental and more; they are all-embracing.

Lesson planning, as I attempt to point out in the following chart, is comparable in almost every detail to any other type of practical planning:—

<i>Necessary to the Preparation of a Building Plan.</i>	<i>Necessary to the Preparation of a Lesson Plan.</i>
1. Clear conception of the purpose, or purposes, for which the building is to be used i.e., whether a dwelling house, an office building or a factory building.	1. Clear conception of the objectives to be attained in the lesson, i.e., whether these are primarily attitude forming, skill developing, intelligence promoting, information acquiring, etc.
2. Adequate conception of the various parts or elements which go to make up the completed project, e.g., foundation, frame work, roofing, floors, stairway, etc.	2. Adequate conception of the various elements or parts of which a fully developed lesson consists, e.g., introduction or approach, material or subject-matter methods, devices, etc.

- | | |
|---|--|
| <p>3. A clear understanding of the contribution depended upon from each of these elements or parts, e.g., the carrying power of the foundation, walls, floors, stairways, fire escapes, etc.</p> <p>4. Well-defined ideas as to methods of carrying the work through to completion.*</p> <p>(a) Knowledge of how to get the most out of the different materials.</p> <p>(b) Knowledge of the necessary tools, equipment, tricks of trade, etc., and how to get maximum service out of them.</p> | <p>3. A clear understanding of the contribution which each of the elements or parts is expected to make, e.g., the subject-matter, approach, the devices of various sorts, etc.</p> <p>4. Well defined ideas as to methods of getting the lesson "across" in a satisfactory manner.*</p> <p>(a) Knowledge of the methods necessary to get the most out of both pupils and subject-matter.</p> <p>(b) Knowledge of the necessary devices and how to make effective use of them.</p> |
|---|--|

* This implies past, though not necessarily present, skill in building construction.

* This implies past, though necessarily present, skill in teaching.

By a clear conception of the objectives to be realized is meant fully-developed ideas regarding specific ends of the proposed lesson, expressed in terms of acquired information, skills, or intelligence; or modified attitudes and habits; of partially cultivated attributes, such as accuracy, resourcefulness, originality, etc., on the pupils' part. That is to say, the first thing to be decided is the exact service a lesson is expected to render. In truth, such a decision might well be made both by pupil and teacher entirely apart from the materials (subject-matter and method) to be used in attaining these ends. I might go even a step further and say that the selections of materials and methods for making the ends attainable should follow, and precede, the determination of these ends, even though this is contrary to the usual method of procedure.

I repeat that, in planning lessons, the teachers' objectives should be the first thing decided upon, the subject-matter and methods of making these objectives realizable, the second. This is far from saying, however, that these objectives should be chosen apart from the human material, the pupils, in whose interests the planning is done. For just as it is conceivable how objectives may be realised in building construction without giving due consideration to the nature of the various materials, such as concrete, brick, tile, stone, wood, etc., and the treatment

For further discussion of this subject, those interested will have to pursue the study in text-books on statistical methods. There is, however, one other measure we need to take up.

CORRELATION.

Correlation is the common method by which one test is compared with another. It would be exceedingly valuable if we had an absolute standard with which we could compare every test. The only substitute for such a standard is to compare a given test with as many others as possible. This can be done with considerable accuracy and the result expressed by a numerical co-efficient of definite significance. Thus if we compare each of the eight tests we have described with each one of the other seven and find a fair degree of correspondence in the ranking they assign to a given subject and find that this correspondence holds good for the majority we are justified in having considerable confidence in our tests. If in subsequent years we find the same correspondence between the test records and the school records of these children we shall have established the value of the tests. They may or they may not have measured that vague entity called "general intelligence" but they will have proved their validity as a basis of prediction. It is therefore of great utility that the degree of correspondence can be designated by a co-efficient which has a uniform significance. This co-efficient is called the Co-efficient of Correlation, usually symbolized by the letter 'r'. Its computation is a tedious though fairly simple process.

(1) List the names down the left hand margin of a double sheet of foolscap. In the columns two and three enter opposite each name the subject's scores in the two tests you wish to compare.

(2) In columns four and five enter each individual's deviation from the median score, plus if it is greater and minus if it is less than the median score. Designate column four as X and column five as Y.

(3) Multiply X for each individual, preserving the signs. A plus multiplied by a minus gives a minus product. Like signs by like give plus products. These had better be entered in separate columns, the minus products in column seven and the plus products in column eight.

(4) Find the algebraic sum of the XY's.

(5) Multiply the Standard Deviations of each of the two tests and multiply the product again by the number of individuals tested.

(6) Divide the result in step (4) by the product in step (5).

The result is the value of r and it will fall between minus one and plus one. If the final value of r is minus the correlation is inverse, meaning that as the subject goes up in one test he tends to go down in the other. If the value of r is plus, the correlation is positive, meaning that a high score in one test tends to imply a high score in the other. The degree of correlation positive or inverse, is indicated by the approximation of the co-efficient to unity. A co-efficient of zero indicates a total absence of correlation, meaning that the tests have no relation to each other. A co-efficient of less than .20 plus or minus would indicate little correlation. A co-efficient of more than .70 plus or minus would indicate a high degree of correlation. A correlation of .90 might be taken to be as nearly perfect as can be hoped for in measuring human qualities.

Suppose we measured ten people for height and weight and wished to find the degree of correspondence between these two tests. If the heaviest man were also the tallest man and the second in height were also second in weight and every man had the same rank and the same deviation from the median in both series of measurements we should have a positive correlation co-efficient of 1.00. If the exact opposites were the case and the tallest man was the lightest, the shortest man the heaviest, and every man bore exactly the opposite rank in the two tests we should have an inverse correlation of -1.00. An inverse correlation must not be interpreted as showing no relation. That is the significance to be attached only to co-efficients approximating zero. If for example, we wished to test the popular idea of "slow but sure" and gave a test for speed and another for accuracy in a certain mental function, and secured an inverse correlation the truth of the popular saying would be vindicated. As a matter of fact, this very test has been made many times and a very high positive correlation secured, indicating that the surest minds were also the quickest.