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"Is Nature Knowledge a Farce?"

There can only be two direct answers to a query of this kind — Yes! or No! — and the answer depends to a great extent on the person of whom it is asked; what might prove work or pleasure to one person, might be a farce to another, and very often ones character or life can be inferred from the answer given to such a question as forms the title of this lecture.

Since it appeared on the syllabus, I have been inundated with all manner of questions regarding how I was to treat the subject, some asked what I had to say in favour of "Nature Knowledge".

- others asked if I had anything to say against it, - and many had no hesitation in answering it without giving it any consideration - a plan pretty often adopted nowadays, because it dispenses with the trouble of thinking-out a problem.

It is wonderful how great a part prejudice has to do in arriving at answers to such questions. For example: - The parent who wishes the services of his or her children in the evening after home lessons are over; - protests against the addition of Nature Knowledge to the already too long list of subjects to be learned for the

following day, and points out carefully that the collecting of plants or animals and learning about them will in no wise benefit the children in their adult life of work & toil in the factory, office or workshop.

Other individuals have a railing passion against teachers, - one occasionally runs against persons of this kind - not that the teachers have done them any harm, but somehow a sort of antipathetic feeling grows in them after they leave school, and often increases as they grow up.

- "Good scholars love their teachers, bad ones hate them"

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perhaps after all it is merely some vestigial traces of their childhood which crop up from time to time,

The same feeling is often applied to students, and the very mention of "student" acts on some people as a "Red rag to a Bull". — My opinion is that the better that these persons know the teacher or the student, — the less will the existing friction become.

Well — to such persons as the above — of course Nature Knowledge is a farce, because as they say "the teachers know little or nothing about Natural History themselves, and have no interest in it, more than that which affects

the earning of their salary, therefore, how can one expect an interest in Nature to be developed in the children when taught under these conditions.

Such cases might be multiplied indefinitely, and would serve no useful purpose in this paper; so I shall proceed to discuss the various points for or against Nature Knowledge as taught in Schools — and perhaps some points may crop up, which had been allowed to pass unobserved by many of those present.

When a temperance orator denounces alcoholic liquors, it is not the liquor itself which he condemns, but its results
on

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on those who abuse it and themselves by drinking it.

It is the long train of cases, of poverty, misery, lunacy and crime which drink has caused, that the orator has in his mind when condemning alcohol, and he knows perfectly well that it is a very good & useful agent for many purposes when properly used.

So also with Nature Knowledge we must take into consideration all its results on those who have come under its influence — the good as well as the bad —

Perhaps, I may be pardoned if I deal almost.

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Exclusively with points referring to the Botanical section of Nature Knowledge; seeing that this is the section in which I am daily employed, and naturally, my chief interest is centered,

The term "Nature Knowledge" was the name given to the teaching of Natural History & Science in schools, and previously known as "Science", the teaching of which I believe our Honorary President Mr. Jas. C. Barnett was pioneer in the North of Scotland.

"Nature Study" is another name, given to the same subject & which will probably come to stay with us.

Nature Knowledge as a title did not suggest its full meaning so Nature Study has been adopted as being more explicit, although we find both terms used freely.

Nature Knowledge differs from ordinary or Technical knowledge, by the former being a system of drawing out of the student that which is already in him; while the latter is a system of cramming or trying to cram all sorts of information into ones memory.

The tendency of technical knowledge is to prevent the proper development of the powers of observing, reasoning, thinking and judging; for,

what has to be learned must be taken as fact, and often there is no means of verification.

Whereas in Nature Knowledge the information can be got fresh anyday and verified at almost any-time, and if any statement in a book is doubted, it can be proved by oneself, and instead of accepting anyones interpretation, if we can, if we wish observe, reason, think & form our own judgment.

These powers were in us in our early life, and if any of these are absent now it is through neglect.

It is a well know law that

if a member or faculty lies dormant or neglected it will in course of time become vestigial, if not altogether disappear.

The cultivation therefore of these four faculties would be of the utmost importance to us as individuals, as well as a race, or nation.

Well! let us then examine the ideas underlying the introduction of Nature Knowledge into our Public Schools.

In my opinion, we cannot say too much in its favour for, as the words imply the acquisition of a knowledge of Nature's children, & of Nature's laws, we may be

sure the lesson will not be without its permanent effects for good in our lives; even though it is only successful in driving the conceit out of us, and this it is pretty sure to do by letting us see how small & puny man becomes in his own eyes, when he compares his works with the wonders he sees in commonest objects of our everyday life.

For all nature is full of beauty and wonders; and by their study we can, as Pope tells us "look through nature up to Nature's God."

But I think no true Naturalist would express

himself in these words, for he sees God in Nature, not separated from it: in fact he sees that Nature is but another word for God; therefore his mind is not led from Nature up to Nature's God, but is led by the study of the outward objects of Nature to Nature itself; whether we study these objects by the naked eye or by the microscope.

For, by the revelations which the microscope gives us of the inner life of the minutest plants; the boldest researches of Science stand checked.

What is above, and beyond these proteoplasmic movements? We stand

on the verge of the unknown,
 — even when beholding the
 living changes taking place
 within the transparent wall
 of any one-celled plant.

For "what if all of animated nature
 Be but organic harps, divinely
 framed
 And trembling into thought, as o'er
 them sweeps
 Plastic and vast, one
 universal breeze;
 At once the Soul of each, and
 God of all."
 (Coleridge)?

I have little hesitation in
 saying that Nature Knowledge
 should be of much more
 importance to us than some

of the subjects taught in Schools at the present day which occupy far too much time, besides being uninteresting to both pupil and teacher, the memory is burdened to the extent that it is unable to retain the more useful information.

What for instance is the use of children cramming up their heads with the history & lists of incidents and dates which happened hundreds of years ago!?

It makes history a dry uninteresting toil; whereas, if left till after school days, adults could turn to it with a greater interest than is done

today, because there would be fewer to say they had their enthusiasm for history damped.

I fail to see that history is of any material use to a lad serving his apprenticeship to a trade, or in fact to any of that class of people commonly designated as "The Masses."

Of course I do not under-rate history — it is good and useful enough when kept in its place, but I am convinced that the elementary-school room is not a place for it — at least under the present system of teaching it.

I think sufficient history of a more general & less detailed

nature might be profitably incorporated in the reading lesson.

With encyclopaedias at their present state of perfection and libraries so freely scattered over our country, we have ample opportunities for pursuing this branch of education when thought desirable.

Regarding Geography - I think it would be none the worse of an overhaul as long as we're at it.

The parrot method of learning and committing to memory whole lists of towns, rivers mountains and lakes of various countries; runs away with a

disproportionate amount of time, but the chief evil in the teaching of this subject is the common practice of map-drawing, it takes far too much time and trouble for all the return that is got; and certainly is not worth it - surely there are other and better ways of aiding or practicing freehand, than drawing maps.

Now - with these two subjects thoroughly overhauled, much more time would be available for more important subjects, of which, at present, there is only time to gain a "smattering".

More time could be spent on

on Reading, Elocution, Writing, Arithmetic, and for boys Manual training while the girls would be occupied with their sewing and domestic economy, this latter is another subject requiring a systematic overhaul too; but as it has no direct bearing on my subject I cannot afford time to deal with it.

School life should not be so much of a cram as it has degenerated into. More interesting & practical work ought to be introduced.

The advantage of this is recognised by our modern lecturers, both popular &

scientific - when we see the almost invariable use of lantern or apparatus as a means of illustration.

If this is so with adults; why not with children?

I have heard it said more than once; that town's children can not be trained to care for nature knowledge, because the various inducements and amusements afforded in town life, prove a greater attraction.

It is one of the most convincing facts in support of Nature Knowledge, and one which has come under my own observation, that when Natural History is taught properly

town children are eager to catch every word you say, and watch every movement you make: You have only to observe the expression of wonder on the faces of the children as they gaze with open eyes and mouth, and crush closer round you as you relate some wonderful mechanism possessed by some plant; you have only to listen & hear how eager some are to repeat your story to those who have not been so near to you as the others; and you would be convinced that somehow or other Nature Knowledge seemed to give

an intelligent interest and pleasure to the pupils, which any or all of the other subjects could not do.

The teaching of the subject becomes a pleasure and the teacher heaves a sigh of satisfaction when he hears his own story, almost word for word repeated over again by one who only a short time ago heard it for the first time. But, alas! this is not always the experience of teachers; and the reason is not difficult to find, for no teacher need expect to hold his pupils spell-bound unless he himself has acquired a great

interest in what he has to teach and particularly with regard to natural History subjects.

In the interests of Natural History and Science I would plead that those teachers who are not interested in Natural Science may not be entrusted to give instruction in it; for rather leave Nature Knowledge severely alone than create a dislike to it in the minds of the children. It is to the children of the present day that we look for carrying on in the future, the work which we as a Society have begun, and if the interest is aroused in the child and

gradually "Fanned & Fed"
we shall find our future
members possessed with a
glowing enthusiasm in
Natural History & our suc-
ceeding generations at least
none the worse for their
training. Whereas, if
nature is misrepresented
by disinterested teachers
our future generations will
acquire a dislike to
natural history and the
result be that the good work
we start now will die out
with the present generation,
and Nature Knowledge
as taught in Schools proved
to be a Farce.

I believe that Teachers

would be glad to take up Nature Study with more zeal if only they had sufficient time; but they find that in the midst of their study of innumerable subjects — which the Dept of Education requires teachers to pass before being fully qualified — little time is found to take it up in anything like a systematic way, and they are glad to collect sufficient "scraps" from all sources to enable them to give the required lesson, and be done with it. I know this from the many appeals I have received from teachers anxious to

get sufficient information on some particular subject to constitute a lesson.

One would naturally expect then, that the fully qualified teachers would take it up properly, but evidently many of these wou^{ld} bother themselves much about it; for several reasons, the chief one being that Nature Knowledge is a section seldom examined by the Inspectors.

The headmaster of a school not 100 miles from here, informed me that his teaching of Nature Knowledge has been inspected only once in the past six years, and naturally asks what use there is treating this section if the work is not examined.

This has been attributed to the want of training on the part of the Inspectors, some of whom may be specialists in one particular subject, but know little or practically nothing of the Subjects included under Nature study, consequently being incapable of conscientiously inspecting this Department of their work.

Don't you think we have reached a point where we might suggest a remedy for the existing condition of Nature Study in Schools.?

The Inspectors would first require a thorough training in Nature Study; and to this I expect they would protest

on the grounds that they would thus be expected to become travelling encyclopaedias, which, of course, they consider impossible; but unfortunately do not consider it impossible for the teachers.

If however the Inspectors made it a point to examine the work in Nature Knowledge it would create a great desire among the teachers for knowledge of all kinds in Natural History, the teachers would require a course of lessons in it before being qualified to teach it.

My opinion is that every teacher ought to have a thorough training in Nature

Study, whoever he or she has it to teach or not, the training would be of as much use to them as to the children.

I am strongly opposed to those persons who have no desire to learn more than is absolutely necessary to earn a livelihood, and who are quite content to while away their lives in almost total ignorance of their surroundings and the laws under which they live. For, one of the first things a naturalist sees is that there are laws under which both plant & animal must exist, these laws apply to us; if we

learn them and try to fit & shape our lives accordingly so much the better for ourselves; if we choose the easier course and neglect this, - and ignorantly break some of these laws we cannot plead ignorance: - the punishment will surely come in some form or other - we see it nearly everyday, it may be by the visitation of some of the numerous diseases or illnesses, or, by seeing that our comrades find life easier, and gain much more pleasure out of it than we who have a constant struggle to gain

but an ordinary existence, or, it may be that our neighbour succeeds in everything he puts his hand to, whereas every new venture we attempt, courts disaster and ultimate failure.

It is therefore essential that a teacher must know how to live or be, not merely unfit for the profession which he has taken up; but a source of great danger to all he comes in contact with.

The teacher must look on the work as one of great responsibility — not the mere discipline of a class — but a responsibility

which involves great results
— think of the influences
the teacher has over the
children, influences which
no other person has, and
of the possibilities.

It rests with the teacher
to decide whether these
influences are to be for
Good or Bad, and whether
the pupils are to grow up
to Bless or Hate them.

I have referred to a
course of training in Nature
Knowledge for teachers,
regarding this I might be
allowed to say a few words as
one competent to speak on this
point.

In the first place, it must

not be supposed that anyone who has attended the course of nature study at the University here is qualified to teach Nature Knowledge in Schools, far from it, indeed if one were to depend entirely on the little that is given here as a basis for lessons it would be better that the teaching of Nature Knowledge be given up altogether; for — as the course only consists of 20 hours lectures & 20 hrs practical work in each subject one can readily understand how little it is possible to cram in during that time, and as a rule teachers learn very little more than is given them

until a lesson on some particular subject has to be given, and that particular subject is got up for the occasion.

This 40 hours instruction is merely given for, and must not be taken for more than, an introduction of the teacher to that branch of Natural History — merely a basis or foundation on which the teacher may commence to build up a store of Nature Knowledge, ^{for future use} and the sooner this building up is begun the better, for the longer the foundation is left uncovered it becomes more & more unfit for any

good purpose and may in the end have to be made over again, and for a person to suppose that this course qualified to teach Nature Knowledge is as great a deception as can well be imagined.

The students attending this course are not really taught Nature study, because there is no time for that, they have only time to take up a few examples to illustrate the method in which to study nature in order to gain knowledge from the objects themselves.

They get, as it were, their first lessons on observation

and reasoning; and, to teach nature knowledge as it ought to be, the teacher must give the children what he really has learned himself from the specimen and what he really knows — not what somebody has told him, or what he has read in some book; let him verify first what the book says and become familiar with the specimen, then tell the children about it — and I can guarantee they will listen and be interested; while the lesson itself would be a pleasure to both scholar and teacher.

It has been suggested more than once, that the work of teaching Nature Study should be left to M.A.'s & B.Sc.'s and such like, who have studied the various subjects to a greater extent than the ordinary trained lady-teachers.

I cannot recommend this method, because what is really wanted is not an advanced lecture on the subject, but some very elementary work, put plainly, and simply, & the ordinary trained lady teacher I think is better fitted for this work than the M.A. or B.Sc. from the University with his mind crammed with hard & dry facts & laws, many of

which he has but a hazy notion of, and moreover has not studied the art of imparting to children an elementary knowledge of what he does know.

This arrangement would also tend to encourage a common practice nowadays in Educational "Bodies" to dismiss capable and educated men to be replaced by almost anyone with a few letters after his name, more as an ornament than a substitute; and not much of an ornament, for very often the M.A. or B.Sc. fills the place like an A.S.S.

What I wish here to emphasise is that the mere presence or absence of a University Degree

is not sufficient to gauge one's knowledge or capabilities, for it is well known that there are persons who are able to cram an enormous amount of information into them before an exam. and forget practically all in a fortnight and even less.

The manner in which one has to "grind and cram" during this University career, makes it more difficult for him to realise and appreciate the small difficulties which present themselves to the children during an elementary lesson, and I think also that young men are awkward in their dealings with little children such as occupy the lower standards.

while lady teachers seem to be more sympathetic or patient in their dealings with the children - although I admit there are exceptions to both of these cases. - still I think that if lady teachers would acquire a good sound general knowledge of the various branches of Natural History, they should find no difficulty in arousing an intelligent interest among the children, and this is really all we want.

I have spoken of the specimens - and I confess it's easier to speak of them than to give a "feasable" or workable way of procuring them - but the

method at present adopted is not a satisfactory one & cannot be recommended.

Before giving you an example of the working of the present system, allow me to draw your attention to the fact that very few of the schools in town possess gardens, and that in such gardens as do exist very few plants are grown for the purpose of children studying nature; and it's unnecessary for me to remind you that unfortunately the children's parents do not all possess gardens.

Let us now suppose that the teacher is to give a lesson

on the crocus — which makes a splendid subject for illustrating several of Nature's wonderful devices — the children are told or asked to provide themselves with a specimen each, if possible.

Where are they to get a crocus? they have no garden! — some of parents have enough to do at this season to get ends to meet, and cannot be expected now and again to give even a small sum to buy specimens, and even though willing to do this — some difficulty might arise as to where the crocuses were to be got.

Such children are poor

informed of some garden where they are plentiful, and consequently the owners of small garden plots find that raids are made on their gardens in the spring just as they are beginning to look gay after the bare, cold, dreary winter (ask the owner of the garden what he thinks of Nature knowledge and he won't hesitate to give you an answer.)

I have myself seen groups of children along the front of a garden;—one in over, handing out specimens to the others, but a sudden cry of "Here's the Marnie" sends them all away like a flock

of sparrows; - to continue their depredations on the next garden, for after seeing that the alarm was a false one, each began to compare specimens & those which had no "roots" (as they called them) tried to remedy this defect in the next garden, several flowers being pulled before one came with the coveted root.

On nearing the School I saw children coming from all directions with specimens of brocuses, and most had roots - and the first question I asked myself was "Where did all these other Brocuses come from?" Since that time, however, I have seen

this whole sale stealing of leaves and flowers, over and over again, and I'm sure that no one living in the suburbs, and who keeps his eyes open, could have failed to see examples of this system of procuring specimens.

Now, I consider that anything which — under the idea of doing good — tends to suggest or encourage dishonesty, especially in children, — must be a farce, if not in the motives — then in the application of the principals.

This question of procuring specimens has always being one of the objections brought up by teachers as an excuse

for not taking up Nature
Knowledge on a larger scale.

I can quite easily appreciate
the difficulty, perhaps better
than anyone else in the North
as my past ten or twelve
years' experience has afford-
ed me ample opportunities
for proving; imagine having
to get 160 selected specimens
each of 4 or 5 different plants,
perhaps only shoots, but
each shoot to show certain
structures.

Even though one has plenty
^{time} he must know exactly where
to go for the particular species
in sufficient abundance.

But when one's time is
limited, it causes not a little

anxiety to see all the specimens safely on their way to town before night-fall.

It must therefore be a great relief and a saving of time & trouble to the teacher, when the children procure their own specimens for themselves.

I think this problem might easily be solved if taken up in earnest.

In the great majority of schools in Aberdeen I find it is possible to use a small piece of the ground as a garden, where there is not already something of this kind; in several of the schools there is ample space to raise

enough plants to supply more than its own needs, but if possible I would favour each school with its own garden.

There is absolutely no necessity to have a large garden, but of course where space is available the larger the better, but a small plot properly laid out, and an annual outlay of a shilling or two is all that is required.

In order to ascertain how much a small garden of about 200 sq. feet, could grow successfully; I have experimented during the past three years.

The first year I grew thirteen different kinds of vegetables,

The second year I grew 175 different kinds and varieties of flowering plants, and had flowers nearly all the year round, while this year I have a little over 200 different kinds, and at different periods have been rewarded by a "plaze" of blooms and colours

I admit there is some difficulty in growing this number successfully on this small space, but for a school garden fewer varieties would suffice; and even then, care must be taken to secure a succession of bloom, for where one plant dies down another should be coming up to fill

its place.

In the spring I have hundreds of flowers of Crocuses, Primroses, Arabis & later on Violas, Pansies and Marguerites, while sweet peas, "nasturtiums" shirley-poppies and cornflowers etc are available for the greater part of the summer; the chrysanthemums are newly past after rewarding me with thousands of blooms and I see a number of the primroses beginning to remind me that spring is not far off.

Such a garden with the addition of a few plants of Buttercups would serve very

well, all the purposes of a school garden, yielding many supplies during a summer, not only for one class but for several.

For example if 100 sweet peas be pulled today another 100 will appear in a day or two, and so with most plants; indeed, the more flowers pulled, the more they will flower, as by this means the plants are not permitted to waste their substance in producing seeds.

Most of the above named plants, if not perennial will produce their own seeds, which may either be saved and sown in the spring

or merely left to sow themselves and the young plants lifted when they are sufficiently advanced to bear transplanting - as regards the necessary attention, I have no doubt but most of the janitors would welcome this means of gaining a little recreative work during the fine days.

Such a garden would also be the means of attracting insects, which might profitably be employed to illustrate lessons on zoology - Butterflies and moths would be frequent & welcome visitors, these could be captured & lessons given on them, while the

caterpillars which would be found eating the leaves of the plants, could be reared and fed in a glass jar having a piece of muslin held over it by an elastic band; the metamorphoses of the butterfly could thus be illustrated not merely from diagram and book but from Nature itself.

I consider the above scheme quite reasonable, economical, & certainly much more satisfactory than the existing arrangement, or want of arrangement, which Aberdeen is content to call Nature Study.

The only alternative I can see

for the School Board to adopt if they wish to improve matters, would be to come to some arrangement with the Botanic Gardens to supply specimens; — one of the scholars being sent over to get them on producing a requisition from the Head-master of the School.

If the school board does not look after the proper treatment of Nature Knowledge, I think we as a Society, in the interests of Natural History & Science ought to do our level best to make up for their deficiency.

I cannot conclude my lecture without referring to that admirable institution The Abdu Horticulture Society

in their efforts to encourage Nature Study among children.

The placing of various prizes to be competed for with collections of pressed plants & leaves, must be an inducement for some to take up this fascinating hobby.

As one who was asked to judge at this years show, I must say, that, had I undertaken the work, the results would probably have been different, and the prizes, I believe, allotted to more deserving competitors; although I think that one judge is incapable of doing justice to all the collections.

The Horticultural Society

I think ought to make perfectly clear that the exhibits must be collected, pressed & dried by the competitors themselves, and that collections made by adults are not allowed to compete with those done by children. I think that is only fair, but I feel certain there was work exhibited that did not represent the work of the person in whose name it was entered, yet they gained prizes.

It is unfair for any adult to compete on the same lines as the juveniles, even though the collection is entered in a juveniles name.

It tends to make the competition unpopular, as it prevents the best collection, made by a juvenile, gaining its well-deserved prize-money, and every competitor should have a declaration to sign, stating that the specimens were collected, pressed, & mounted by himself or herself as the case maybe, and that the specimens have not previously been exhibited at the show.

In order to check their reappearance I would have the society to stamp those sheets which gain prizes, as I understand that flower shows are not altogether free from deceptive tricks in order

to gain a prize, and it is only those tricks which have been found out that are exposed, & often, only experts can detect the tricks.

I wonder how many tricks have been successful in escaping the notice of the judges.

If the Horticultural society would make plain, what points are to be taken into consideration in judging the collections of pressed plants, it would be a guide and aid to both competitor and judge.

It seems hard to see a first prize going to some person who has exhibited some 2 or 3 dog plants, because they are tastefully mounted, while

another person gains perhaps seventh prize for a collection of from 80-100 specimens almost as well pressed and mounted, but owing to his having so many, he has not the same room to display them.

Surely the latter shows more work & trouble than the former, there are more plants to collect, and lay out before drying, while the work of mounting a large number of specimens on a card of given size, is certainly greater than mounting a few.

It would therefore be of interest to know whether the prize depends on the mounting

of the specimens or if it is for the best collection.

Although I point out this matter regarding the show, I still commend the Horticultural Society for their interest in the welfare of the children; for this, together with improved teaching of Nature Study in schools, would tend to lead the children more to the fields, moors or woods, with a desire to observe for themselves, and read from Nature, things, which to many an adult-mind lie hidden.

This tendency to draw them out of the town would surely be health to their body, and healthy exercise for their minds.

instead of the various forms of mischief in which they are often occupied, when playing about in town.

For those who are unfortunately too far from the fields and woods, I think the various public parks would prove an acceptable substitute, and I might suggest that the gardeners in these might cater a little for the school-children by growing some clumps of showy ^{"flowers"} & placing "tallies" bearing both Latin and English names on them.

Well then I think we have examined, and dealt with most of the aspects of Nature Knowledge, not only

as it is taught in schools, but as seen from various stand-points.

This has led us to seek into the subject and enquire where the weak points are & their causes, and I trust that the discussion of them may prove profitable to the study of Nature.

I also trust that each of our members may take up this subject in earnest, and do all they can to further the spread of Natural Hist. and Science amongst the young as well as the older people.

I feel that we are only doing our duty if we come to the

rescue, and assist the Schools to improve matters by placing our services at their disposal, and I must say, it is no credit to the teaching profession of Aberdeen to find that out of the teaching Staff of Aberdeen, numbering about 541 Certificated teachers and 150 Pupil teachers; a total of over 720 only 21 take advantage of them.

But I sincerely hope that the benefits gained by the "faithful few" will be sufficient to warrant their recommendation of our work, and its relation to theirs; to those teachers who have not yet associated their names with ours on the list of members.

Summing up then —

On Saturday 2/12/05 the following was given to me at Aberdeen School Board Offices Union Ter, as the latest returns for Teachers in Aberdeen.

	CT.	PT.		CT.	PT.
Ashley	21	- 6	St Paul St	20	- 8
Broomhill	19	- 8	St Johns	5	- 3
Causewayrds	30	- 8	Skene Sq.	28	- 10
Central	32	- 0	Skene St	19	- 4
Commerce St	12	- 4	Lorry	15	- 4
Ferryhill	24	- 4	Walker Rd	29	- 8
Frederick St	17	- 4	Westfield	10	- 4
Hanover	18	- 4	York St	9	- 4
Holburn	20	- 6	Woodside	28	- 8
Kingst	30	- 8	Grammar	25	- 0
Kittyb ^{ks}	18	- 8	High	24	- 0.
Marquell	10	- 4		541	- 150
Middle	20	- 8	Total of	421	
Mile End	22	- 4			
Old Abelu	18	- 4			
Porthill	10	- 4			
Rosemount	20	- 8			
Ruthreston	5	- 1			
St Clement	13	- 4			

My answer to the Query
is :-

1st That Nature Knowledge or
Nature Study - which - ever you
choose to call it - is not a
Farce

2nd That it is a useful agent
when properly applied. Being
profitable for the body
& elevating for the mind &
of great use in the training
of our intellectual powers.

3rd That what is taught in
majority of schools under
the name of Nature Know-
-ledge or Nature Study is
a Farce, and the sooner
steps are taken to put it on
a better footing, and have it
taught in earnest; the better

it will be for all concerned.

I do not see in Aberdeen any institution which is better fitted to occupy the first place as an educative body, - taking the lead in supplying information on Nature to suit the tastes of all; - than the Aberdeen Working Men's Natural History & Scientific Soc.

I do not say this because I am secretary of the society, but because I believe from what I have seen myself, and from the testimony of members, together with the opinions of outsiders and of the press, that we do maintain this position, and it's because the Society

occupies this position, that
I am proud of the Honour,
of filling the Secretaryship

In conclusion I only wish to add
one verse handed down from the
16th or 17th century (B. 1688, D. 1744) written
by Alex Pope in his Poem on
Animated Nature. It contains
practically the whole of Nature
Knowledge in a nutshell & the
last verse runs: ~~thus~~

"Thus, then, to man the voice of Nature speak—
Go, from the creatures thy instructions take:
Learn from the birds what food the thickets yield;
Learn from the beast the physic of the field;
Thy acts of building from the bee receive;
Learn from the mole to plough, the worm to weave;
Learn of the little nautilus to sail,
Spread the thin oar, and catch the driving gale.

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"Here, too, all forms of Social union find,
And hence let reason, late, instruct mankind,
Here subterranean works and cities see,
Their town aërial on the waving tree,
Learn each small people's genius, policies
The ant's republic, and the realm of bees;
How those in common all their wealth bestow
And anarchy without confusion know;
And these, for ever, though a monarch reign,
Their separate cells and properties maintain,

J. Davidson
Dec 1905