

the Intermediate the most ~~long~~
literature are the Ancient Studies
and so it comes to pass that in
the Universities afterwards there are
scarcely any left who are able
or willing to devote themselves seriously
to scientific work of any kind,
even if the opportunities lie in their
way. I think that everyone
interested in science is also
anxious to see the influence of
scientific ideas spread through
~~that~~ the masses ~~in~~ taking up the
^{Science} study in the University and therefore
at school increased. But in
trying to bring about what we
would so much wish to see

Ravenne
Novare Road
Bray
Co Wicklow

15/76

July 31st 1892

My dear Dr. Foxwell

You will be glad, I have
no doubt, dear that the Com-
mittee of the Royal Society to
which my paper on "Change of
Absorption & fluorescence" was referred
have recommended it for pub-
lication in the "Philosophical Mag."
It has come as a surprise to
me, as I was under the impression
it would have got into the Proceed.
The apparatus for trying fluorescence in
a magnetic field is not quite
ready yet and I am busying myself

About the attitude of the Intermediates
people towards Natural Philosophy
and are making violent efforts
to secure that, in consequence of the
new system which came into
effect last year, the marks allo-
wed with subject may be
raised as - see costs. 15/76

There have been only 610 Candidates
in Natural Philosophy this year.

Last year it was practically about
the same 630, as well as formerly.
The subject had been
neglected for a considerable time
past, but since the new rule came
into existence, by which the marking
marks were reduced, those subjects
which counted least were of course
almost altogether neglected and Natural

Philosophy, I am sorry to say, was
one of those.

I am anxious to see this evil
redressed, not because I am
an examiner, for I shall probably
not be on again for some years
but because I can see very well
that the neglect of scientific studies
at school means their neglect
ever afterwards.

If an intelligent boy takes to any subject
at school and is successful
he will continue to take an
interest in that line of study. Many
men in College had perhaps a
restless life; whereas if he is
discouraged the reverse will take
place. It so happens that in

(2) 15/76

whom we have unhappily been placed; with the hope that at some future time they may fully realize the extent of their iniquities and come for them in sackcloth and ashes!

I am thinking of presenting to the Board a gold medal annually for three years, which may be competed for in one of the grades. I am sorry

I can't offer to give more than one every year; ~~but~~ - but it may be hoped that at some future time others may be moved by the same spirit and do likewise

we are out with violent opposition due to ignorance, prejudice and selfishness.

You know this perhaps better than anybody else in Ireland and that is why it is next to bring these evils once more within your reach, with the hope that they may be even more trampled upon and perhaps ultimately wiped away.

The Board is a difficult body to agree with, I have little doubt; and though composed of men ^{who} in some respects, though in some respects only, may be said to be highly educated; it seems to have but little

desire for the study of science,
~~the commissioners~~,
they have probably neglected it
themselves and in this respect
they are as difficult to argue with
upon the subject as wholly un-
educated people would be about
the merits of education of any kind.
We have to put up with the same
difficulties and perhaps to make
make the same sacrifices that
pioneers in other fields are obliged
to suffer.

15/76

There are people who would
think nothing of giving 20 guineas
for missions to spread the light in
China where there are so many
heathens never born, educated

or Academic claims, the cul-
minations of truth or of the search-
ing. At any rate they behave
as if they were so, and if they
were asked to subscribe five shillings
towards the encouragement of ^{Scientific studies}
in "Darkest Ireland" would turn
their backs to you and say they
couldn't afford it - or that they
didn't think it was necessary.

I see no way for those who ham-
per the progress of science at least;
but to point the ~~the~~ way by good
example to these miserable cowards
of Medieval learning, these
barbarians of Modern times amongst

Cast into a ~~distorted~~
shape from which it can never more
depart.

I don't identify Religion with Bigotry
and Conquerors & I don't imply
that religious instincts should be
ignored, but - on the contrary that
the Scientific instincts - often religious
^{may} ones / should be developed side
by side. That if the best instincts
be not developed in early life they
become lost for ever. And that
is why I think that the most
important time of life in scientific
education is boyhood, the time
when boys are supposed to be preparing
for the intermediate, when the proper
attitude of mind may be more
easily acquired and the mind

(3)

that the three grades may profit
equally by the experiment.
I propose to give them on the
condition that the marks allo-
cated to Natural Philosophy be
revised.

15/76

It is simply ridiculous when
it is said that the marks at present
are as follows.

English 1000, Latin & Greek
2400. Mathematics 1900.
French, German 900 each,
Italian & Spanish 200 each.
Natural Philosophy
& Chemistry only 500 each.

There is another point worthy
of particular attention, and that
is the way that physics seems to be

taught - in schools, in that cut-and-dry fashion, the system beloved of prudish dotards who call themselves teachers but who are nearly the most serious obstacles to education, those who think little of crammering unfortunate students & perhaps spoiling them for ever for the sake of result-fus.

It has often occurred to me that scientific men ought as a body to guard over the scientific instincts of children as religious men know how to guard the religious.

Cardinal Wiseman once said "give me the children of England & I will make England Catholic in twenty-

years" It would be of more importance if some man of science were to say "give me the children of Ireland and in twenty years God I will make these scientific men ~~atheists~~, clear headed, and unprejudiced beings, I will wipe away their bigotry; they will love one another as true Christians & scientific men. and I will remove for ever that barrier that separates the North from the South" 15/76

The willingness to listen to everybody, the spirit of inquiry, Curiosity - are amongst the scientific instincts of a child, which unfortunately few men retain, for it rapidly dies away if not properly watched over & encouraged & the mind gets

profile - by the marks being raised.

Mr. Muller thinks that as the Intermediate Board is my Act - an examining body they could not officially at least undertake to offer awards for merit shown by either of these two Arts suggested. But I have only communicated with him privately about the matter & I have not yet had any dealing with the Board upon the matter.

though of course we are all friendly in this frame of mind. Said something in my report that may serve to impress upon people the viciousness of the present system. Its supporters will of course say that

(4) may be made better an intelligent interest in everything that comes before it; when it tends of itself down in the scientific groove and all the faculties of observation are at their best. 15/76

It has been suggested to me that the only way of getting over this difficulty is to do away with the Intermediate altogether by the substitution of a system of inspection. This though undoubtedly the best plan ideally can be brought about only by the method of ~~the~~ ^{an} Agreement which ~~is~~ as I have always said has not little influence when ~~the~~ obstinacy & stupidity prevail. If Latin & Greek Mathematics can

15/76

be taught satisfactorily by the present system, but Natural Philosophy not so much the worse for Natural Philosophy. ~~We assess~~ those who are satisfied with the system ~~would~~ ~~had~~ will not pull down the edifice which they built up & by which they have succeeded to more or less so much.

It is a pity that scientific men are not better represented in Parliament, but that of course is their own fault.

I think on the whole it would be better if the medals were awarded (in order to direct the attention of candidates for the exam) not for the highest marks at the exam

whomsoever alone, but to ~~the~~ gives most evidence of originality - either by some ingenious invention of any kind or by an original essay or by some other means of testing that the candidate is not a phonograph in human shape. It would be desirable I think that he should obtain respectable honours marks at the examination to secure that he had not neglected his book work. Of course all these miserable little schools about the country will not be able to train students for this, & only places like the Academic School, Belfast, & Clongowes Wood College & such places would deserve any share of these medals; but then the small schools will

(5)

15/76

I have had little experience in
teaching and that at present I
am not actively engaged in it.

To which I could only reply that
neither did Herbert Spencer, nor
John Stuart Mill, nor Cardinal
Niemeyer ever teach, but they
had the experience of all those
who taught them and of all
those who thought before them
to form their opinions upon, and
did not rely upon individual
~~experience~~
~~experience~~ even of a lifetime, & as
those who doctor their pupils as
old women do ^a this grandchild
with medicine ~~and~~ ^{the say} that they are
more qualified to speak than young
physicians ^{they taught} who have the experience of centuries.

My impression is now strong
as yours of men ~~were~~ to you
concerning men ~~are~~ & of &

$$mp \left[\frac{f}{x-q} \right] = mp f - Tp \frac{f}{x-p}$$

$$mp \left[\frac{f}{x} \right] + mp (mf) = mp \frac{f}{x} + \frac{mf}{T(p)} :$$

$$\cancel{(mf)} + mf + \cancel{\left(\frac{mf}{T(p)} \right)} = \frac{1}{q}$$

$$mp \frac{1}{q} = mp x + Tp \cdot \cancel{\frac{1}{p}} \\ + Dp$$

to pride them, are inclined to do.

It is enough to go about collecting ideas, sketching notes, to form opinion, to find out where there is really ^{there is} ~~such~~ play. ^{But} ~~that~~ they will say that I am only a young man and that I am unqualified ^{to} ~~and~~ "I shall only ^{have to} content myself by wishing that I may be one of those whose follies earn with this youth & not ~~of~~ that number who are obstinate & ignorant in spite of experience."

I am anxious to profit by the experience of those who I have reason to think are in earnest, who have studied the whole question more deeply

15/76

than I could possibly ^{have} attempted, the more ^{success} ~~success~~ than myself, and who have lost whatever preoccupation & narrow-mindedness ~~that~~ I may still possess, and who have been ~~but~~ active pioneers in everything that concerns science & therefore come to you for your advice, for you can surely look at these things from a more elevated stand-point than my inexperience, my immaturity, my failures will permit me to reach.

I find I have become eloquent & if I were copying out this letter I would try to divert it of its ridiculous ~~simplistic~~ ~~ridiculous~~ rhetoric

yours sincerely
John Brereton

P.S. My name will of course not be associated with the ~~articles~~ which will be given privately to the Board.