

The Murder Machine Revisited

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(This is a paper delivered at a HTAI meeting by Mr O Conaill, of the Department of Education. The opinions expressed here are those of the author. They need not necessarily express or be in accord with the policy of the Department of Education)

Let's start with a simple proposition and see where it leads us. The main reason why pupils come to our schools is to learn. Education is much too metaphysical a concept to deal with; it takes place all day, every day and not merely in the 12 - per cent of their time that pupils spend at school over 13 to 14 years. What we are talking about is schooling. The school is a specialist institution within the education process. It is here contended, in what may appear to you to be the banality of the year, that the principal function of that particular institution is that the pupils learn.

A certain amount of coming-to-school relates to using it as a custodial service. It is an instrument also of socialisation, acculturation in an anthropological sense. Some people set great store by schools for turning out good people a major project indeed! In practice schools tend to approach the moral aim indirectly. Schools organise themselves to teach subjects, lots and lots of subjects, in the general belief, perhaps a naive belief, that if pupils are informed enough, understand enough, able to reason enough and have such attitudes as intellectual curiosity, honesty and so on, that they will somehow also be good.

There are a few who suggest that schools are the mechanism for selecting the elite to lead the show and at the same time, with an economy of effort wondrous to behold, train the followers to be followers. Such general notions are at such a level of generality and are maybe so tendentious that they lead to a certain degree of incomprehensibility and constipation in action. Adopting any one such macro-view, no doubt, influences that equally vague entity - the "ethos" of the school.

This commentator finds them somewhat mind-boggling - not quite as mind-boggling perhaps as the "general aim of education" which adorn all the syllabus booklets for the Junior Certificate, which has defied all his efforts at analysis. Education is to contribute to the development of all aspects of an individual - "all" is a small papoose of a word with heapum big mewing - "including", it goes on,

“aesthetic

emotional

political

creative	intellectual	social
critical	moral	and spiritual
cultural	physical	

development". I suppose one should be thankful that somebody didn't think of "animal, mineral and vegetable" or "biological, chemical, zoological" or even more obvious "auditory, aural, oral" as additional aspects to be listed. All this is to take place for

"personal life, for community living, and leisure".
 family life,
 working life,

As fine a collection of overlapping sets as one could hope to unravel.

But we have wandered a bit from the basic banality, pupils come to school or are sent to school to ~". Why, you may ask, should anyone ~ to state that? What is the big deal? If that is what you think, great.

We can use it as an axiom. If it is accepted that the pupils learn a lot, then the job is well done.

With this as a basic tenet of our faith as educators, it simplifies life considerably. On the one hand, we see clearly what we have to do. Our function is to stimulate, to encourage the sparks of curiosity and creativity, to provide resources, to explain, to structure, to organise, to get perspectives in order, to revise, to set up exercises for practice, to correct and so on. That is the job and success is when the pupils grow in knowledge, understanding, skill and appreciation.

If that happens the day is won. What the pupils are able to do by way of showing knowledge and understanding, by way of being able to find out about and making sense of history, by way of wanting to find out about the past and by way of tempering their attitudes to events and issues by understanding of the historical background, is what counts. A lot of these characteristics of human growth are truly imponderables - things that can not be weighed or measured. Our expertise in measuring past achievement is error laden - and we shall return to this later. The prospect of measuring genuine as distinct from feigned "curiosity" "enthusiasm" or the potential to take "the historical view of events and issues" is daunting to say the least. Just because they are not measurable, however, does not mean they do not exist. In fact the drift of this commentary is that such imponderables are among the main objects of the exercise. It is how the pupils have grown

that matters and not the grades or numbers ~ we attach to our guesses of the worth of the performance on some set of idiosyncratic exercises.

Now you have it. From our initial banality we are led to the corollary that the examination is of secondary importance. No examination, no matter how sophisticated it is, will ever come near to satisfying the principal objective of teaching. The important thing is the learning activity, class period by class period, that takes place in the minds, hearts and hands of the pupils. If that is sensible, sensitive and stimulating, then the main benefit is achieved. The important thing is the course followed, not the examination.

I err. "The course" itself is not even the main thing. There is no doubt that anyone of you, given a little time - say before lunch on some Monday - could draw up a three year outline course that would be, as suggestive for sensible, sensitive and stimulating learning as what we have. Having lived through junior history courses, read through tens and fantasised about hundreds of others, one is led to the conclusion that history courses are a dime a dozen. In fact one might surmise whether their number might not qualify as an infinite number. If everyone in the world wrote out as many of them as they could, it would always be possible to write another. What is important is not so much the course followed but the fruit of the tree in terms of pupil growth.

Given the inveterate and deep-seated inclination towards democratic centralism that pervades most systems of education - a benevolent despotism along Joseph 11 lines in which the centre lays down the law in most exquisite detail for the periphery - one should be thankful, I suppose that the present phase of syllabus and examination development appears, on the face of it at least, to have potential for sensible, sensitive and stimulating work by pupils. No course or examination is proof against uninspiring, not to say boring, teaching or against an elitist, not to say snobbish, attitude which worries more about some abstract standards in History than about losing the attention of at least one in four of the pupils. For that, friends, is the real malaise in Junior history in our schools. It has precious little to do with courses or the examination and a good deal to do with demotivation. It would be pleasant, perhaps, to examine the various sources of demotivation but it might strain your patience. Confining ourselves to one which links somewhat with the title of this commentary, may be about bearable. I refer to the manner in which our system in general and within that, history teaching, is so examination driven that it takes the life out of the subject. There is a fundamental loss of faith in the educative process in which the pupils learn and then, if the pupils learn, the examination looks after itself - almost. If the process is inverted the result is coverage at all costs, short cuts, rote learning, verbiage without understanding, preoccupation with higher grades and for a great number of pupils, grinding, life-sapping boredom - murder machine indeed! This commentary boils down to a call for a return to a simple fundamentalist faith in the educative

process. Let's have first, education for pupil growth, second, education for pupil growth, third, education for pupil growth and fourth, let the examination look after itself.

Giving primacy to the examinations in the process, with the consequent drudgery, futile efforts to beat the system and marginalisation of many pupils is basically a very foolish activity.

Examinations at their best, and we have as good as they come, are highly problematical affairs. It would appear that there is very little appreciation abroad about just how hit and miss they are. One bears the most fatuous nonsense bandied about on the basis of statistics. Post hoc, propter hoc arguments abound with a fine disregard for the historical way. Apples are added to oranges and the result given in bananas with a fine disregard for mathematical units, and possibilities are spoken about in such a way that one knows why "bookies" generally make such a good living. Conclusions are made, based on 3 or 4 percentage points on a single experiment as if the measuring was done by instruments and methods as precise as thermometer readings.

Let's first talk about value. Of what use is an Intermediate Certificate in general or a grade in history at that level in particular to anyone? Precious little I would say! I have never heard of anything in recent years for which the Intermediate Certificate results were used in a competitive way. One can imagine person that it may be used as a kind of certificate of satisfactory attendance. Several years ago a high powered group of worthies examined the Intermediate and their summary was that those who needed it did not get it and those who did not need it got it. The situation has not changed. Certainly the educational press is benignly uninterested in the Intermediate.

One can see values internal to the school system. Results are an acknowledgement to the pupils, at a stage of their lives, for honest endeavour. They are a contribution towards self-knowledge. If interpreted, they have some diagnostic value and are useful to schools in allocating pupils to Higher and Ordinary Level classes.

From the point of view of value, it would appear not to be worth the candle concentrating overmuch on enhancing performance on the examination per se. Of far greater value is doing a good course in history and - let's say it in a whisper - trying to enjoy it.

Paradoxically, if the total concentration is on doing the best course possible, given that one takes the set syllabus as a framework, then the results will look after themselves. One of the ~t assets of all in doing examinations is to be in a state that one can have a go at the unexpected. Examinations that test nothing other than recall are bad examinations. There is no comment more damning about an examination paper one the one which is regularly made by way of compliment - "a good paper; it had no surprises".

Leaving aside the question of value, let's look at the process itself and wonder just how reliable and valid it is or can possibly be made. Is it a process that is worth putting as the top criterion of

evaluating one's achievement. The general drift of what I will have to say will, I hope, enable you to convince yourself that the proem is so fundamentally unnatural and error laden that it is foolish to make it the primary aim of your teaching. I am not saying that one should adopt a position of "splendid isolation" from examinations altogether. One has seen so many candidates who apparently get no preparation in the technicalities of examination technique that one could never say that. My drift is that we get a sense of perspective about examinations. They are not all. they are cracked up to be.

First the whole process is quite unnatural. What one is at is putting numbers on achievement on the basis of certain performances. The only thing you can do with any sort of exactitude with numbers it count. One can count sheep and goats with great exactitude and while you can use numbers, to a certain extent, by counting things, to distinguish sheep from goats, they are very vague altogether in distinguishing sheepish behaviour from goatish behaviour. Whether a statement is worth 3, 2, 1, 0.1, 0.2, 0.3, etc. of a percentage is a highly subjective affair. It is well to remember that a piece of writing is one thing and a number is something else and representing one by the other is an odd piece of behaviour and the formulae used to achieve the number are eccentric to say the least. Going from the overall peculiarity of the practice, we can explore a little further the elements of error in examining. You will be able to do this quite effectively for yourself if you start from the proposition which can be set out in the form of an equation - "LUCK = ERROR". Getting a result in an examination is a form of measurement. In measurement, if there is "luck" involved, then there is "error" - sometimes it's right, sometimes it's wrong.

What I want you to do is think of all the ways you can be lucky (or unlucky) in an examination. Let's take the obvious things first. You'll be lucky (or unlucky) in how "they" will correct your effort. There are at least three factors to this. The most spoken about is individual marker variance. For an individual marker to stay consistent with him or herself in spite of fatigue, different types of writing, sloppy presentation, the bombardment with error, the unending repetition, elegant and inelegant variation, the ups and downs of a relationship with an advising examiner and so on is a major feat in itself. Then examiners, in spite of all the devices used to get them on the same frequency, are all individuals, differing from one another in their knowledge and understanding of different topics, in their constructs of what is a good statement, in their capacity for analysis, in their judgement. Through frequently sampling, direction by letter and telephone and so on attempts are made to bring about conformity to one standard. How well this succeeds a matter of some doubt. There are all sorts of permutations - examiners who consistently are dovish and examiners who constantly are hawkish and examiners who are hawk-crossed doves (or vice versa). In a big junior cycle subject the history there can be problems of consistency between Advising Examiners -

quis custodiet custodes? Marker variance is correcting is only one factor. Before the marker really gets to work at all, hundreds of decisions are taken about what various responses are worth. For factor candidates there is luck here. Why should such and such be worth 3 marks and this other worth and something else worth 1? There is detailed consultation, another name for which is "horse trading". Factor number three is the growing trend towards targeting numbers into grades. One can be luck (or unlucky) in that.

Another huge area where you can be lucky (or unlucky) is, of course, in what is on the paper or other test which you tackle. Before you get even a sight of the paper hundreds of decisions have been taken, some of which favour you and some of which are unfavourable to you. All that is possible on an examination paper or other test is sampling of the field. The topics that come up, the nature of the problems set on the topic and the weighting given to different aspects of the topic give great scope for luck to operate. In spite of all the stereotyping of examinations, a process which has now reached an extraordinary intensity, there is still major scope for error.

The fact that there is choice on the paper is a two edged sword. It reduces this type of luck/error for the individual but it increases luck/error in that all candidates are not being tested on the same thing. Selection of questions becomes very important.

There are a whole cluster of factors ~ come under the heading of "luck on the day". One's s~ of well being, how one gets on, say, in the feat question one attempts, the slight missing, the momentary lapse of concentration and so on.

A source of error not often adverted to is the nature of the numbers we use and what we do with them. On the face of it, it appears simple. We use the natural numbers from 0 to some number, say 100, 200, 300, 400. These are translated into other numbers A, B, C, D, E, F, NG which are a kind of ordinal set of numbers. A feature of the natural numbers is equality of units: $35 - 30 = 95 - 90$. Say we are dealing with 0 to 100. However in examining $25 - 20$ is not equal to $95 - 90$. The increment in performance to get from 0% to 10% is in no way commensurable to the increment in performance to get from 90% to 100%. At one level the examiner is frantically looking around for hints for which to throw a few marks at the script; at the other the tendency is almost the opposite. This is one of the reasons why it is so important for candidates to make sure to attempt all required questions and sections. Sticking with a question in order to milk it dry of every last mark is inefficient if thereby another required question is not attempted. The first 30% of marks on a question are much easier to come by than the last 30%. The numbers we use are a funny kind of number. They are a far cry from being the exact numbers we use for counting sheep and goats.

What do we do with these funny numbers? We add them! We add the throwaway marks to the marks extracted by blood and sweat We treat these funny numbers as if they were exact units. Don't get me wrong, addition is the examiner's great friend. The marks that were perhaps too easily earned are added to the marks parsimoniously doled out and we come up with a total which we hope and pray evens out matters. One of the saying features of our examinations is that they are multiple test examinations and as the tests are separate events, the probability of all errors being in the same direction decreases exponentially. If the probability of consistent error in one direction in a single subject is ten to one, the probability of consistent error in the direction of over 6 subjects is a million to one. Swings and roundabouts work.

However, like 'choice', addition is a two-edged sword. If you add performance on a project to performance on an objective test, what does the result represent? It is all very vague, given that marks are distributed differently in each format and on different criteria. It is somewhat like the beggarman outside Times Square who had a billboard on which he had printed

wars	2
legs	1
wives	2
children	2
wounds	2
total	11

What does 11 represent? A level of misery, a measure of need, perhaps? Addition appears to be the most natural thing in the world to do, but you can lose a lot in the practice. If one Mona Lisa is worth 25 million pounds, what are two worth?

Has enough been said, I wonder, to convince you that it is an inexact science? The outcome of examinations are far from absolute; it is more the outcome of educated guesses. The height of my own expectation is that the examination results "tell the truth most of the time". If they are such approximate, instruments, it does not appear appropriate to give them primacy of place in our teaching.

What do I suggest to you as an approach, say, to sample papers. First make a calm appraisal - the real value is not the examination grade, it is pupil growth through exposure to our subject. Does that definition of the course implicit in the examination paper allow for you following of a sensible, sensitive and stimulating course? Will the bright learners be likely to get 70% Anything over that is

just pretentiousness. Will the slower pupils have a chance of getting 40% without being bored out of their tiny little heads? Second once it is determined that they will have to go through the exercise, as some sort of initiation rite, please ask yourself whether the sample paper is something that is sensible, sensitive and stimulating in its own right for its victims? What I'm saying is to please concentrate on the real world which is the 200 or so hours of teaching time which the pupils will get. Is the sample paper a contribution to good learning during those periods? The other aspect of the real world is the one in four pupils whose predecessors have so obviously been turned off. What we need for senior history is not basic knowledge but more mildly interested pupils.