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To get back to the right place in the text click "back" button in your PDF reader.

## **Continuing the Dialogue**

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To me, the most surprising and disturbing feature of these important commentaries was the authors' apparent lack of concern about the kinds of abuse of science, logic, and authority I highlighted in my starter paper and/or discussion of what might be done to stem these abuses.

To put this in context, I have had several discussions with teachers, clinical psychologists, and occupational psychologists in which those concerned spoke about the damaging effects of the policies they were required to implement and the way in which such policies were often justified by reference to research.

How could it be that those who commented on my paper were unaware of, or unconcerned about, that research and its effects?

Perhaps they attributed the problem, not to the research itself, but to the politicians or bureaucrats who generated the prescriptions, thereby avoiding responsibility.

That certainly seemed to be the case in relation to high-stakes testing. But what of the cyclical process whereby psychologists' failure to generate meaningful measures of areas of competence beyond "academic ability" fuels a preoccupation "academic ability" in schools, thus leading to a situation in which it is easy to obtain funding for research into such things as "motivation for academic achievement" but great difficulty obtaining funding for creating alternative curricula and means of enabling people to get credit for alternative talents. Whatever the political motivations behind it, it was *researchers* who dominated the Council of the International Association for Educational Achievement (the precursor to PISA) who determined the evaluations that were used and were therefore, at least to some degree, in a position to promote more broadly based measures of "achievement" than those which, despite endless declarations to the effect that the promotion of an International Educational Olympics was *not* what they were about, resulted in just that.

How *could* these commentators *not* be alarmed about researchers' role in this and similar processes?

How could they not be concerned about the process described by Margaret Clark (2015) in a recent edition of PER whereby control over both the framing of policy relating to the "reading" problem and the framing of research commissioned in relation to both reading itself and the evaluation of remedial programmes excludes alternative framings of both "the problem" and its "evaluation"?

Perhaps they are afraid to talk about such problems and thus expose themselves as “unsound” when the time comes to apply for funding or jobs. That was certainly the case for the teachers, clinical psychologists, and occupational psychologists just mentioned. It would be “more than their jobs worth” to say anything. And, if I may share a secret, that is also true of number of prestigious educational researchers with whom I have had conversations.

Perhaps, they thought it was someone else’s job to do so.

Perhaps the explanation is that they are, at least in part, caught up in the process depicted in Figure 1 in my starter paper whereby they, like millions of others, are trapped by a network of social forces which lead to the production of endless non-controversial “high-impact”<sup>1</sup> papers in specific areas to feed the needs of the Research Evaluation Exercise and Bologna process and thus the sociological need to promote “growth” via the generation of endless work and thus, having become embroiled in that process, remain unaware of its wider implications.

Perhaps this is how it comes about that, as noted by Rothschild (1982) in his review of the Social Science Research Council, social scientists become their own worst enemies by contributing endless small studies which somehow manage to miss the important issues.

As I see it, if it is any of these “explanations” have validity, we encounter illustrations of the conflict between a system which operates on the basis of an implicit definition of competence grounded in formal “knowledge” and one which operates on the basis of professionalism.

Perhaps Donald Schon (2001) has done most to highlight the problem.

The results are highlighted in Tommy MacKay’s question about whether or not to intervene when one finds a child lying in its faeces. When does intervention become interference? It seems that modern society seeks to solve this problem by generating endless rule-based prescriptions binding on all instead of relying on professionalism. It is perhaps this process that lies behind the inability of the educational system, and society more generally, to come to terms with the diversity of values.

Perhaps we see the process at work most clearly in the way in which Manualisation has undermined social work. Here we have a 600-page Manual of prescriptions which leads them to spend 60% of their time checking with their computers (in order to avoid accusations of having failed to follow the rules) instead of paying attention to the needs of their clients and taking appropriate action. One sees the same process at work in the undermining of teacher professionalism by centralised prescription of classroom behaviours. And the undermining of adventurous research by the standardisation of criteria for research competence through the REF and Bergamo processes.

But whatever about that, here we have endless examples of the operation of the network of social forces sketched in Figure 1 in my original piece.

But let me change tack.

In 1980 HMI (Scotland) reported on a survey of what was going on in primary schools.

They were horrified by the results.

They wrote that “The Scottish teacher insists on making her pupils numerate and literate but does not sufficiently recognise areas of competence beyond these”. Furthermore “only 5% of project work going on in schools is of any educational merit”.

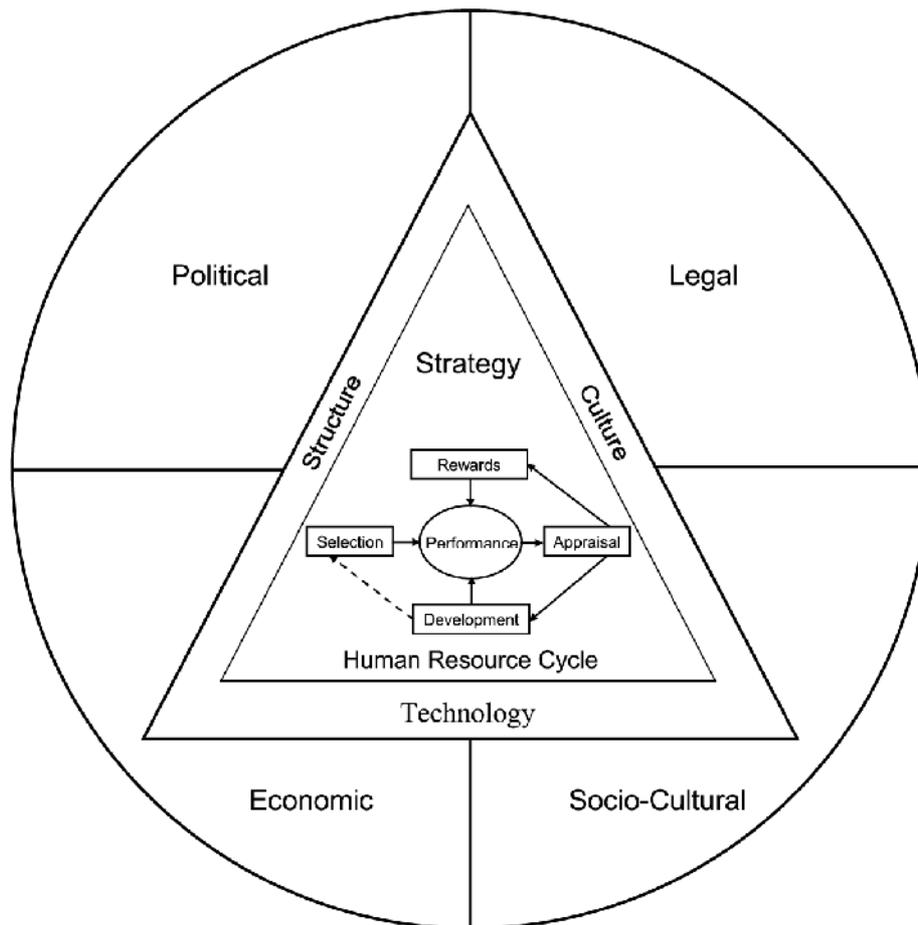
The latter resulted in a request that I find some examples of good practice, describe it in such a way that others could do likewise, identify the benefits in such a way that more parents and politicians would think it was worthwhile, and identify the barriers.

So I did my best with the very limited resources available to us to meet this need and, with great difficulty, presented the results in what many would consider an “unscientific” form in *Opening the Primary Classroom*.

Among other things, we described “one” teacher’s use of the environment around the school to nurture a huge range of talents in her pupils. Some pupils developed the skills of the scientist: the ability to problematize, find relevant information through a reading process very different from that with which most teachers are preoccupied, track down others who might be able to help etc. Others became good at writing *in such a way as to evoke emotions that would lead to action*. Others became good at creating turbulence around officials who had failed to take appropriate action. Others re-calculated the spreadsheets which claimed to show that necessary action was “uneconomic”. Others specialised in soothing out the conflicts that developed within the group ... and so on.

How to think about the competence of “the teacher” who orchestrated these things?

One way is via the following diagram which I stole, with permission, from a paper by Lees (1996).



First note that she had to forget the widely-promoted model of human resource development at the centre of the diagram and replace it by one of her own creation - an image of a process through which she could create a developmental environment whereby all pupils were able to pursue their particular motivational dispositions and develop the competencies needed to do those things effectively. That is, she had to replace what was essentially a single-ability oriented process by one which Michael Wigelsworth might have implied when he mentioned a strengths-oriented process. As the teacher herself at one point put it to her class when talking about the benefits of what they were doing, she had got them to stop thinking about how “smart” or “dumb” each other was to thinking about what they were good at.

Then she had to intervene with parents, the local inspectorate, the bureaucracy, and the head teacher of the secondary school to whom the pupils would go. She had to convince them of the value of what she was doing and persuade them to question the construct validity of standardised tests of reading and arithmetic. And so on and so on.

Now my point is this.

Here we have an image of *professional* competence which is very different from the image of teacher competence pursued in colleges of education and assessed in current teacher- and school accountability exercises.

Maybe we need to disseminate such a model of professional competence among the members of the *Psychology of Education Section* in place of the implicit model that informs the REF and Bergamo process. Maybe we need to encourage PER to publish papers which will advance professionalism rather than papers of the kind promoted by “High Impact” journals.

### *Individual Dialogues*

I have spent several hours mulling over what the words *Review* in the title of our journal and the word *Dialogue* in “*Open Dialogue*” might imply for the writing of this response.

Is the dialogue meant to be with the editors, the readership, or the authors?

The answers to these questions are fundamental to the future of our journal.

### *In dialogue with Piotr Oles.*

I entirely endorse what Piotr is saying. But there is a tension between influencing values and respecting values. This is illustrated in the table below which stems from an “illuminative” evaluation of an Educational Home Visiting project designed to influence the parenting behaviour of 2-3 year old children.

TABLE 1  
TOP PRIORITIES IN CHILD REARING FOR LSES, HSES, AND EHV PARENTS  
(% rating each item "Very Important")

	EHV Group		LSES Group		HSES Group	
1	That your children need you.	90%	That your child develops respect for his parents.	81%	For your child to be read to.	93%
2	For your child to be read to.	85%	That your children need you.	75%	For you to talk to your child a lot.	90%
3	For you to ask him about pictures in books and things he has seen.	75%	For you to teach him to respect property.	63%	For your child to have books at home.	88%
4	To teach your child to respect property.	75%	For your child to learn to stick up for himself.	55%	For you to ask him about pictures in books and things he has seen.	73%
5	That your child develops respect for his parents.	75%	For your child to be read to.	54%	To encourage your child to be willing to use books to find information for himself.	73%
6	To teach your child to think for himself.	72%	For your child to develop the ability to work with others.	53%	For your child to know how you feel when he does something well.	70%
7	To encourage your child to talk to you about what he is doing.	70%	For your child to have plenty of time to play with other children.	50%	To encourage your child to talk to you about what he is doing.	68%
8	For your child to have books at home.	67%	To talk to your child a lot.	50%	To teach your child to think for himself.	68%
9	For you to talk to your child a lot.	67%	For you to ask him about pictures in books and things he has seen.	49%	For you to treat him with respect as an individual in his own right, who is entitled to pursue his own interests and ideas.	63%
10	For your child to be given educational toys.	62%	To teach your child to respect figures in authority.	49%	For you to encourage him to be independent.	60%
11	To encourage your child to ask questions.	57%	For your child to develop the ability to mix easily with others.	47%	To encourage your child to ask questions.	60%
12	To encourage him to work and read on his own a lot when he's older.	55%	To teach your child you don't get anything you want without working for it.	46%	That your child develops respect for his parents.	60%
13	For you to continue the work of the school at home.	55%	For your child to know how you feel when he does something well.	46%	For you to encourage your child to question and seek reasons for things he is told.	58%
	For your child to do well at school.	55%	From: Raven, J. (1980) <u>Parents, Teachers and Children</u> Hodder & Stoughton, Sevenoaks			
	To encourage your child to question and seek reasons for things he is told.	55%				
	That your child develops the ability to work with others.	55%				

Note what lies behind this. A concern with "cognitive development" (actually success in hierarchically-organised schools) has led to a cyclical process whereby both practitioners and researchers focus on "cognitive development" (mainly valued by HSES mothers) and neglect other areas of competence. Hence the framing of the narrowly based paternalistic intervention and the expectation of a focus on "cognitive ability" in the evaluation.

This process takes effect, *a fortiori*, in the Scottish Government's *Children and Young People* act which was/is designed to inforce parents, against the threat of overwhelming punishment, (resulting in threats of having their children taken into care and themselves being consigned to prison), to force compliance with this process.

To my mind, this story implies that we, as members of the Psychology of Education Section, and the BPS more generally, have a huge responsibility to seek to intervene in the process whereby the framing of the issues influences both the framing of policy and the framing of the research which gets commissioned.

But there is another vitally important issue raised by Oles' commentary ... the apparent need to *influence* values. There is no doubt in my mind that we do have to radically change the way we live if we are to survive as a species. The question is whether this is to be brought about by values change or by studying the sociocybernetic<sup>2</sup> processes which determine the way we live and prevent people enacting values they already endorse.

As far as I can make out, the problem is that people cannot see *how* to influence those sociocybernetic processes and enact their values. They know that single-factor intervention will be over-ruled by the reactions of the system.

So what are the constraints which conspire to drive the kind of education Oles endorses out of schools?

Steve Higgins has hinted at the immediate role of centralised curricula and high-stakes, hierarchically organised, testing.

But what lies behind *that*?

As Steve recognises, the answer lies in the self-reinforcing (autopoietic) network of social forces sketched in the diagram in my starter paper. That diagram suggests that two key components of the system are (i) a governance system which does not encourage the kind of experimentation that would be required to evolve the network of educational activities required to cater for diversity, and (ii) a network of sociological functions associated with the promotion of hierarchy<sup>3</sup>.

If we are to improve education it seems to follow that our top priority must be to study this network of social forces and find ways of intervening in them.

Yet this perspective does not seem to be widely shared. The activities of Research Committee 51 (Sociocybernetics) of International Sociological Association are consigned to a basement dungeon while the lecture rooms in the skyscraper above are full of people debating more "academic" issues which will enable them to generate publications which will non-controversially advance their careers.

What I am saying is that we as a Section and we as members of the BPS have a responsibility to get such issues onto the agenda of those who commission and fund research. It has to do with the framing of "the problem". Politicians focus on presenting problems not the social forces which lie behind them. As I see it, it is our job to re-focus that debate and open up funding to study the wider issues behind them and contribute to their solution.

*In Dialogue with Tommy MacKay*

Perhaps the most thought provoking/disturbing comments of any in the responses were those of Tommy MacKay in relation to reading and dyslexia. I have personal interest in this in that,

on the one hand, unlike my wife, I am not myself much interested in reading and, on the other, have a “dyslexic” son who could neither read, write, nor count until he was 8 years . He would have been crucified under the current assessment system and subjected to “remedial” programmes which we can see, with the benefit of hindsight, have been entirely inappropriate, indeed destructive.

I have been horrified at what we have observed in some schools. And don't tell me all has changed; it hasn't. Plus I sought, and largely failed, to follow up Margaret Clark's claims in an earlier PER about the recursive funding of research and practice relating to one perspective in the terrifyingly narrow views about teaching “reading” that figure in the reading wars. Unfortunately, these ramblings are not suitable for inclusion here ... but would be suited to an appropriate dialogue ... not debate ... with Tommy ... or anyone else who might be interested.

But, if I may, I would like to make a couple of further comments.

First, I would like to underline the enormous effort that Tommy had, over a 10 year period, to put in to maintaining the West Dumbartonshire reading project. During that time the administration changed and changed again.

Here is someone defining his job as entailing going well beyond the calls of duty. What is more, the reading programme he maintained looked nothing like the kinds of thing most commonly advocated. It involved all sorts of things like in involving the children in goal setting activities and a range of playground activities. Yet, and this is the rub, I feel somehow uncomfortable with the evaluation. I have not taken the time to fully explore what lies at the basis of this feeling, but fear that it has something to do with that dreaded “phonetics” issue and the failure to unpack “How important are what kinds of reading to what kinds of people?” Me, I don't much care what is actually *said* in material I read. I am generally only interested in the lateral thoughts it evokes. My wife is interested in the feelings it evokes and the images it evokes in her mind. I fear that most of the reading tests I have seen not only do not register such outcomes but are actually destructive of them<sup>4</sup>.

Returning to the “intervention or interference” issue to which Tommy returns in his reference to the Scottish *Children and Young People (Scotland)* act and the child in its faeces.

I have great problems with the GIRFEC<sup>5</sup> and SHANARI<sup>6</sup> questionnaires prescribed for mandatory use when a “named person” mandatorily visits the home of every child aged minis 5 months to 22 years 5 times over that period.

The named persons, when visiting the homes of adolescents, were asked to rate whether the young person in question has “appropriate attitudes toward his/her sexuality?” The values issues could not be more apparent? And who is to do what as a result of a negative rating?

This may be an extreme example. But the problem is that these questionnaires generally reflect the thoughtways of what Plomin calls a “head girl” mentality.

I have not taken these particular questionnaires to the homes of low socio economic status mothers. But I vividly recall a mother's response to our question about how important it is for her pre-school child to learn to use books to find their own information in the Home Visiting

project mentioned above “Oh. No. I wouldn’t want that. Goodness knows what he might come across poking about in books”.

The problem is not what to do about the child in the faeces. It is that many social workers adopt what I find to be an extraordinarily judgmental stance. As far as the *Children and Young People’s* act is concerned, very disturbing examples have been reported via the “No2Np”(No to Named Persons) campaign.

I don’t have an answer. But there must be a better way than relying on the law, or, worse, hiding behind the law. How can one justify the cascade of personal decisions which result in the statistics (ref) which lie behind *I Daniel Blake*? Ken Loach’s and John Pilger’s films have sought to provoke a *political* response. In contrast, I see myself, as having tried to formulate an answer based on the little I know about the social constraints on behaviour. In this context, I feel I have to mention that I have been appalled at the workings of the cross-party committee on ACE<sup>7</sup>s. The quest for a net, justified on the basis of “trying to avoid harm”, that will enable central government to catch all its embrace seems to grow ever wider. Currently one can only speculate. We could really do with some serious research, both psychological and sociological, into what lies behind it.

#### *In Dialogue with Steve Higgins*

By way of introduction to this meandering commentary on Steve’s beautifully organised piece may I just say this. I feel that, if he added Bookchin’s<sup>8</sup> law to Campbell’s law in his organisational framework, that framework would provide even more insights into the problems of the “educational” system. Bookchin’s law states that “In any situation of surplus labour, society somehow manages to create endless, hierarchically organised, senseless work to occupy the idle hands.” (The work is senseless in that the products it delivers fail to enhance quality of life). As I see it, much of the “educational” system falls into that category. But note this. The process offers a wonderfully obfuscated illustration of the popular saying that “The Devil finds work for idle hands”.

I think it is worth picking up Steve Higgins’ comments on assessment at some length. In our own work we have long embraced Spearman’s observation that “every normal man, woman, and child is a genius at something”. And we have published reports on how this observation is (was) translated into effect in some primary schools, homes, and workplaces. The point is, however, that all these observations are grounded in a framework for thinking about individual differences and their nurturance that has been widely ignored, even discredited. So, yes, I repeat, some further development of that framework is needed if pupils are to have their talents recognised and if teachers and parents are to get credit for their work. But the backdrop to this is the need to create developmental environments which enable people to select themselves into environments which enable them to pursue their chosen activities and develop the competencies they need to do so in the process<sup>9</sup>. Such environments do, of course, include respect for people possessed of dispositions which many find unacceptable.

As to control over education.

Peter asks, in essence, “By whose authority have we got here?”

And here we encounter Tommy McKay’s dilemma.

The first step was to move from the observation that “education is a good thing” to “education shall be compulsory for all”.

That made many people uncomfortable. But there was a get out. It was the *parent’s* responsibility to ensure that it happened by having their children attend school *or otherwise*.

But then the time came when we needed cannon fodder for the second world war.

This exposed the fact that large numbers were still illiterate.

So, if it isn’t working, let’s extend it. That’s logical.

Next problem: the rabble complained about being forced to study a grammar school curriculum possibly suited to high status officers and public servants.

So, somewhere around 1962, the Minister for Education recognised that something needed to be done about the curriculum.

He set up a curriculum study group within the Department of Education.

The teachers screamed: This is our job: Hands off.

The minister was not to be outdone.

Recognising that what happened in schools was largely controlled by examinations, he seized the Schools Examinations Council and inserted the word “Curriculum” into the title.

Then he made what can retrospectively be seen as a political mistake.

He gave control over the Schools Council for Curriculum and Examinations to teachers.

They sent an emissary to the Government Social Survey department who said

“The government has decided to raise the school leaving age. There are not going to be any more teachers or any more schools. And the kids are delinquent already: Please can you find out how to keep the blighters happy?”

That led to *Enquiry One: Young School Leavers and the Lives they Lead*.

The consequences of that have dogged my life ever since.

The teachers set up a series of curriculum projects ... on the Humanities, Science, Mathematics, and so on.

These were quietly sent to Coventry ... or at least East Anglia.

The examinations committee, faced with the task of finding ways of recognising all the outcomes that were to be pursued through these projects, never reported.

Until Mrs. Thatcher arrived.

She demanded that they report within 6 months.

They produced a report<sup>10</sup> which said that pupils have a wide range of talents and abilities which society requires and schools are able to nurture ... so we need a range of examination Boards relating to a wide range of outcomes to be assessed in different ways via a range of modes and levels.

So far so good. An unknown apparatchik inserted a single sentence into the paragraph which said just that.

The sentence read: "The results will be expressed on a single scale of seven points in a subject area."

That, of course, negated everything the committee had said.

Smart piece of footwork.

Meantime Mrs. T held a "consultation" on the curriculum.

Hundreds of thousands of man hours in schools, on committees, in homes, and everywhere else were devoted to responding.

Mrs. T's officials binned the whole lot without reading them.

Along came the GERBIL.

The teachers screamed.

One of my colleagues, at a national meeting, shouted that responsibility for education had been shifted from parents to the Minister of Education.

And, sure enough, he announced that "As from tomorrow there will be no more play schools. All pupils will be sitting in rows facing the teacher and being taught."

But now to the point of this story.

It underlines the need to attend to the central box in that causal loop diagram we keep using.

This has to do with the governance system. What would a more effective governance system look like?

I discussed this at some length in *Part II of Managing Education for Effective Schooling* and in more detail in my subsequent book *The New Wealth of Nations: The Societal Learning arrangements needed for a sustainable society*.

In essence, what we need is an educational system which provides a wide range of options suited to people with different talents and abilities, undertakes comprehensive evaluations of all the short and long term personal and social, consequences of these and feeds that information to the public to make informed choices between them.

This implies paying *more* attention to assessment, not less.

Oh. Yes. And one more thing. Peter says that schools function to allocate position and status reasonably effectively.

That is, they *mainly* perform a sociological rather than an educational function. And this raises the question whether or not a hierarchical society functions in the long term public interest. As far as I can, with the aid of Murray Bookchin and others, see, it does not.

It generates vast amount of work which contributes little to quality of life and does so at the cost of enormous destruction of our habitat. If there is one thing we need to plan to avoid it is the perpetuation of this system.

But, actually, Peter is wrong! The truth is that, as work on the amazing Scottish Longitudinal Mental Development Survey<sup>11</sup> has shown, the school system as currently organised performs its social allocation function extremely *inefficiently*. It can be, and was at one time in Scotland done, by administering an simple “intelligence” test at age 11. It takes till age 40 for Americans to achieve the same level of association between “ability” and occupational status that that test achieved at single blow.

But I want to conclude by emphasising this. While the field is on the surface dominated by deeply-rooted political agendas, it is also permeated by a host of scientific questions which recursively affect those agendas and the funding that can be obtained for that research. As I see it, it is not only our responsibility to influence the questions that get asked and the way they are framed. Given the context, it is also vital to do what we can to ensure that as much of the research as possible is conducted within a framework of systemic, non-reductive, science. The task cannot be left to politicians, philosophers, or what have you.

*In Dialogue with Dave Putwain*

Dave’s discussion of the relationship between what has come to be termed “reductionist thinking”, systems thinking, and ecological thinking is interesting and important, not least because he highlights the difficulties of reporting the results when confronted with editors who, at least in part, precisely because of the systems constraints under which they operate, are unwilling to publish the results.

When a request for proposals for articles relating to “Closing the gap” fell on my desk some three years ago, I could not resist the temptation to return to an unfinished debate which had occurred in the pages of *The American Psychologist* some 15 years earlier. Ceci and Papierno<sup>12</sup> had explored the social implications of the finding that, when the “enrichment” programmes offered to poorly performing pupils were also offered to the others, the “have’s” gained more than the “have nots”.

There were many interesting things about this article, not least the fact that the authors whose work they had reviewed had sought to “close the gap” by increasing scores on what were essentially single-factor, norm-referenced, measures of outcomes – ie they had ignored the possibility of dealing with the problem by highlighting the other talents the “have nots” possessed. But they also made the “mistake” of exploring the assumed long term social consequences of enhancing everyone’s “performance”.

Now note this.

Dave readily accepts the example of mis-application of reductionist, viz non-systemic, science in the fertilizer example.

But he fails to notice that Ceci & Papierno have done exactly the same thing.

First they fail to note that focussing on a single outcome ignores the damaging effect of those programmes on many, if not all, pupils by rendering invisible many important talents which schools could have helped to nurture.

Then they fail to notice the recursive effect that this preoccupation with a single outcome has on the educational programmes offered by schools. That is, they neglect its ecological context. It breeds monocultures of mind.

Then they say that the implementation of a process in which *everyone's* scores will result in more brilliant scientists.

In so saying, they overlook the effect of norm referencing: if everyone's scores go up, those who select scientists will raise the bar. Here we have a failure of logic.

Finally, they fail to notice that it is those very scientists who, by encouraging the application of their non-systemic science, contributed to the destruction of the soils, seas, and atmosphere that constitute our habitat and thus our imminent extinction as a species.

Nothing could better illustrate the misapplication of science that I am complaining about *in the educational area*.

How to obtain funding for more broadly-based research? How to get any such studies published in the context of a preoccupation with narrow high-impact studies?

It has become fashionable to advocate the teaching of systems thinking in schools. This can mean many different things. But one stream of thought leading to its advocacy has to do with the need to consider the negative as well as the positive outcomes of burning fossil fuels. Ironically enough, though, the outcomes actually considered usually get reduced to one (climate change)! And then, when it comes to considering how to intervene in the network of social forces which promote this/these outcomes, one again encounters a focus on a single component or factor (CO<sub>2</sub>) instead of multiple systems-oriented changes<sup>13</sup>. The need to promote systems, i.e. non-reductionist, thinking is all too apparent.

But what happens if one takes the task of promoting (not “teaching”) systems thinking in schools seriously? One finds oneself in conflict with the image of science that has been imbued the thinking of science teachers and is embedded in the curriculum and examinations process. And one finds oneself in conflict with politicians.

The urgency of mapping the network of social forces which constrain this whole process and finding multiple-focus ways of intervening in it become all too apparent.

Changing tack.

I was at first hard pressed to come up with examples of the misapplication of educational research. But then, the right button having been pressed, I came up with a whole series of examples of the serious misapplication of reductionist science in the research that has formed part of the spiral of responses to government “calls for proposals” resulting in research which reinforces destructive policies. The processes incorporated into the formulation of the infamous Scottish government’s “Children and Young persons” act being but one of them<sup>14</sup>.

But the real problem was that my mind kept turning to Dave’s remarks on ecology and, in particular a recent meeting in which a number of researchers presented their work on the ecological impact of sea- and land-based wind farms and marine turbines to harness tidal and other flows to generate electricity. These all had dramatic effects on the movements, feeding and foraging habits, and breeding habits of birds, fish and other animals and micro animals. Even the electro-magnetic radiations of the sea-bed electric cables required to transmit the electricity to land had huge knock-on effects. Hundreds of such studies had been published across Europe. That was where I encountered the notion of DRIP research.

But what was it that was not there? I cannot tell you for the simple reason that the careers of those concerned have already been threatened (by reference to their contracts) for even mentioning these things.

But let us imagine that they had been prompted by their research to think about the possible wider ecological impact of these activities on the network of interactions of human beings, fish, algae, and micro-organisms in the seas, on the land, and in the atmosphere.

One would not be entirely surprised if their work led them to appreciate the need to study the complex interactions of all these things ... including the symbiotic relationships that have in the past presented ecologists and biologists with serious methodological problems.

More practically, one would not be surprised if they were to conclude that the proliferation of these “green” energy sources would have ecological impacts every bit as serious as the generation of electricity from fossil fuels.

If that were to be the case, one would not be entirely surprised if “the government” were to take appropriate action to prevent them even thinking about conducting this broadly based research, let alone putting out “calls for proposals” to undertake the requisite research.

That such a scenario is not entirely without foundation can be illustrated by the fact that Mrs. Thatcher insisted, by threatening the withdrawal of funds for genetic research, that the University of Edinburgh close their tiny Centre for Human Ecology despite the protests of the University Court.

These observations strongly support the concerns at the heart of my starter paper.

I have stressed the need to “turn psychology inside out”, and gone so far as to suggest that we embrace sociocybernetics (the study of the networks of social forces controlling human behaviour) and I have myself dabbled in General Systems Theory.

But what if these things represent only the tip of the iceberg?

Are we going to shrug our shoulders and say “Yes. Well. But this is really someone else’s job ... perhaps specifically something for Sociologists”?

Personally, I am uninclined to do this. For, as Harris<sup>15</sup> has argued, it is through young people’s interactions with their peer groups and wider society that they hone the components of competence required to express their genetically-determined motivational dispositions. So, just what do we think we are doing by building schools surrounded by brick walls and armies of attendance officers and accepting nationally-determined curricula assessed and held accountable via narrow, mandatory, high-stakes testing in subject areas?

Are we going to risk our careers by joining our ecological friends in saying something, trying to do something, about this situation? What about the commitments in the BPS charter to act in the long term public interest?

*In Dialogue with Michael Wigelsworth*

First, I need to thank him for the list of publications that I obviously ought to have read but which, for a variety of reasons, am unlikely to read. It seems they should be very useful to anyone who wishes to follow up with such issues.

Then I need to say a bit more about this fascism issue ... which seems to be represented here in ways which I did not quite intend.

“The nature of the damage appears to be one of stagnation, (‘a self-perpetuating system which ...negates efforts to introduce change’(p4)) by virtue of suppression and discrediting of talent and innovation, and as a consequence, the promotion of a ‘fascist ideology’ in education (ibid).”

I don’t think the system becomes self-perpetuating by suppression and discreditation of talents, although this is part of the picture.

It becomes self-perpetuating, as Michael recognises, via the multiple recursive feedback loops depicted in Figure 1.

Nor do I think schools necessarily perpetuate a fascist *ideology*. (In fact, I have very little to say about either ideologies or Fascists.)

Schools do model, authoritarian, hierarchical, institutions and promote single-factor notions of “ability “.

But my concern in recent years has been with the *pervasive* disposition, evident in the Woke movement, the procedures of the “benefits” system, and systems proposed for guarding against ACEs, for people in general, and many of those engaged in these systems, to believe that they *have a right to impose on others that which they believe to be good and right regardless of the wishes of those concerned and the long term social consequences of what they are doing*.

Such thinking lies at the heart of fascism. But it does not constitute Fascism ... and it seems to me much more dangerous. I am not at all sure that, despite the extensive literature on Authoritarianism, the issue has been adequately addressed.

But now to say something about the “strengths” movement.

In a sense this is what we have been pursuing in our work: What were the individual blacksmiths, hotel owners, public servants, and others we studied good at? What were pupils good at if provided with a context which enabled those talents to flower? What were parents good at ...such as creating opportunities for their children to express their specific motivational dispositions and hone the competencies needed to pursue them effectively.

We have been guided in this work by a framework derived from David McClelland which most believe to have been discredited.

As I see it, the strengths movement had been bedevilled, like naturalists prior to Linnaeus, by the absence of an agreed taxonomic framework of this sort.

Fortunately, the quest for a basis for such a framework has recently been progressed via developments in a quite different area<sup>16</sup>.

I am not exactly sure what Michael is saying in the course of his interesting discussion of Social and Emotional Learning, but he seems to be confirming my feelings about teacher-proof packages and the limitation of research arising from a fixation on randomised control designs, including the kinds of assessment that they necessarily entail.

I am not sure about the reduction of teacher professionalism to making choices between, and making minor modifications to, off-the-shelf packages.

I worry about the very notion of promoting social and emotional development through some kind of *teaching*. It is true that everything I know about the area was gleaned from stumbling into the occasional conference paper and may thus be seriously misleading. But I fear the reduction of what is an extremely complex area to what can be taught in some kind of (verbalised) lesson and assessed in a similar manner.

We come back to the value-based notion of inculcating values. *Whose* values are to be implicitly incorporated into the activities?

Yet I fear the verbalisation problem even more.

And CBT

And I think of those I know who are particularly adept at social manipulation or sensing the need for, and implementing, some personal intervention.

How did they hone the competence to do these things so well?

Do we all need to learn to do these things?

Rather, it seems to me, we need to create situations in which some people learn to do these things in the context of others learning to do very different things .. such as getting a computer to perform unimaginable operations.

We have observed such processes in schools, and Rosabeth Kanter and others describe them in workplaces.

One problem is that, sorry, such processes are at loggerheads with subject-oriented activities in schools and conventional thinking about HR management.

Worse, although we have (with great difficulty and in conflict with most standards for reporting on research), done as requested and reported on this work “in such a way that others could do likewise” we are mindful of the fact that, although Dewey had one teacher to every 7 pupils in his school he could still only get 5% of his teachers to do what he wanted.

In short, I am sceptical about the idea that it can be done via teacher proof packages marked *Social and Emotional Learning*. But I am also sceptical about whether one could get many teachers to follow the procedures we have described. But here is an interesting thing: many parents do these things instinctively.

It is sociologically naïve to think we could get rid of schools. But how could we make more schools more like homes?

Too many psychologists appear to say “It can’t be done”. I am reluctant to adopt that position and instead ask “*How* can it be done?” If that means coming to terms with values and the sociological functions of education, so be it.

### *In dialogue with Richard Remedios*

Yes. That’s good fun. I use high jumping ability to illustrate how Item Response Theory works. But now hear this almost-true story. In his 1956 *Guide to the use of the Standard Progressive Matrices*<sup>17</sup>, my father hardly mentions the words intelligence or educative **editor: this word is spelled CORRECTLY. It is not a mis-spelling of “educative”** ability. He presents no conventional measures of internal consistency or construct or predictive validity. Instead he refers us back to some graphs plotting the chances of getting an item right (clearing the bar in high jumping) against total score<sup>18</sup>. Today we would call these Item Characteristic Curves. That’s it! Take it or leave it<sup>19</sup>.

So yes, you are right.

Let’s get a measure. Check its internal consistency (most factor-analytically-derived scales yield only arbitrary measures in the sense (a) that the same score can be achieved in very different ways and thus means different things (b) the location of the vectors used to reduce the number of variables required to reproduce the data matrix to a smaller number is also chosen by the analyst, not the mathematical procedure). And find out how it correlates with measures of other things and whether it supports the notion that it measures some wider underlying construct.

But then what?

In some of his writing Spearman was quite clear about this. Yes, there is a conspicuous general factor running through the correlations between many “ability” tests. But that does not mean that there is some underlying ability of intelligence. On the contrary, he claimed, the tests that had yielded the correlations which supported his concept of *g* “had no place in schools” and “every normal man, woman, and child is a genius at something ... the problem is to identify at what ... this cannot be done with any of the psychometric procedures currently in use”. Yet it is the business of schooling to draw out these multiple talents.

*Note what he has done.*

He has set his reductionist scientific model of one small sector of the “intelligence” minefield in the context of systemic thinking. What can be understood as his “paragraph” on “Limitations of the Study” has gone far beyond anything I have ever seen in more recent reports.

If only those who had shown that the burning of fossil fuel could drive cotton mills had done the same thing! (Not that Spearman’s caveats have had the least effect in deterring many people, but most noticeably, authorities of one kind or another from mis-using Spearman’s results.)

I entirely agree that the model of reductionist science – a model which asserts that “There are all sorts of things going on here, but for the purpose of advancing understanding let’s just focus on these two or three” – has its place. What has been missing when these results have been applied has been consideration - ie documentation – even acknowledgement - of the *other* things that are going on. The image of “science” that has been conveyed, propagated, and utilised has been one of reductionist, not systemic, science.

I simply do not believe that the tests of such things as mathematical and scientific “ability” that are embedded in most educational assessment programmes merit the names given to them or that they support most of the applications<sup>20</sup> associated with them.

But, actually more important, I do not believe that, eg, the *conception* of mathematics or science that is embedded in those tests is of much value to two thirds of the pupils who will be required to take them. But alternative conceptualisations of these subjects could lead to the nurturance of competencies that *would* be of value to them.

But, to back up I absolutely do not agree that “When we consider systems-level analyses, these arguments are best left to philosophers, sociologists, anthropologists, political scientists or any other thought-experiment based subject”. What I am arguing is that consideration of these things is excluded by the very notion of “science” that is most widely embraced and taught.

It is too easy to dismiss these as “values” issues. This was quite clear in Spearman’s repeated, but unanswered, question to the committee who plotted the imposition of intelligence testing on Scottish schools<sup>21</sup>. “What are you trying to do?”

But note this: The answer to that question would be greatly informed by better information about the personal and social, desired and desirable, undesired and undesirable, short and long term consequences of doing different things.

These are not questions to be passed over to someone else. They are questions which can only reasonably be debated if there is better information *from us*.

*In dialogue with Stephen Gorard.*

There is not a lot within Stephen Gorard's that leads me to feel inclined to enter into a dialogue with, or about, him.

But, while bearing in mind Dave Putwain's exhortation to stick with things that would be of interest to readers of PER, there are three things which merit comment:

1. He fails to make a connection between reductionist science and the destruction of the planet. To me (and Pope John Paul II!), it is clear that it has been the neglect of the wider consequences of "scientifically-based" activities – ie the pursuit of reductionist science which encourages those concerned to study multiple outcomes – of doing such things as consuming fossil-fuels that have brought the planet to its present state. Put another way, the thinking has been precisely non systemic.
2. He criticises John Hattie's book. I do not know exactly why. But, personally, I like Hattie's book precisely for the reason that, I suspect, Gorard dislikes it. Hattie's book is distinctive in that Hattie goes beyond the data to draw conclusions *from* the data that are not demonstrated or tested *within* the data. As I learned from David Donnison, it is the understandings built up in the course of research, not the statistics generated by it, that are the most important. The form of learning modelled by the teachers Hattie deems effective is not learning *content* but learning how to learn from studying the effects of one's actions. Hence the term "visible learning". The "feedback" discussed is not feedback from teacher to pupils on the quality of their performances but feedback to teachers from their self-motivated study of the effects of their own actions.
3. It is clear from a glance at Google Scholar that Gorard and his colleagues run a publication factory which is well suited to producing the kinds of products valued by the Research Evaluation Framework and fueling the Bergamo process "designed" to generate skyscrapers full of offices housing "researchers" who produce peer-review (ie power review) –proof, non-threatening, papers about minuscule issues to fill the journals and promote the further growth of the "universities" and the "research" industry. No wonder he is not much concerned about the appalling conditions in which many pupils find themselves in many schools and unable to connect that with researchers' neglect of the most important issues and politician's misuse of available research and unwillingness to commission research which inform alternative policies. The problem is not to find better ways of forcing children to attend destructive schools but to radically change the schools. And research into how to better relate to pupils with a wide range of talents and abilities both through studies of the nature and

development of competence and reform of the pupil and school evaluation process (and the two are inextricably interlinked) is rare indeed.

4. He seems to think that, because much of what I said has been published somewhere before, it should not have been published here. I would be more inclined to pay attention to the “repetition” argument if there was any evidence that he had ever read any of the earlier publications.

Actually, I think Gorard’s paper could be extremely useful to many readers of PER. On the one hand, It stands as a stark warning to those who want (need?) to publish in “high impact” journals, and, on the other, it highlights the urgent need for discussion of the role of journals like PER and action to protect them. There is not space to embark on that discussion here. Nevertheless an attempt must be made to lay down a marker, incomprehensible though this is likely to be to most readers. A network of social forces, such as the “Bergamo process” that is designed to facilitate the free movement of “students” and higher education teachers across Europe by standardising curricula and publication standards, have conspired to promote “high impact” journals in whose pages, and only in whose pages, publications will count in the Research Evaluation Framework. This process embodies a requirement to follow the dead hand of APA referencing and a deadly “peer review” (better understood as “power review” process) which ensures conformity to the conventional wisdom. These lucrative but largely unreadable publications circulating mountains of non-information are then hidden behind paywalls. Now my point is this: if, as a Section of the BPS, we wish to break out of this process and promote open dialogue we need to somehow break out of this stranglehold the end stages of which are represented, I am told, by a network of apparatchiks within the BPS.

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### **Endnotes.**

- <sup>1</sup> As is typically the case, the term means it's opposite. It means that the paper is cited by a network of researchers working in the same area within the same framework. It does not mean that it had a high impact on the educational system or society. I have learned a new acronym to describe these studies: DRIP (Data Rich Information Poor). But it seems to me that DPIP are even more common and that it is the latter that have fuelled the replication crisis.
- <sup>2</sup> Cybernetics deals with the study of the guidance and control processes in animals and machines. So sociocybernetics deals with the study of these, largely hidden, processes in society.
- <sup>3</sup> See Bookchin (2005)
- <sup>4</sup> This is actually an example of Campbell's law which is discussed more fully by Hitchens in his Commentary.
- <sup>5</sup> Getting it Right for Every Child. (Means the opposite, of course.)
- <sup>6</sup> An acronym for the eight wellbeing indicators in the CfE Health and Wellbeing curriculum. It stands for Safe, Healthy, Achieving, Nurtured, Active, Respected, Responsible, Included.
- <sup>7</sup> <https://www.parliamentlive.tv/Event/Index/730b9508-5ff6-4464-a7b8-2bbb6f709ef5>
- <sup>8</sup> Bookchin (2005)
- <sup>9</sup> Some recent research [(Möttus, R., & Rozgonjuk, D. (2019), Raven (2020)] from an entirely unanticipated quarter has led to elaboration and reinforcement of this position.
- <sup>10</sup> Waddell (1978)
- <sup>11</sup> Hope (1984), Deary *et al* (2004).
- <sup>12</sup> Ceci & Papierno (2005)
- <sup>13</sup> Interestingly enough the processes of systemic – ie multi-pronged – intervention in systems to yield systemic change was nicely illustrated in the previously mentioned environmentally based project conducted by primary school pupils. The process facilitated the emergence of new competencies in the pupils ... competencies which, in a sense, could not have existed outwith that context. But it also facilitated the emergence of a climate of enterprise going far beyond the talents of individuals. And it was the harnessing of those emergent talents that made possible the systemic, multi-pronged, intervention that achieved the desired effect.
- <sup>14</sup> Others included the work of the International Association for the Evaluation of Educational achievement (the IEA), which preceded PISA. I was on the Council.

I repeatedly pointed out that the design of the studies they were promoting precluded answering the very question they claimed to be setting out to answer: What were the differential effects of the varying curricular, with differing objectives, that had been enacted in different countries? One problem was that the measures had to be shown to scale in the same way in all countries. That is, they had to be tailored to what was common across all countries, not what was specific. They were therefore unable to reveal the differential effect of curricula aimed at achieving different outcomes.

Another example was that at one time the Department of Education commissioned studies of the effectiveness of their national curricula.

When the results were presented at a BERA conference Jean Ruddock and I drew attention to just how misleading the results were because the narrow range outcomes studied recursively fed back into supporting the narrowly-focussed curricula. Doing other things (i.e. pursuing wider objectives) necessarily became a "waste of time". The Chairman responded "There is no need to be angry, Jean". She shouted back "There is a time for being angry".

A third example was that, had we followed the procedures we were expected to follow in evaluating the effects of a pre-school home visiting project in which teachers repeatedly visited the homes of 2-3 year old children to model mothering behaviour for the children's parents we would never have discovered that, to all intents and purposes, the psychologists whose work lay behind the interventions knew little about mothering behaviour. They focussed on a single set of behaviours related to a single outcome ("cognitive development") with which psychologists had been preoccupied for several decades. So the evaluations would have been entirely misleading.

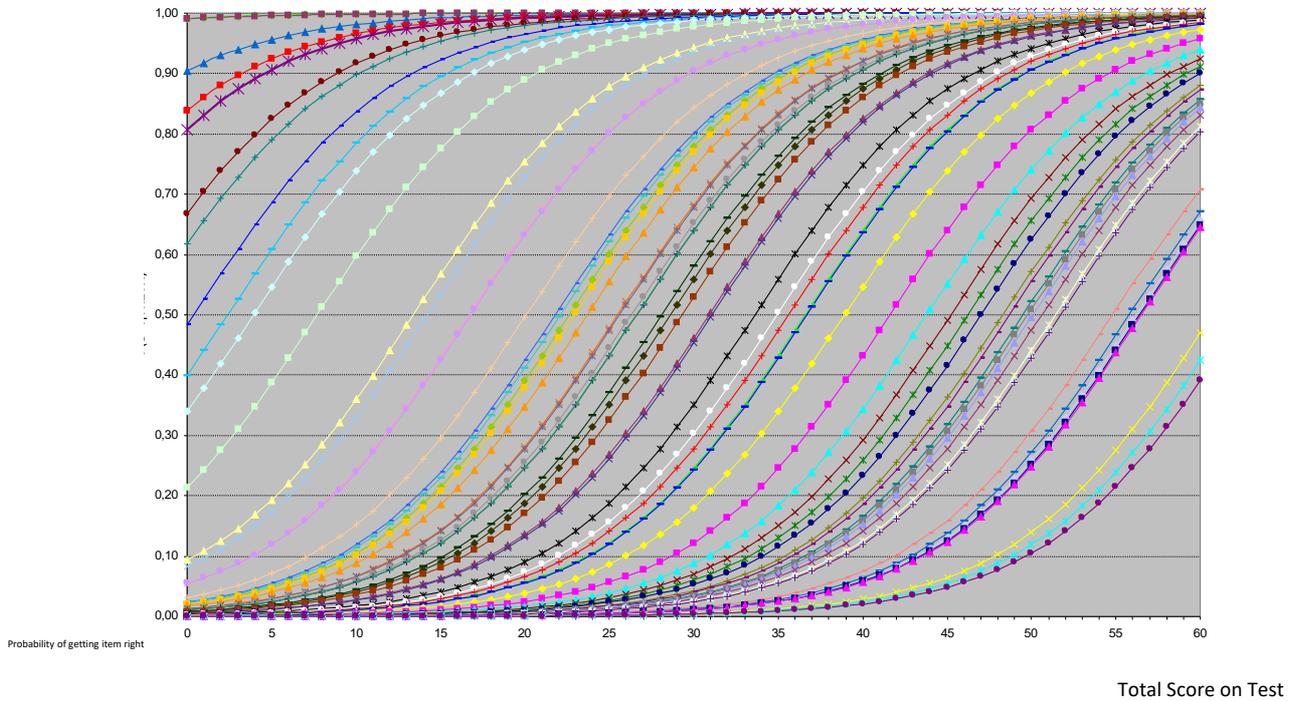
<sup>15</sup> Harris (2006).

<sup>16</sup> See endnote 9.

<sup>17</sup> By that time the RPM had, of course, been administered to millions of people in the school systems and armed forces across the world, including the Soviet Union, and been shown by Eysenck to have greater predictive validity than the entire WOSBY process.

<sup>18</sup> For the sake of completeness, here are those curves from the standardisation of the Standard Progressive Matrices **Plus** test in Romania in 2003.

### ICC Plots for 1-PL SPM (Romania Data)



<sup>19</sup> In the event, of course, not only were billions of people across the world required to take the test (with often dramatic effects on their life chances), tens of thousands of researchers produced misleading DRIP (actually DPIP) papers relating to its internal consistency, relationship to everything under the sun, and differing theoretical interpretations. If you seek evidence of the social impact of a psychological intervention look no further.

<sup>20</sup> Actually, as Hunter (1998) and Schmidt *et al* (2016) show, they have little predictive validity outside the educational system.

<sup>21</sup> Deary *et al* 2008.