Unreasonable Learners

Petition 1423

Existing Research and How We Could Use It

Introductory Summary
The Petition is asking the government to compare the assumptions that underpin present management practice, in the Public Sector, to the findings of the management research that has taken place over the past 60+ years.

In 1960 Douglas McGregor in his book "The Human Side of Enterprise" (X&Y Theory) recognised the basic fundamental assumptions of an organisation, especially about the management of people, determines the methods used and their effectiveness. He referred to these underpinning assumptions as "Theoretical Assumptions." Scholars both before and after McGregor have been making the same point. Deming talked about "The Theory of Knowledge," Peter Senge talked about "Mental Models," others have talked about management paradigms.

The management profession across all sectors in our society has been slow in taking their thinking down to its underpinning assumptions and have, therefore, failed to appreciate the extensive research of the past decades. At present the majority of current management practices are based on theoretical assumptions that have been proven to be flawed. Furthermore we are getting better at applying these flawed assumptions and are unconsciously making the situation worse.

One of the reasons for this denial has been the availability of a simple alternative, which is commonly referred to as "Command and Control." C&C is popular because it does not aspire to have empathy with employees nor have an understanding of complex interdependencies. It also seeks to maintain the unquestioned authority of those at the top of the hierarchy.

For many people, it is the approach that has dominated our working lives and has created cynicism and low expectation of many bureaucracies. However, recent developments in management are now compelling us to challenge our deep seated thinking; albeit, this will not be easy.

Furthermore our culture is action orientated; we like to get things done. But existing research is demanding that first we address how we think. To quote David Bohm - "*thought drives action.*" If we do not change how we think then our actions will simply be a variant of our existing failing methods.

To summarise the existing research has demonstrated that:

- **Motivation** - We are intrinsically motivated. Evidence is now available that shows that motivators such as targets destroy that intrinsic motivation.

- **Interdependence or Systems Thinking** – it is not sufficient to manage just the parts, i.e. people, departments, functions etc., (Silo Thinking) we also need to manage the interdependency and the interrelationship between the parts.
- **Understanding Variability in Organisations/Data (Statistical Process Control - SPC)** – variation exists in all aspect of the work, people, customers, daily productivity etc. In analysing data we can make the situation worse if we misinterpret this variation – a common failing with those who manage from spread sheets.
- **Organisational Learning** – organisations are living entities that have a learning ability that is separate from the learning of the individual.
- **Learning – the Acquisition of Knowledge** – the requirement of a disciplined learning process commonly referred to as "Scientific Method." The need for a disciplined learning culture across the whole of Scotland
- **How the brain works** – In recent years we have significantly increased our knowledge of how the brain works. This is especially relevant when we consider our education system.

The above elements are interdependent. This thinking, when applied, makes a very significant positive difference.

We are asking the government to sanction a study into the theoretical assumptions in use by the Public Sector organisations in Scotland. These underpinning, and often subconscious assumptions, can be derived from an examination of:-

- methods used
- reporting mechanisms and appraisal processes
- data collection and its use
- the use of procedures and regulations
- the auditing and inspection processes
- through simply listening to people
- Etc.

For example if the research finds that individuals and teams are set targets and are appraised relative to those targets – then the organisation is demonstrating a belief that it can motivate people. The next stage would be to compare this belief with the existing research into motivation.

This type of research has been conducted throughout the past decades:

- Douglas McGregor comparing common practice with that proposed by the Scanlon Plan.
- Tom Johnson's research into the culture within Toyota and the Swedish truck maker Scania in comparison with the "Big Three" automakers in America.
- Peter Hunter's research into creating an enabling culture within the oil industry.
- John Seddon's research into the waste and significant opportunities in the UK public sector.
- Edwards Deming's 50+ years of research on the Western management culture

- Kenneth and William Hopper's research into the decline of the Western management profession in the past 40 years.

The above research offers recommendations as to a future course of action. We do not feel that this would be appropriate for this study. **There is no simple solution**. The challenge of moving forward is highly complex and involves the whole of society. We believe that this research should just be the first stage in thinking through how we move Scottish Management into the 21st century.

Following the research our hope is that The Scottish Parliament will lead a national dialogue where we reveal our underpinning assumptions on management and are prepared to open out discussions as to their effectiveness.

We are not aware that this type of research into how our organisations think has been explored elsewhere.

Obviously the investigation team would need to be conducted by personnel who already recognise that what our organisations do is governed by how they think – i.e. their theoretical assumptions. They should also be aware of the extensive research into theoretical assumptions that has been conducted over the past 60 years.

Existing Research in Context of this Petition

Petition Request:
Calling on the Scottish Parliament to urge the Scottish Government to review the considerable research into the thinking that underpins the approach to managing the contribution from staff that has been undertaken over the past decades and compare this with the assumptions that underpins existing management practice.

Two Primary Themes
"*We cannot solve our problems from the same level of __thinking__ that created them.*" – *Albert Einstein*

"*For too long there has been a mismatch between what science knows and what business does*" - *Dan Pink*

Underlying Purpose
The responsibility for modernising our organisational thinking lies not with Politicians nor leaders in Government nor leaders in commercial organisations. It lies with us all - the whole of society.

The hope of this petition is that following the study in the public sector comparing the assumptions in use with researched knowledge, parliament would then lead broad based dialogues, in this context, across our whole society.

Our longer term aim is to facilitate a disciplined learning culture (in the context of management) across the whole of our society. This would have a very profound and positive effect on the effectiveness and well-being of our whole society.

Observing and Gathering Facts is Not Enough
Past research has gone beyond the simple gathering of facts. The Christie Commission and the Alison Hume Fatal Accident Enquiry gathered facts and opened out issues that need to be addressed. But here they stopped, trapping us into searching for solutions from our existing mindset. If the thinking does not change then no real progress is achieved, efforts to secure change may even make the situation worse.

Past Research
The research identified below has been on-going for the past 60+ years.

Motivation
The vast majority of us are intrinsically motivated to do a good job. We want to belong and be part of a team, we will commit to an organisation, we crave the respect of our peers and we enjoy the opportunity to express our creativity and innovative solutions. We are all different.

In contrast extrinsic motivators such as bonuses, targets, qualifications, commission systems, performance appraisal, etc. undermine our intrinsic motivation and reduce our overall motivation. A reason for this finding is that extrinsic motivators are manipulative tools that are used to make the individual do what superiors dictate. They rarely address the complexity of the job in hand.

Extrinsic motivators are useful when the job in hand has no thinking content – such as packing widgets or de-legging dead chickens.

The Research
Elton Mayo founder of the human relations movement, Abraham Maslow and his hierarchy of human needs, Douglas McGregor and his X & Y Theory, Fredrick Hertzberg and his hygiene theory, David McClelland and his Primary Social Motives. Meridth Belbin on Team Roles

For research on the negative effects of extrinsic motivators, see Alfie Kohn's in his book "Punished by Rewards" – and Daniel Pink's book "Drive – The Surprising Truth about What Motivates Us"

For a snap shot of the negative effects of extrinsic motivators see this RSA 11 minute Dan Pink animate - http://www.youtube.com/watch?v=u6XAPnuFjJc

Interdependence or Systems Thinking
Our dominant management culture addresses complex problems by managing the parts, i.e. individual competences, team performance even departmental performance. (Silo thinking) Systems thinking, in contrast, studies the parts **plus** the interdependence and interrelationship between the parts. This interdependence can be simple as that of the various parts in a car or highly complex such as the interrelationship between people, functions, departments, organisations, society etc. They can also be dynamic. The outcome from a system can be getting better or getting worse.

Organisations develop systems to coordinate the efforts of the individual employees.

The significant recognition from the research is that the outcome from a system is, in the main, a function of the design of the system, rather than the diligence and competence of the individuals working in the system. It is estimated that at least 90% of the outcome from a system is a function of the design of the system.

Managers/Leaders work **ON** the system, Staff work **IN** the system

The Research
As a discipline, Systems Thinking has been around from since the Second World War. W Edwards Deming and J M Juran were introducing systems thinking into Japan in the 1950s. There has been a vast array of researchers and thought leaders in this area since then, we just need to enter "systems thinking" into Google to get a glance at the extensive research that is available.

Literature on systems thinking is available from W Edwards Deming in his "The New Economics," From J M Juran in "Planning for Quality" In Tom Johnson's "Profit without Measure," in Barry Oshray's "Seeing Systems," In Peter Senge's "The Fifth Discipline – The Art and Practice of a Learning Organisational," the writings of Russell Ackoff and Jay Forester; Peter Checkland and his Soft Systems Methodology, Jake Chapman in introducing systems thinking in the public sector and John Seddon in his book "Systems Thinking in the Public Sector," plus many many more.

There have also been developments of the systems thinking concepts taking us into consideration of Systems Archetypes, Cybernetics, Human Systems Dynamics, Complex Adaptive Systems, Complexity Theory, Emergence, etc. etc.

Variation
Variation is found in all aspects of any organisation. People vary, customers, suppliers, time taken to carry out a task, length of meetings, are just some examples of the things that can vary. This variation includes those processes that provide measures for management reports. Some of this variation is just the expected ups and downs of a system working as designed. Other variation indicates that something untoward is happening in the process. It is vital that we differentiate between expected and unexpected variation. If we look for causes when we are witnessing expected variation we find we are searching for reasons when there are none. If we miss the occurrence of unexpected variation then we fail to correct a system that is going out of control.

The misinterpretation of variation within the public sector is a major problem – even leading to some staff members losing their jobs through this misinterpretation.

The science that has developed in context of variation goes under the name of Statistical Process Control. The tool to analyse variation is the Control Chart

The other serious aspect of measurement is the mistaken belief that we can measure the majority of the aspects of the public sector. "If you cannot measure you cannot control it" - is a dangerous myth. W Edwards Deming considered this thinking within organisations as one of the deadly diseases of our modern society.

The Research
The father of Statistical Process Control was Walter Shewhart (1891 – 1967), he was the originator of the SPC tool – The Control Charts. It was used extensively during the Second World War and taken to Japan by Deming and Juran in the 1950s. (A visit by the author to Nissan in Japan in 1989 witnessed SPC being used and understood by shop floor personnel) The work was further extended by Donald Wheeler and many others including our own Tim Stapenhurst in his excellent book "Managing Statistical Process Control"

Organisational Learning
From the study of biological, atomic and natural systems we are beginning to see organisations as living entities that have an intelligence and a learning ability (or disability) that is separate from the learning of the individuals within the organisation.
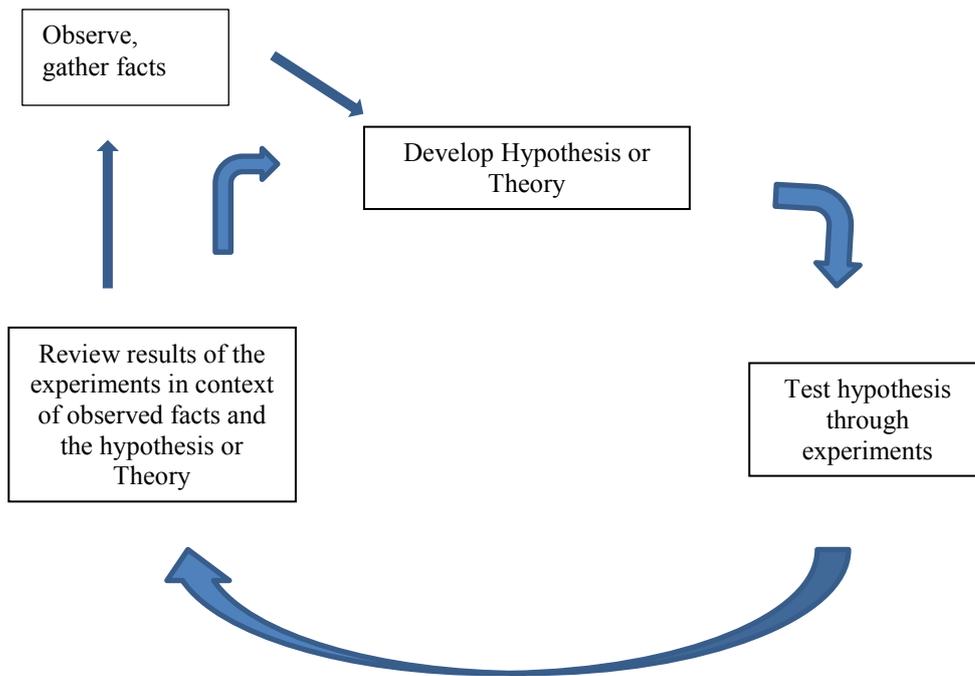
If we tie this recognition back to the research on systems thinking and motivation, we start to think in terms of the organisation learning by continually improving the design of the systems that enable the creativity and innovation of staff.

The Research
Margaret Wheatley in her books "Leadership and the New Sciences" and "A Simpler Way." Peter Senge and his colleagues who have written extensively on this subject and are behind the international – The Society for Organisational Learning (SOL).

Learning – the Acquisition of Knowledge
Throughout the ages we have learnt through the application of a cyclical method often referred to as scientific method. It is through the application of this approach that we have been able to make such remarkable progress in medicine, engineering, physics etc. The call is for "Management" to be equally disciplined and open the door to the transformation of its profession.

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Observe,              →        Develop Hypothesis or
gather facts                   Theory

        ↑        ↱                              ↓

Review results of the
experiments in context         Test hypothesis
of observed facts and          through
the hypothesis or              experiments
Theory

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We learn when the observed facts do not meet our expectations and are prepared to challenge our thinking. We then develop a hypothesis or new theory and then do experiments to put it to the test. We then review the results in context of our hypothesis and the observed facts. If they disprove our hypothesis then it is abandoned and new concepts have to be considered. If, on the other hand, there is an indication that our hypothesis is correct, then we carry on and expand our experiments until such time we have the confidence to state a proven theory.

(Opinion – a not very scientific hypothesis – we do not seem to learn from examples, There have been countless projects that have shown how the application of "researched knowledge" can greatly enhance outcomes. Yet few of our organisations absorb the knowledge and transform how they operate. The hypothesis is that we have to think in terms of the whole of society and for society to be comfortable with thinking at the theoretical assumptions level.)

The Research
Scientific Method is the centuries old methodology through which science has developed its knowledge; Karl Popper (The précis of his work by Bryan McGee); The Structure of Scientific Revolutions by Thomas Kuhn; C I Lewis and W Edwards

Deming's interpretation of his work in his "Theory of Knowledge," Douglas McGregor and his call to be aware of our theoretical assumptions, The PDSA cycle used in ISO 9001 and many other texts; the article Bad Management Theories are Destroying Good Management Practice by Samantra Ghoshal of the London School of Economics.

Action Research: - Argyris, C. Putnam, R. & Smith, D. 1985. Action Science: Concepts, methods and skills for research and intervention; Burns, D. (2007) Systemic Action Research: A Strategy for Whole System Change. Scotland has its own expert in this field – Cathy Sharp.

How the Brain Works

As well as the above it is worth mentioning the recent research into how our brain works. This work has major implications on how we educate our children, especially in the early years. It also opens up consideration of how we train our young people in the most responsible job they will face in the future – that of being parents.

The Research

The Beginners Guide to the Brain – by Elaine Johnson; The Selfish Society by Sue Gerhardt; and much more.

We would also mention the 40 years of research and application of Reuven Feuerstein and his international organisation Centre for the Enhancement of Learning Potential (ICELP) Rather than simply pour knowledge into students, much of which is out of date, they teach the young person how to learn; a skill that remains with them for the rest of their lives. Scotland has its own resident expert in this field in Billy O'Neill and is applying the principals in the Feuerstein project in The Scottish Borders

We could do well to learn from Finland and its education system. It has considerable less testing and has moved away from teacher accountability. It significantly out preforms the UK and the USA – see the web site http://ecologyofeducation.net/wsite/?p=3694 – you can also view the American video clip http://www.youtube.com/watch?v=bxcUEYSh5X4

It Works – Examples of Application

Examples showing dramatic transformation in outcomes have been very very numerous over the past 60 years. The tragedy has been our inability to learn from these examples. An exploration as to why this should be the case is fundamental to this petition.

The Following are a sample books and projects that provide the case studies that show "It Works." The transformation in performance is quite remarkable.
- *Delivering Public Services that Work – by John Seddon*
- *Breaking the Mould – by Peter Hunter*
- *Improvement initiatives within the Public Sector such as STEP at Dundee City Council, Kaizen at Aberdeenshire Council and many more. The improvements secured have been at the work face level and the thinking has not been transferred to the overall organisation*
- *Maverick by Ricardo Semler*

- *Feuerstein projects in the Scottish Borders and others*
- *The employee owned companies are the high profile examples of how when you give people responsibility they respond in a highly positive way. The exemplars are John Lewis Partnership, W L Gore, Arup, Tullis Russell and the Mondragon movement in the Basque region of Spain. The book that develops this theme is "Beyond the Corporation – Humanity at Work" by David Erdal*
- *The Siroli Project*
- *The work of Manfred Hellrigl in Austria.*
- *Etc.*