

How to be wrong

March 2022

A report by Ratio, funded by Sport England
and Lloyds Bank Foundation for England and Wales



What's inside

Introduction	3
The way we learn continually evolves	4
Learning from the past	5
Learning from the future	5
Shifting the focus of learning from 'I' to 'We'	6
Is it all too complex?	6
Learning that embraces the complexity of life	7
Nine features of learning that changes the world	8
How to be wrong	12
How to be right	13
The reading	14

Our Network

Our network emerged from a series of one to one conversations initiated by Jill Baker from the Lloyds Bank Foundation to inform her work on 'place' and 'scale'. Rather than meet one-to-one it seemed more efficient to come together as a group. Michael Little from Ratio, who was involved in several of the initial conversations, was asked to facilitate. To focus the discussions and create a continuity between meetings, Michael distributed book chapters, articles, short videos or podcasts to be consumed prior to each meeting. When visiting experts were in town they were invited to present to the group. After each meeting, [Michael prepared a short note on points of connection in the conversation](#). The network met face to face for around eight months. There was a short hiatus during the first pandemic lockdown, and then the work moved online. A few people who signed up for the network never came to a meeting. We didn't keep a register but there may also be a handful who came to all 20. Most of us attended some of the time.

It had never been the intention to write a report. We came together because we felt we had something to learn, from the reading, from the discussions and from each other's work. But it was clear from the notes we collected along the way that there might be messages worth sharing outside of the network. Michael Little prepared this report. It should be clear from the way the network was assembled and functioned that this is not a formal report that reflects the shared perspectives of a representative group. It is a reflection. It is intended to encourage others to reflect, funders especially, about the future of learning. If the report lands well, it will start a longer and deeper conversation.

The work was funded by the Lloyds Bank Foundation of England and Wales, and Sport England, and organised by Ratio. Alexandra Smith from the Lloyds Bank Foundation organised the network, Aferdita Pacrami and Nicholas Smith, also from the Foundation, advised on the editing and distribution of the report.

The network comprised: Ruth Alleyne, Ed Anderton, Jill Baker, Harriet Ballance, Matt Bell, Jo Blundell, Jonathan Breckon, Amy Buxton-Jennings, Valeria Carrizo, Bonnie Chiu, Arjan Cok, Ngozi Lyn Cole, Pippa Coutts, Emily Cryer, Jo Daniels, Richard Galpin, Bärbel Goedeking, Richard Haigh, Bonnie Hewson, Helen Highley, John Hitchin, Neeta Kanagaratnam, Ali Kaviani, Helen Kersley, Geoff Little, Michael Little, Mary Locke, Avril McIntyre, Gordon McLean, Sarah McLoughlin, Ken Masser, Noel Mathias, Lynn Mumford, Frances Northrop, Chad Oatley, Rachel Parkin, Nerys Parry, Lynne Peabody, Robert Pearce, Chris Perks, Richard Puleston, Toby Quibell, Anna Ramsay, Maria Reader, Carole Reilly, James Richardson, Rebeca Sandu, Laura Seebohm, Ray Shostak, Duncan Shrubsole, Jo Silver, Elizabeth Slade, Sam Thomas, Liz Thompson, Kevin Turner, Asimina Vergou, Denis Wiering, Mike Wilson.

Network members worked at the following organisations. The report reflects the collective thinking of the network members, not the views of individuals or their employers. BD_Collective, Bright Purpose, Bury Council, Carnegie UK Trust, Changing Lives, Corra Foundation, Cripplegate Foundation, Gemeente Rotterdam, Essex County Council, EY Foundation, Future Public, Herriot Watt University, Islington Borough Council, Landscape Institute, Locality, Marks and Spencer, Maternal Health Alliance, Mayday Trust, Nesta, North East Wellbeing, Oxford City Council, New Economics Foundation, Pembroke House Settlement, Plymouth POP, Power to Change, Ratio, Redbridge Borough Council, Renaisi, Rossendale Leisure Trust, Safe Lives, Save the Children, Sport England, The Key, The Social Investment Consultancy, The Unitarians, UK Government Department for Digital, Culture, Media and Sport, Wellcome Trust, WEvolution, WMove.nu.

Introduction

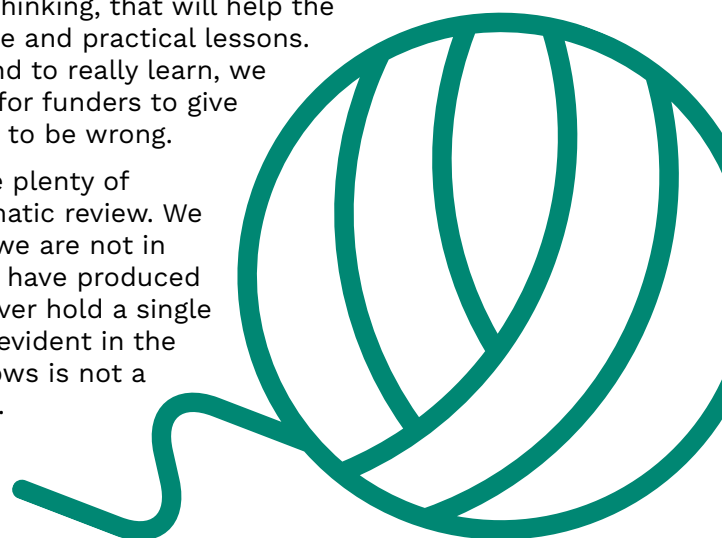
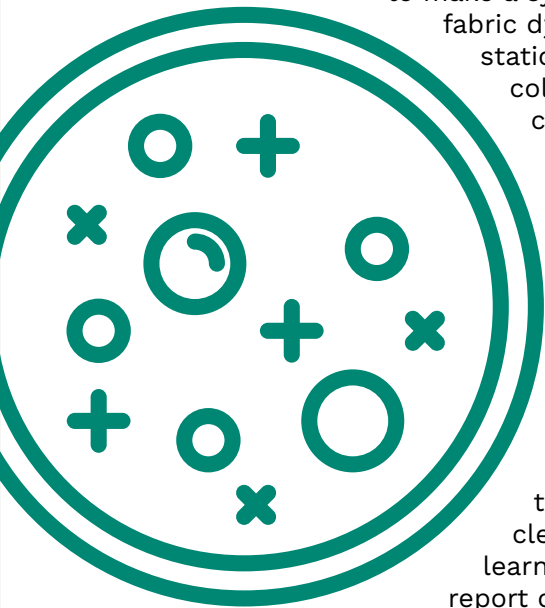
We did not set out to write a report. We came together to learn about how to learn. We read key texts, listened to experts, reflected and wrote down shared lessons in 60 short pieces¹. There was no imperative to go further. But there were common threads in the work that we felt might encourage and challenge others, in particular funders in government, public systems and foundations such as the National Lottery Community Fund and Sport England. These threads make up a story about the continual evolution in the way we learn. About the shifting focus of learning from the 'I' of the individual to the 'We' of community. About how we learn from our mistakes. And, therefore, about how to be wrong.

We came across example after example of error informing human progress. Alexander Fleming went on holiday without cleaning his Petri dishes. His haste was rewarded with mould in the bowls that limited the spread of bacteria. Charles Goodyear mistakenly put a pot of elastic gum and sulphur onto the stove. He was stumbling into the success of mass tyre production. William Perkin set out to make a synthetic cure for malaria but ended up inventing fabric dyes. Banking on the idea that the universe was static, Einstein put a constant into one of his equations. His colleagues put him right with the standard model of modern cosmology that describes an expanding universe.

The aspirations of the foundations, public systems and civil society organisations that employ us are not as exalted as Fleming or Einstein. But they and we are trying to change the world. To reduce domestic violence. To help economically disadvantaged women achieve their economic potential. To facilitate social sector organisations to be more than the sum of their parts. To make participation in exercise and sport routine. And much more.

But a visit to the websites and reports of our employer organisations is not going to yield any example of failure. We seldom report our mistakes. In fact, an outside observer might be forgiven for thinking that we, and the organisations for which we work, are flawless. That clearly isn't true. We set out to learn. We feel more informed. But the learning is hard to describe, and seldom recorded. Instead there is a report on what was done. Who was involved. We make recommendations for policy and practice. We might include a few headline figures, such as how many beneficiaries, and how many did the things we hoped they would do. But we offer little in the way of practical lessons that will save people from making the same mistakes that we made and little in the way of generalisable knowledge, ideas and ways of thinking, that will help the next generation to do a better job. Generalisable knowledge and practical lessons. This is how we came to define the products of learning. And to really learn, we need to both understand how to be wrong and find a way for funders to give themselves and the organisations they support permission to be wrong.

This report tries to achieve these two objectives. There are plenty of reasons to doubt what we have to say. This is not a systematic review. We read what we thought would be interesting. As a network we are not in anyway representative. A change in the membership might have produced another set of observations. In any case, a network can never hold a single point of view. The diversity of perspectives in the group is evident in the blogs and podcasts that accompany this report. What follows is not a conclusive statement. It is the beginning of a conversation.




The way we learn continually evolves

A short article by health scientist and policy maker Don Berwick² describes a career shaped over three eras. The first was dominated by the professions. In the second, from which we are emerging, market forces reshaped measures and accountability structures. Berwick looks forward to a third moral era with greater transparency, civility, and less greed (embracing improvement science and a stronger citizen voice).

Berwick shows how evidence to learn came to be used to hold people and organisations to account. At the beginning the shift was beneficent (a word to which we will return). But it turned nasty. When we got to an article by Stefan Collini³ we found the sentence “accountability is the fig-leaf that covers up ... systematic bullying”.

It is not that the advocates of new public management set out to suppress learning. Their objective was noble. Greater equality of provision. Efficiencies. Better outcomes. Very often these goals were achieved. But frequently there were unintended consequences. Jerry Muller’s book *The Tyranny of Metrics*⁴ provides countless examples. Here’s one. In New York State surgeons were required to report on the proportion of patients who survived 30 days after a coronary bypass. The doctors worked out how to game the system. They stopped operating on patients least likely to survive one month post surgery.



As is evident in the accompanying blogs and podcasts there is a strong, although not universally held emotional reaction against new public management. The complainants in our groups say it encourages technical language that evades shared meaning. It encourages funders to be risk averse, even the foundations that theoretically are set up support activity that is new, and unproven, and therefore more prone to failure. It encourages the abstraction of complex challenges to the point where they become meaningless.

It explains why our reports are strong on what we have done, and how many benefited, but weak on what we have learned, and what we would do differently if we had our time again.

In New York State surgeons were required to report on the proportion of patients who survived 30 days after a coronary bypass. The doctors worked out how to game the system. They stopped operating on patients least likely to survive one month post surgery.

Learning from the past: humility, ethics and truth

What is the antidote? Berwick's call for greater transparency, civility and less greed caused our network to look back and ask what has been lost from past ways of learning?

Take the role of the professions. Their role is rightly subject to strong scrutiny. But a professional ethos encourages humility, the need to continually learn from one another, and to be truthful when things go wrong.

Another example from Jerry Muller. He reports on doctors using a checklist to reduce infection when catheter tubes are inserted in the body. The first results were promising. By sharing their results, good and bad, the doctors were able to improve the checklist and increase the benefit. Had the results been tied to hospital funding or job prospects the professional ethos of humility, learning and truth would have been suppressed. Unimpeded the doctors produced what Stefan Collini calls "unfiddled data," not only for the benefit of their patients, but also for future patients worldwide.

Learning from the future: machines that think like children

We can learn from the past but we must also negotiate future challenges. Machines - computers - are beginning to shape all aspects of life, and learning is no exception. We focused on how machines think and Adam Kucharski's book, *The Perfect Bet*⁵, in which he describes teaching a machine how to play poker. The machine is able to learn from its mistakes. And before too long it beats its maker, Professor Kucharski, game after game.

The key phrase here is 'learn from its mistakes'. When Alan Turing thought about machines that could think, his principal point of reference was a child's mind. Adults look forward. Children look back and ask themselves 'what would I do differently if I had to do that again?'. As do machines that learn like a child. They are applying a theory known as regret minimalisation.

Turing built a machine to help win a war. In 1997 IBM built a machine called Deep Blue to play world chess champion Garry Kasparov. The Russian won the first game. Deep Blue won the second, and the third, and... Deep Blue called on a repository of all the great chess moves. Modern machines, like children, start by learning the rules of the game⁶. They use their mistakes to learn how to minimise future regret, and to win.

We have read much that makes us extremely wary about the unintended consequences of machine learning. But we recognise machines can improve the way we think and learn. Machines ask different questions. They don't have to look for linear associations between variable A and variable B, they can search for pattern across multiple variables. They are not restricted to 'before' and 'after' an intervention, they can learn about everything in between. They learn from diverse data sources, words in reports, conversations in meetings, WhatsApp group chats, videos. Data that require little to no input from the respondent.

Most important, machines do not look for the obvious answers. They embrace the messiness of life. Their lifeblood is being wrong. When playing games they don't try to read the faces of their opponents. They are not emotional. They have no emotions.

Shifting the focus of learning from 'I' to 'We'

Frank Oberklaid addressed the network. He is a paediatrician. He trained to treat children one case at a time. Early in his career he noticed that most patients came from a handful of communities. He asked himself “wouldn't it be better to treat the place than the child?”

There is a new wave of action and research around place. Adam Lent and Jessica Studdert⁷ predict a new 'community paradigm' refocusing policy to make 'place' an agent of social change. Robert Putnam and Shaylyn Romney Garrett's book *The Upswing*⁸ charts the shift in the United States from a focus on the individual 'I' to the collective 'We' in the 1920s, and then back to 'I' in the 1960s.

The shift from 'I' to 'We' is explained not in terms of state action. That came later. The catalyst, according to *The Upswing*, was civil society, and its institutions, such as the settlement movement that created the context for people in economically disadvantaged communities to come together and find new ways of living. For Putnam and Romney Garrett, social progress is the product of pressure from, and ideas developed in, civil society.

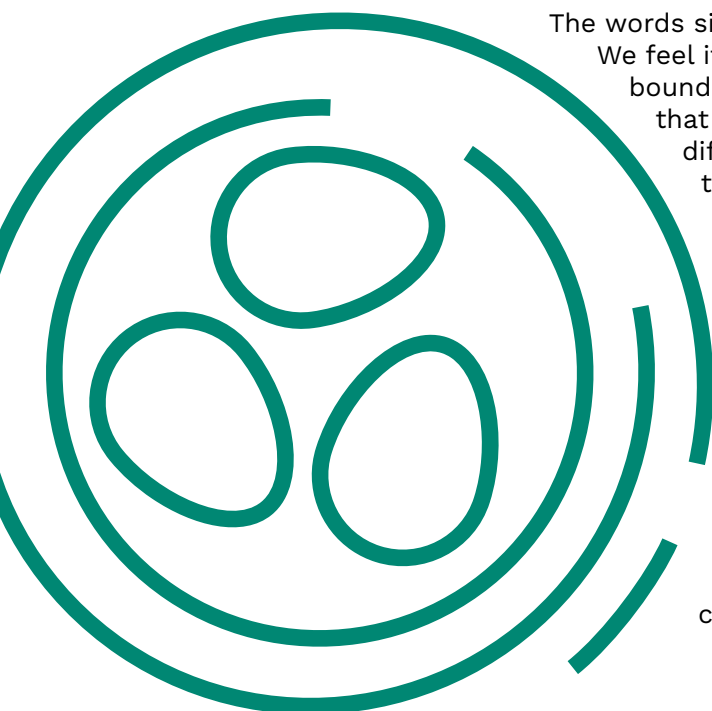
This is grist to the mill for members of our network. Many of us are learning about place, exploring how social processes in a jurisdiction, a city or neighbourhood bear upon the lives of people who live in those places. One of our group leads a team learning how a '21st Century settlement' in south London can presage the next switch from 'I' to 'We'.

Is it all too complex?

Place and civil society and 'we' feel messy, certainly more so treating the problems of individuals one case at a time. Understanding change means understanding the complexity of communities growing and faltering together. We took a lot from a reference in a John Hitchen essay⁹ to Seamus Heaney's poem *The Herbal*¹⁰ that includes the stanzas: “...beyond maps and atlases... woven into and of itself, like a nest”, and “...me in place, and the place in me.”

The words signal the meaning that our species invests in place. We feel it. It is part of our identity. We share not the physical boundaries of the place in which we work, or learn, or live — that is imagined and contested, every neighbour has a slightly different sense of her neighbourhood. It is the idea of place that we share, its contribution to our sense of who we are, and what we can be.

Viewing the world through this frame challenges current monitoring, learning and evaluation practice in at least three ways. It requires us to think about change at the population level not just the individual case level. It demands an analysis of process - how change comes about - as well as impact. And it means we have to think about the process as dynamic, with feedback loops, not as a line of dominoes that predictably fall in order after the first is toppled. To find out how best to address these challenges we started reading case examples of learning about complex issues that have contributed to clear improvements in the human condition.



Learning that embraces the complexity of life

It appears that as a species we are continually learning how to progress. Steven Pinker's book *Enlightenment Now*¹¹ and Gregg Easterbrook's *It's Better Than It Looks*¹² both show that on more or less every indicator, for the great majority of people, it is better to be alive today than in previous generations. There is less violence. Fewer wars. We live longer. There is less hunger. We continue to learn how to make the world a better place.

We drilled down into a series of practical examples. The Bill & Melinda Gates Foundation led a 15 year drive to halve preventable deaths of children around the world. The goal has been achieved.

Abhijit Banerjee and Esther Duflo¹³ are the best known among a group of scientists and policy makers learning how to reduce deep poverty in the world. It too has halved in the last decade.

Five year survival rates for prostate cancer in the U.S. have increased from 68% between 1970 and 1977 to 99% between 2007 and 2013.

Air travel. The fact that millions of bits of metal bolted together can get into the sky seems a miracle to most travellers. To this complexity we can add the actions of the pilots, the air stewards, the passengers, the mechanics, the luggage handlers, air traffic controllers.... Not to mention the weather. Yet, over six decades, the underlying trend for air crash fatalities is down.

The 2008 global economic crisis. Another crash. One that impacted most citizens of the world, with disproportionate effects on the most disadvantaged. Andy Haldane¹⁴ applied what is called a 'system of systems' perspective to the global financial crisis. He employed a microscope to look at the role of the national financial systems and economies. He then used a telescope to examine the global financial and economic system. Then he brought the competing analyses together to inform the prevention of another economic catastrophe.

Air travel. The fact that millions of bits of metal bolted together can get into the sky seems a miracle to most travellers. To this complexity we can add the actions of the pilots, the air stewards, the passengers, the mechanics, the luggage handlers, air traffic controllers.... Not to mention the weather. Yet, over six decades, the underlying trend for air crash fatalities is down.

Nine features of learning that changes the world

As we say at the outset, our work is not in any way systematic. And we are not set up to complete an exhaustive analysis. But there appear to be nine common features in the examples just described.

Error is the lifeblood

Error is a primary source of learning. A patient dies. An aeroplane crashes. Customers ‘run’ on their bank. When the Bill & Melinda Gates Foundation backed a series of innovations to reduce preventable deaths of children, the uptake was risible. Instead of derailing the effort, the failure helped the Foundation and its partners to understand what was needed to achieve the goal. As Siddhartha Mukherjee puts it in *The Emperor of All Maladies*¹⁵, the story of science is not just one of discovery but of the discovery of failure.

Data

Two types of data. First on the overall goal - less people living in deep poverty, more children surviving infancy, fewer deaths from airplane crashes. There can be thousands of people and organisations involved in change processes. Commitment to a shared objective and the metric to measure that objective increases the chances of success.

These data are collected at a population level. It is the big picture that matters.

Second, are the data that inform the learning to achieve the goal. These data are diverse. Different teams will source different types of data at successive stages of learning.

It is not a golden rule. But data to inform learning tend to cover three areas. There is learning about reach: how many people are using an innovation? There is learning about quality: is the innovation being delivered as envisaged in the design process? And there is learning about impact on the overall goal.

Most of the data in the examples described earlier are open source. The numbers can be re-analysed by outsiders to discover new avenues of learning.

Diverse methods

We are using illustrations from both science and learning. Science starts with a question. Learning starts with a decision about how to apply an idea or evidence to a real world situation. (In both cases, there is also a story that predicts the answer to the question or the consequences of the decision: we will come to that later). Note the method follows the question or the decision, not the other way around.

No method trumps another. An experimental trial is no better than a single case study. The test of a method is simply a matter of fit. Does it answer the question or help to discover whether the decision worked out as planned?

This approach generates diversity. Banerjee and Duflo’s work rests on the results of hundreds of experimental trials, household surveys, and the researchers spending a lot of time talking to intended beneficiaries of poverty reduction strategies. Increasingly machines play a role - Andy Haldane’s work to avoid another financial meltdown - and answers can also be found by applying game theory - Lin Ostrom’s work¹⁶ on how people cooperate to optimise scarce resources. Sometimes a single case study is sufficient. There is not one method. There are many.

Ethics, truth and rigour

Successful learning is underpinned by careful scrutiny of ethics. There is respect for the autonomy of participants, to minimise harm. There is clarity about beneficence, (there is that word again, it means being clear about the good that might come from research or innovation). And justice matters. Perhaps the fundamental ethic is to tell the truth. Does that need to be said? Unfortunately yes. More or less everybody entering public service does so with strong ethical values. But the context in which they work can lead them astray. It is not that people lie - although some do. The challenge is more playing along with the game without appraising the rules. Accepting and not testing the findings of rich and powerful organisation. Reporting so much data that the truth is clouded.

The best learning appears to rest on a strong sense of doubt and leads to what philosopher Onora O'Neill¹⁷ calls 'active checking', talking openly about what to do, listening carefully to contrary views, asking how ideas are heard, and how they stand up.

No single learning approach is sufficient to establish the truth. Austin Bradford-Hill¹⁸ established the link between smoking, morbidity and mortality. His work was rooted in humility and doubt. If one viewpoint, as Bradford-Hill called it, suggested a link between smoking and death he looked for another that might point in the opposite direction. And then he would look for another. Even after exhausting all the options Bradford-Hill never claimed to have proof. He would say something like, 'At present I can find no better explanation for what we are seeing'.

Craft

There is a lot of craft in successful learning. Ways of working born from hard won experience. A few illustrations.

It is ideas that endure, not interventions or programmes. 'I and We' is an idea. And like the best ideas it translates from context to context. From the changing culture of a nation state to the outlook of a civil society organisation seeking to support a community.

How do we know whether a new idea works? A simple test is to write it down¹⁹. Another is to explain it in plain terms to someone outside of the learning circle. Another is to reflect on how the idea changes each time it is described, and why.

There is natural variation in the ability to write, describe and reflect.²⁰ Good learning teams find a place for people who know a little about many things, who are prepared to make fine grained predictions about the probable answers to a question or impact of a decision, who are good in a team, listen to reasoned arguments and readily admit their mistakes.

The learning is embedded

Every time a passenger buys a plane ticket, they make a financial contribution to an agency devoted to safer travel. It pays for accident prevention experts to sit alongside pilots in the cockpit. Near misses of plane collisions are routinely reported, as are mechanical faults. Learning how to reduce fatalities is not outsourced to research teams who strive to get their findings read by policy makers or airlines. The learning is embedded in the airline industry; as it is in each of the other examples earlier described.

Intelligent accountability

If learning is rooted in error, who is accountable for that error? When we are learning it belongs neither to an individual nor an organisational. It is managed relationally using numbers that inform but do not dictate judgement. Those responsible for the learning - the scientists, the aviation inspectors, the Bank of England - are part of a mutual accountability.

Onora O'Neill²¹ shows that it is possible to both hold people and organisations to account and learn. She writes about 'intelligent accountability' in which "those who are called to account... give an account of what they have done, and of their successes and failures, to others who have sufficient time and experience to assess the evidence and report on it. Real accountability provides a substantive and knowledgeable independent judgement of an institution's or professional's work." (p. 58).

The World as it is

The people who stand to benefit from the learning are not accorded any special status. They may be extremely poor. They may stand to die before reaching school age. Cancer may have left them with few years to live. But they are treated as rational decision makers. Their decisions are shaped by their context. There is an unspoken assumption by those involved in the learning that they too could make similar decisions if faced with a similar context.

The best learning deals with the world as it is, with all its imperfections, not the world as we would like it to be.

So as well as gradually understanding how to reduce death and strife, our best case examples also inform future innovation by adding to the sum of knowledge about the human condition. The potential for new information or changes in the contexts in which we live to open up the mind to new possibilities²². How changing incentive structures, for example asking people to pay for mosquito nets²³ instead of giving them away for free, recovers agency and leads to better decisions about health. How a sense of trust and belonging, for instance in the ten million or so self-reliant groups in India generates enterprise²⁴. Our human tendency to follow the lead given by others in our community²⁵. This knowledge, much of it generated from learning about marginalised populations, applies to more or less all citizens of the world.

The job is never done

There is no end to the learning. Poverty has halved but it has not been eradicated. Deaths of children have halved, but still too many children die. Progress is the catalyst for new learning.

Tytti Solantaus and Michael Rutter's article²⁶ on the relationship between learning, policy, practice and common sense reveals how one 'truth' opens up a path to another. One of their examples deals with early studies of family life that revealed the negative impact on child development of even minor stresses. Common sense suggested protecting children from stress. But later experiments revealed risk in the early years bolstered health in adulthood. Brief separations from the mother are a part of strong attachment and a preparedness to explore the world. Exposure to dirt and disease builds a healthy body.

As Adam Tooze points out in his recent book *Shutdown*²⁷, COVID-19 has sent economists scrambling to learn from mistakes made in their response to the financial meltdown of 2008. The pandemic is also asking serious questions about how to sustain global reductions in poverty.

It is ideas that endure, not interventions or programmes. 'I and We' is an idea. And like the best ideas it translates from context to context. From the changing culture of a nation state to the outlook of a civil society organisation seeking to support a community.

How to be wrong

Nine characteristics of good learning. Funders will reflect on how many of the nine are absent in the work they support. It is clear that few will claim to make error the lifeblood of the work. How can they? Can foundations set out to be wrong? Can we imagine a public system developing a strategy to really screw up?

The answer is no. But funders can create the conditions to learn from error. The starting point is decisiveness. The protagonists in the stories described earlier are decisive. The scientists start with a question (to which the answer is not known). They then tell a story that describes a possible answer to the question. They then choose a method to find out if the story is correct. (The method generally shows the story, the hypothesis, to be wrong). People trying to change the world make a decision about the catalyst for change. They too tell a story, this time about the how the catalyst will work. And they too apply a method to find out if they are correct. Usually they are also proven wrong. In both cases a repetitive process of trial and error is used to find the winning formula.

The best learners are decisive. Too often we in this network are not. The problem is evident in the treatment of the concept of 'place'. Are we talking about testing an idea in one geography before spreading it to others? Are we talking about tailoring change mechanisms to the conditions that exist in different places? Or is it about collective action by people who live in a place? Too often, we don't decide. We fudge. There is no clear decision about what we will do to achieve change, and no story about how it will happen. And, as a consequence, no learning.

The best learners seem continually to be stepping out of line. There are many mavericks in our network. But we are constrained by formulaic approaches that use data to hold us and our organisations to account. We fail to resist the pull of the orthodox, of logic models, theories of change or the ubiquitous 'engagement of people with lived experience'. An invitation to be decisive and to learn from mistakes is easier to make than act upon. In the real world delivery organisations have to justify their existence and funders have to demonstrate value for money and, for those closest to government, their relevance to the current policy line.

Learning leading to meaningful change in the world - less death, less poverty, less violence - never rests on method, a single programme, or an organisation. None is predicated on changes in systems or government policy. That comes later. Meaningful change rests on ideas. The power of positive contagion²⁸. Allowing change agents to be owned by the people who use them²⁹. Altering incentive structures³⁰. Broadening people's cognitive bandwidth³¹. Understanding the interaction of genes and their environments.³²

Network members are working with ideas like self-reliance, contexts of trust and belonging, gentle commerce across civil society organisations, and the value of connecting over fixing. They have, we think, the potential to shift the world in a better direction. But we shy away from talking and writing about them. We feel safer with the frame of the work - place for example - or the method -listening to people. Why is that?

Is it because ideas cannot be controlled or owned? That they can seldom be traced back to individuals (Fleming was one of dozens of inventors of antimicrobials) or organisations (Goodyear died before a company that took his name was formed to market his invention)? That it is impossible to hold any single person or body accountable for good ideas?

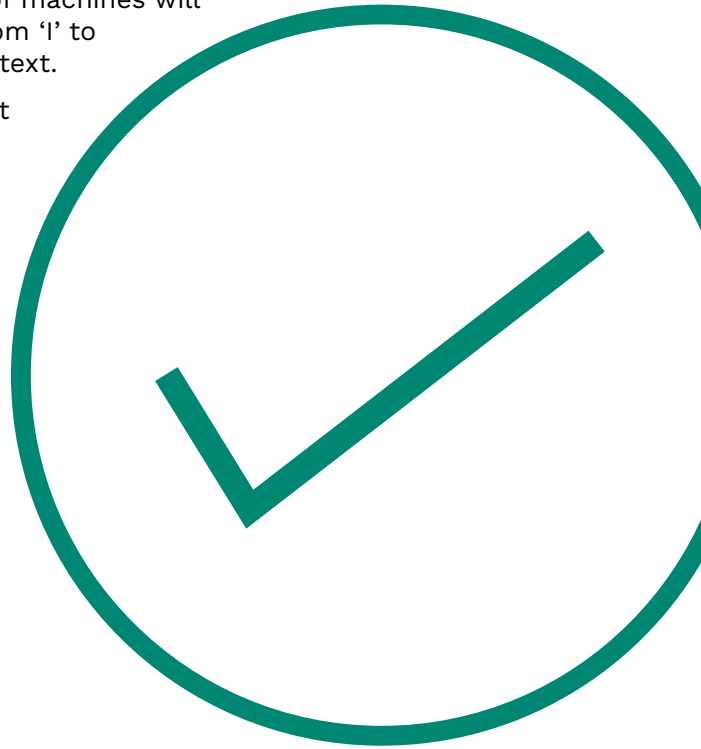
Some of us work for organisations more interested in results than ideas. None of us wants to embarrass ourselves or our employers. The challenge is to find a balance. As we survey the vast amount of literature emerging from funders we are struck by the lack of ideas, learning, and data.



How to be right

We do not have a formula to put this right. We agree with Berwick that the structures for learning are constantly changing. The power of machines will revolutionise the world. The focus of learning is changing from 'I' to 'We', from individual to community, from intervention to context.

We have summarised some of the lessons from learning that has changed the world. Now we need leadership from the funders to shape this third era. It is time to look out not in. To put the same effort into learning as to protecting organisational reputation. To escape the tramlines of existing ways of working, following the path of others who claim to be right. To build contexts that encourage people and partners to fail, and learn from failure. Environments that value divergent voices and disagreement. That share data with others to explore competing explanations. That provide a space for decisiveness, for action that falls short of the goal. That result in ideas that change the world.



We are interested in your feedback on the report, particularly where you think we may be wrong!

Please share your ideas with michael@ratio.org.uk

The best learners are decisive. Too often we in this network are not. The problem is evident in the treatment of the concept of 'place'. Are we talking about testing an idea in one geography before spreading it to others? Are we talking about tailoring change mechanisms to the conditions that exist in different places? Or is it about collective action by people who live in a place? Too often, we don't decide. We fudge. There is no clear decision about what we will do to achieve change, and no story about how it will happen. And, as a consequence, no learning.

The reading

Abhijit Banerjee and Esther Duflo's Good Economics for Hard Times on using the findings of randomised control trials as one element of a comprehensive learning approach to poverty reduction; and on the way in which the economically advantaged parts of the world can learn from the economically disadvantaged parts of the world.

Samuel Barnett together with his wife Henrietta pioneered the settlement movement in England and the United States, encouraging privileged people to settle, learn from and contribute to disadvantaged communities. The network reflected on Barnett's 1883 lecture Settlements of University Men in Great Towns at Pembroke House, a South London settlement that has survived over a century of major social change (and is led by network member Mike Wilson).

John Berger and Jean Mohr's book A Fortunate Man on the craft of the country doctor John Sassall practising in the Forest of Dean the 1960s. Sassall was at the heart of his community, but the health of the nation has improved since Sassall's relational style of working has gone out of fashion.

Don Berwick's two pager in the Journal of the American Medical Association on three eras of learning applied to medicine and health care.

Austin Bradford-Hill's paper in the Proceedings of the Royal Society of Medicine in 1965 on the idea of viewpoints, of seeing the problem from many angles to arrive at a composite picture.

Felton Earls and Maya Carlson's Voice, Choice and Action on the way in which children can be catalysts for change and learning in their communities.

Malcolm Gladwell's New Yorker article on Taleb Nasseem's 'black swan' approach to investment and the role of machine learning.

Edith Hall's book Aristotle's Way on the role of decision making in life and learning, and the contribution of luck.

Friedrich Hayek 1944 book Road to Serfdom on how the world is unknowable, and therefore should be exempted from government sponsored analysis. The book has informed global public policy and governments that collect more and more data.

Adam Kucharski's books A Perfect Bet -on how machines are changing the way we think, learn and bet- and The Rules of Contagion on the history of measuring infection, good and bad.

Peter Medawar Advice to a Young Scientist, written in 1979, and as relevant today as it was then.

Siddhartha Mukherjee's The Emperor of All Maladies on the way in which practical experimentation to extend the lifespan of cancer victims led to generalisable knowledge about the interplay between genes and environment.

Jerry Muller's Tyranny of Metrics on what happens when numbers are taken out of 'finding out' and placed in 'holding people to account' mode, and the review of the book by Stephan Collini in the London Review of Books.

Steven Pinker's Angels of Our Better Nature on the multiple and interacting explanations for the centuries-long and continuing decline in violence in human societies, including the work of sociologist Norbert Elias on the role of manners and etiquette, philosopher Montesquieu on the role of trust in the development of capitalism, cultural theorist Kwame Anthony Appiah on the functions of trust, intelligence researcher James Flynn on the role of cognition and reason, and Elinor Ostrom on how people manage scarce, shared community resources.

Frank Oberklaid from the Centre for Community Child Health at the Royal Melbourne Children's Hospital presented to the network on why 'place' is important to a doctor trained to see patients one case at a time.

Onora O'Neill's A Question of Trust (based on her 2002 Reith Lectures) on the mangling of data in accountability processes from the perspective of a philosopher. Her work is at least a decade ahead of others in the field.

Robert Putnam and Sheylyn Romney Garrett's The Upswing on how advanced economies have switched from a focus of 'I' to one of 'We', and the catalysts for future change.

Everett Rogers' Diffusion of Innovations on contagion, and how as a species we appear to do things because other people do them not only because they might be good or valuable to us.

Geoffrey Rose's Strategy of Preventative Medicine encouraging public systems to focus on those whose lives are typical of the crowd and hold the clue to wider social change.

Michael Rutter and Tytti Solantaus' article in the European Child and Adolescent Psychiatry on how learning begets learning; on how evidence becomes common sense until new evidence comes along to question that sense.

Michael Sandel's The Tyranny of Merit on the way in which elites constrain learning to maintain the status quo.

Philip Tetlock and Dan Gardner's book *Superforecasting* on the characteristics of people who are good predictors, how they think, and how to get the best from them.

Jon Zaff from Boston University presented on how relationships influence educational progress, and the implications for the way we intervene in and learn about schools.

Endnotes

- 1 See <https://ratio.org.uk/category/learning-about-place-and-scale/> and <https://ratio.org.uk/category/how-to-be-wrong/>
- 2 Donald M. Berwick, Era 3 for Medicine and Health Care, *Journal of the American Medical Association*, 315, 13, 1329-1330, 2016. See also: Donald M. Berwick, Derek Feeley, and Saranya Loehrer, Change from the Inside Out, *Journal of the American Medical Association*, 313, 17, 1707-1708, 2015.
- 3 Stefan Collini, Kept alive for thirty days, *London Review of Books*, 40, 21, 8th November 2018.
- 4 Jerry Z. Muller, *The Tyranny of Metrics*, Princeton University Press, 2018.
- 5 Adam Kucharski, *The Perfect Bet: How Science and Math Are Taking the Luck Out of Gambling*, Basic Books, 2016.
- 6 <https://deepmind.com/blog/article/alphazero-shedding-new-light-grand-games-chess-shogi-and-go>
- 7 <https://www.newlocal.org.uk/publications/the-community-paradigm/>
- 8 Robert Putnam and Shaylyn Romney Garrett, *The Upswing: How America came together a century ago and how We can do it again*, Swift Books, 2020.
- 9 https://renaisi.com/wp-content/uploads/2019/11/An-essay-on-the-concept-of-place-in-policy_by-John-Hitch-in_2019.pdf
- 10 Seamus Heaney 'A Herbal' in *Human Chain*, Faber and Faber, 2010.
- 11 Steven Pinker, *Enlightenment Now: The case for reason, science, humanism, and progress*, Viking, 2018.
- 12 Gregg Easterbrook, *It's Better Than It Looks: Reasons for optimism in an age of fear*, Public Affairs, 2018.
- 13 Abhijit Banerjee and Esther Duflo, *Poor Economics: the surprising truth about life on less than \$1 a day*, Penguin, 2012 and *Good Economics for Hard Times: better answers to our biggest problems*, Penguin, 2020.
- 14 <https://www.bankofengland.co.uk/speech/2015/on-microscopes-and-telescopes>
- 15 Siddhartha Mukherjee, *The Emperor of All Maladies: a biography of cancer*, Fourth Estate, 2011.
- 16 Elinor Ostrom, *Governing the Commons: The evolution of institutions for collective action*, Cambridge University Press, 1990.
- 17 Onora O'Neill, *A Question of Trust: The BBC Reith Lectures*, Cambridge University Press, 2002, and <https://www.bbc.co.uk/programmes/p00ghvd8>
- 18 Austin Bradford-Hill, *The Environment and the Disease*, *Proceedings of the Royal Society of Medicine*, 1965.
- 19 <https://ratio.org.uk/11-it-only-becomes-real-when-you-write-it-down/>
- 20 Philip E. Tetlock and Dan Gardner, *Superforecasting: The art and science of prediction*. Random House, 2015.
- 21 Onora O'Neill, *A Question of Trust: The BBC Reith Lectures*, Cambridge University Press, 2002.
- 22 Abhijit Banerjee and Esther Duflo, *Poor Economics: the surprising truth about life on less than \$1 a day*, Penguin, 2012.
- 23 Abhijit Banerjee and Esther Duflo, *Good Economics for Hard Times: better answers to our biggest problems*, Penguin, 2020.
- 24 Aloysius Fernandez, *The Myrada Experience: 50 Years of Learning*, Myrada, 2018.
- 25 Everett Rogers, *The Diffusion of Innovations*, Free Press, 2003 (Fifth Edition).
- 26 Michael Rutter and Tytti Solantaus, Translation gone awry: differences between commonsense and science, *European Child and Adolescent Psychiatry*, 23, 5, 2014.
- 27 Adam Tooze, *Shutdown: How Covid shook the world economy*, Allen Lane, 2021.
- 28 Everett Rogers, *The Diffusion of Innovations*, Free Press, 2003 (Fifth Edition).
- 29 Michael Little, *Achieving Lasting Impact at Scale*, Synthesis of a convening hosted by the Bill and Melinda Gates Foundation, 2011.
- 30 Abhijit Banerjee and Esther Duflo, *Poor Economics: the surprising truth about life on less than \$1 a day*, Penguin, 2012.
- 31 Sendhil Mullainathan and Eldar Shafir, *Scarcity: Why have too little means so much*, Times Books, 2013.
- 32 Siddhartha Mukherjee, *The Emperor of All Maladies: a biography of cancer*, Fourth Estate, 2011.

A report by Ratio, funded by Sport England
and Lloyds Bank Foundation for England and Wales



lloydsbankfoundation.org.uk

 @LBFEW

 /lloydsbankfoundation

Contact Us:

Society Building
8 All Saints Street
London N1 9RL

enquiries@lloydsbankfoundation.org.uk

Registered Charity No. 327114
Company Limited by Guarantee
Registered in England and Wales
Company No. 1971242