The Incomplete Guide TO DELIVERING LEARNING OUTCOMES

Michael Barber and Saad Rizvi
With an introduction from John Fallon
About Pearson
Pearson is the world’s leading learning company.

Our education business combines 150 years of experience in publishing with the latest learning technology and online support. We serve learners of all ages around the globe, employing 45,000 people in more than 70 countries, helping people to learn whatever, whenever and however they choose.

Whether it’s designing qualifications in the UK, supporting colleges in the US, training school leaders in the Middle East or helping students in China learn English, we aim to help people make progress in their lives through learning.

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It is now more than 15 years since we began to ponder whether Pearson should aspire to become the world’s leading education company.

We were first attracted to that goal by both the business opportunity implied by the overwhelming need for quality, affordable education, and the social impact that we might make if we could play some small part in advancing learning. This blend of commercial opportunity and public purpose was not new to Pearson. In its 160-year history, some of its most successful ventures combined strong growth and financial success with an equally strong commitment to a public need and a public trust.

So we decided to make a big bet on that idea. As we set out, it was often the deals that we did and the investments that we made that grabbed the most attention. But that was never the whole story. While those moves certainly helped Pearson get stronger and sped up our ability to make an impact in education, they didn’t tell anyone much about why we were doing it. That was, very simply, to help students learn and teachers teach. That was what most of us got out of bed every morning hoping to achieve.
In the early 2000s, we began to embed technology in our learning programmes. We also made a deliberate shift from selling education products to selling education services. And we began to realise that what we were really after was ‘learning’ – an active choice – not ‘education’, so often a passive infliction. With those changes we became increasingly aware of an enticing opportunity, and a weighty responsibility.

Our online homework and assessment programmes – the ‘MyLabs’ – were beginning to assemble some remarkable data pointing the way towards big improvements for students’ learning and for institutions’ effectiveness. That suggested a much bigger agenda. If we were really serious about our purpose, “to help people make progress in their lives through learning”, then we’d need to be able to measure our achievement, commit to improving this all the time, and hold ourselves accountable for providing effective learning.

“We began to realise that what we were really after was ‘learning’ – an active choice.”
Like many good ideas, it has proved much easier to say than to do. It is notoriously difficult to relate inputs to outcomes in the world of education. As the novelist William Boyd once wrote: “The last thing we learn about ourselves is our effect”. Though he was writing for Penguin and I’m pretty confident he wasn’t writing about Pearson, we began to think hard about how to make an ‘effect’ one of the first things we required of ourselves.

John Fallon, who was then running our international education business, began to put this idea (which we rather inelegantly labelled ‘efficacy’) at the centre of our strategy in global education. Around the same time, I got to know Sir Michael Barber and began to learn about his education work and his work with the UK government and others around the world to ensure that public sector reforms delivered the intended outcomes at scale. And we started to talk about how it could apply to education.

At one point in our conversations about education, Michael leaned forward and asked me: “Marjorie, are you offering me a job?” I was, and the central purpose of that job was to change learning by defining how we could somehow put ‘efficacy’ – through an approach or framework for ensuring students were learning – at the heart of the company.

Now John, Michael and all their colleagues have set a goal of organising the company, its strategy and its day-to-day activities around that idea. It is a bold and brave aspiration. There will be many problems to solve and questions to answer along the way. It will take time and sweaty (!) commitment from Pearson’s 45,000 people and many of its partners and customers.

But what is beyond doubt is that the company is on its way. The campaign, set out in this paper as ‘the path to efficacy’, will be a long and tough one for Pearson. But as I look back at the company that was my home for 16 years, nothing makes me more proud about what it is doing, or more excited about its future, than knowing that this is its quest: to help people improve their lives through learning and to stake the company’s reputation on it.
Pears

earson has a rich history in publishing – an industry which delights in finding, sharing and spreading insight and knowledge. That desire to support learning has defined Pearson’s strategy, driven us to get involved in education at every level and in all sorts of ways, all over the world.

Pearson now operates in virtually every sphere of the education landscape, from schools to higher and professional education; from publishing textbooks to operating entire institutions. We are the world’s leading learning company. With that evolving and more active role in education comes the privilege of insight and a weight of responsibility to prove our impact.

Always important, education is increasingly fundamental to improving people’s lives. Individuals rely on learning to help them to progress and to prosper: it is the most consistent path to improving one’s life and fulfilling dreams. In developing countries, parents make education their third largest household spending item, after food and shelter. Governments understand that an effective education and skills strategy is core to their economic strategy. Education policy features high on voters’ priorities and high on election manifestos.
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The learning challenge is unrelenting in scale (by 2025 the world’s population will have doubled twice in the space of 75 years), and in its increasing complexity. Globally, at least 60 million children remain without access to primary school education, and an estimated quarter of a billion are lacking in basic reading and writing skills. The International Labour Organisation estimates 200 million people are unemployed in 2013.1 The labour market demand for routine tasks has fallen rapidly over the past 50 years, meaning we can no longer rely on memorising and reproducing knowledge acquired from a specific curriculum to support us in our careers.

At Pearson, we are building our strategy around trying to make some impact on those big needs. Today, we primarily provide inputs into the process of education, such as a textbook, an assessment, a learning technology or platform, a course, a qualification, a high-stakes test or professional development for teachers.

We put all of those ‘inputs’ into the hands of an educational leader, an experienced teacher or an enthusiastic student. And, in most cases, for all the investment, expertise and care that go into their creation, that’s where our involvement ends. We are rarely able to predict or measure the learning outcomes.

We are not alone in facing the challenge of relating educational inputs to learning outcomes. It is something that taxes many of the biggest brains around the world. Two years ago, we partnered with the Economist Intelligence Unit (EIU) to create The Learning Curve Data Bank, bringing together an enormous set of internationally-comparable data on education. We asked the EIU to analyse more than 2,500 data points covering 50 countries and two decades, and to draw out the lessons for policymakers and educationalists. It concluded that “the most striking result of the exercise is how few correlations there were. Education remains very much a black box in which inputs are turned into outputs in ways that are difficult to quantify or predict consistently”. 2

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The Incomplete Guide to Delivering Learning Outcomes
INTRODUCTION

But that’s no excuse for us or indeed for anyone else involved in education. We need to learn more. At Pearson, our purpose is to help people make progress in their lives through learning. So we had better be sure that we can demonstrate that progress and measure our impact in a meaningful way.

The unique experiences of the educators and learners that Pearson employees have the privilege to interact with every day are all clues to the factors that really matter in delivering learning outcomes. As the world leader in learning technology, we are starting to see how, properly applied, it has the potential to seriously transform (or ‘disrupt’) the world of education for the better, to enable us to be much more confident both in our ability to personalise learning and in our ability to deliver improved learning outcomes at scale. For example, community colleges in the United States of America that adopted the MyMathLab programme have reported dramatic advances in student performance.

The scope for transformation isn’t restricted to an individual product or service; it can be applied in a systemic, a truly transformational, way. As Michael Fullan argued in his book, Stratosphere, the opportunity is to deliver, around the world, far greater learning outcomes at a much lower total cost. This can be achieved by combining pedagogy (especially how to learn and the opportunities to learn differently) with technology (and the huge, ever-expanding series of data and information it opens up) to engage the whole system. In short, the evidence base is becoming wider, sharper and more actionable all the time.

This transformational opportunity to combine curriculum, assessment and technology to personalise learning on a scale never previously possible has been at the heart of the Pearson strategy for 15 years. The natural next step is to build on the initiative begun by my predecessor Marjorie Scardino to create a global education company focused on ‘efficacy’. Our commitment is to make improving learning outcomes the central driving force of our business, to report on our progress and to use the findings to propel continuous innovation and improvement.

We borrowed the term ‘efficacy’ from healthcare. Just as a pharmacist would talk about relieving a tickly cough rather than listing the ingredients of the

syrup, we want to be able to state the outcome we help to produce, rather than describe the input we provide.

Efficacy might be complex enough in healthcare; in education it is frequently many times more so. The process of learning is a social, dynamic and interactive one. Context – culture, community, language – is central to the learning outcome. We may never be able to ‘prescribe’ an educational process to deliver a desired learning outcome with the same precision as a doctor or a pharmacist. Yet all of us involved in education must take a lesson from that most famous phrase in school reports: we must do better.

As we transform our organisation, and expand and deepen our external partnerships, our aim is to ensure that our actions, our decisions and our investments are driven by a clear sense of how we can make a measurable impact on learning outcomes. That idea will shape the choices we make – what we do, what we stop doing, where we invest and innovate, who we partner with, how we engage with our customers, and how we recruit, develop and reward our people.

To be clear, while we’ve made good progress over the past couple of years, we are only just beginning. We have set out on the path to efficacy and we are now learning to walk confidently. The Incomplete Guide to Delivering Learning Outcomes shares our agenda publicly for the first time.

Whether, as an individual, you are looking to improve your own understanding of learning, or are seeking to change an institution or corporation, we hope you will benefit from what we have learnt and tell us where we could make more progress. We also hope that you will tell us what works and what doesn’t, show us how we can improve our methodology, and work with us to improve education outcomes for learners all over the world.

This guide is ‘incomplete’, a work in progress, a living document – and it will remain so. Our aim is that, five years from now, we will have institutionalised this agenda and that we will, in a rigorous and externally-audited way, be able to report on the progress we have made in improving learner outcomes.

We invite learners and educators to work with us to develop not only a fuller understanding of today’s most pressing learning challenges, but a clearer agenda for how we might collaborate to solve them.
Since we at Pearson set out on our ‘path to efficacy’, we have learnt a tremendous amount about what it means to deliver learning outcomes in various settings. We have also come to understand what it takes to embed an idea right into the heart of a company, and to draw upon and mobilise a huge body of collective knowledge and expertise.

This *Incomplete Guide* is an explanation of the journey, the successes, the failures and the lessons. It is incomplete because it is just one view of the complex world of learning, and we are aware that we have only just begun.

We are writing this guide now partly because we want to be transparent about our approach, but partly also to test our thinking on what is clearly a major issue not just for us but for educators generally. We are excited about what we have learnt and where we are heading, but we also realise that it is only through interaction with the best thinkers and practitioners in the education world that we will ensure that what we do continuously improves and achieves the highest standards.

For this reason, our main purpose in publishing this paper (and inviting people outside Pearson to use and test the framework online) is to invite comment and dialogue from all those who might be interested. We want to develop and enhance the approach itself, but we also want the opportunity to work with others to tackle the barriers to efficacy that the process is helping us to uncover. This is also why are explaining our approach in some detail rather than just sketching an outline.

Together, perhaps we can make this guide complete.
If you listen carefully to a conversation about education, you’ll notice that ‘inputs’ often dominate the dialogue. Those inputs might be how much it costs the taxpayer to fund the school system; the price of getting your child through college; or the research spend lauded by higher education ranking systems around the world. We tend to pay much less attention to the outputs of education.

The world would be very different if every consumer had the ability to assess, and therefore demand, educational outcomes, and every provider—whether an institution or a service provider—was held accountable. The first challenge in our brief to embed efficacy at Pearson was how we could flip the conversation over so that it started with the impact of what we do.
WHAT IS EFFICACY?

DEFINITION

We adopted the term ‘efficacy’ from the pharmaceutical industry, where demonstrating the efficacy of medical interventions through systematic trials is essential. Education research is neither as well-funded nor as advanced as medical research. At the moment, efficacy is an aspiration we intend to work towards, rather than something we have already achieved. However, the fact that we cannot yet achieve it in the pharmaceutical sense doesn’t mean we should not get started right away. On the contrary, we have begun the process now because only by persistently asking the questions that efficacy demands will we systematically build the data, the research capacity and the evidence we will ultimately need.

To get started, we needed a definition. Keeping it simple, we chose to define it as follows: an education product has efficacy if it has “a measurable impact on improving people’s lives through learning”.

Note that, with this definition, it is the learning outcome that we are pursuing. Passing a test or an exam is good, but it is not an end in itself: what we really want to see is the benefit of doing so in someone’s life.

To give an example, if a prospective university student passes an IELTS test in China, that is good. What really matters, though, is that their mastery of English helps them to make progress in their career. Or, as another example, achieving ‘A’ grades at A-level is good, but what really matters is that, as a result, the student can progress to the university course or career of their choice, prepared – as it is phrased in the US debate – for work, college and citizenship.

We realise that by including the ultimate outcome in the definition, we are setting a high bar for what we mean by efficacy. We are inspired by the medical profession, but aim even higher. Often in medicine there are high rates of readmission and recurrence, and some doctors are incentivised by procedures performed rather than outcomes achieved. We want to hold ourselves to

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4 At Pearson, we use the term ‘product’ to describe all that we or an external party produces to sell to customers – content, technology, service and commercial elements which are combined to meet learner and customer needs.

5 International English Language Testing System.
WHAT IS EFFICACY?

A standard based not on the potential of our products, but on the ultimate outcome for the learner, on how an individual’s life is measurably improved.

We realise that the ability to measure efficacy in this sense in a systematic way lies some years in the future. In some cases, it also introduces an element of subjectivity and, potentially, controversy about what represents excellence. We are aware therefore that in the meantime we will often depend on test and exam results, graduation rates and other measures as proxies. In any case, this will allow us to get ever-better at specifying the conditions under which our products and services will deliver outcomes. And we will shape Pearson’s global research programme and work in open partnership with others so that we don’t lose sight of this bolder vision.

THE FACTORS OF EFFICACY

Although we are still at the early stages, it is worth briefly outlining what we might call the factors of efficacy – the elements that make up successful learning and need to be refined to improve efficacy.

There seem to be three factors at play when learning is supposed to happen:

1. The student(s) with his/her/their incumbent level of motivation.
2. The teacher and/or the technology with his/her/its capacity to make an impact.
3. The interaction or relationship between them.

Furthermore, learning will increase if the student (and perhaps the teacher) invests more time in it. This is what education researchers call ‘time on task’.

If this mix is right, learning should happen. To maximise this impact, we, like other educators, need to be conscious of the evidence. For example, in the exceptional work of John Hattie from the University of Melbourne, there is plenty of deep insight into what teacher capacity looks like and how it can be improved.

The role of leaders, of a school, college, university or system, is then to create the conditions in which these factors can be combined successfully so that learning flourishes. We know a lot about how leaders can do that, at the school level and the system level – for example through OECD-PISA.

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6 The Programme for International Student Assessment, from the Organisation for Economic Co-operation and Development.
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and other international benchmarking. For Pearson, the key is to understand how our various products, whether at the student, classroom, institution or system level, can help to bring about the combination of factors that ensure learning flourishes.

Some of our products, a data system for example, might have a broad effect. Others will be narrow and specific. From an efficacy perspective, it is clear we will need to be in constant dialogue with learners and customers about the context in which our products will be used and the conditions under which they work best.

THE EFFICACY FRAMEWORK

The idea of efficacy had lots of support across Pearson. Our challenge was to consider what it implied for product teams and the way we work, and consider how to make the efficacy concept operational and practical. How could we make the idea of efficacy relevant and actionable for every product owner in Pearson? In the absence of a neat mathematical formula that spat out numbers, how could we benchmark products in our portfolio?

The overarching idea was that our investments should be driven towards those products which deliver the highest impact for learners while sustaining us financially so we can continue to invest in new models and improvements.

Had every product owner methodically collected data on learner outcomes over time, we would have been well placed to do this. We had some pioneers; indeed there were some great examples of products that could demonstrate their impact on learner outcomes, and there was some strong efficacy research which was beginning to contribute to product design, but the impact of this work was not yet systematic.

Furthermore, for a review of a product’s efficacy to be truly valuable, it needed to be forward-looking, setting an agenda for improving the product, rather than simply being a post-hoc evaluation.

In designing Pearson’s Efficacy Framework, we drew on work Michael had done in government as head of the Prime Minister’s Delivery Unit in No. 10 Downing Street. Then, the challenge had been not just to assess whether a domestic policy programme was delivering, but to predict whether it would deliver in the future.
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Similarly with efficacy, we wanted to be able to review a product with the team and agree what it would take to ensure efficacy in future.

Crucially, also, we wanted to be able to compare the likely future efficacy of entirely different products. Just as in Downing Street Michael had wanted to be able to compare the likely future success of entirely different programmes — everything from railway performance to health service waiting times — we wanted a method to review maths programmes for eight year olds, online English learning for adults, vocational assessments for all ages, and more.

The approach needed three characteristics. It had to:

1. Be constructive and practical.
2. Be forward-looking.
3. Enable comparison.

This led us away from searching for the perfect dataset. Yes, every product would ultimately need data to enable its owners to measure impact and progress, but there could never be a single dataset that would allow us to, for example, compare young children’s progress in reading with graduation rates from a university.

We therefore designed our Efficacy Framework which, instead of imposing a model, asked a set of questions which, once answered by a product team, would set the product on the path to efficacy. The key, we believed, was for the framework to be practical and comprehensive, flexible and consistent.

We’ll come to the process shortly, but first, pictured overleaf, is the framework itself.

The framework is in four sections. The idea is that, for each of the four sections, a judgement is reached on a four-point scale — Green, Amber-Green, Amber-Red and Red. These four judgements can then be combined into a single overall judgement on the likely efficacy of the product. We should emphasise at the outset that the framework does not claim to be scientific: its basis is informed human judgement. Crucially, though, it is provocative and
## What is Efficacy?

### The Efficacy Framework

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<tr>
<th>Criteria</th>
<th>Rating</th>
<th>Rationale</th>
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<tbody>
<tr>
<td><strong>Outcomes</strong></td>
<td></td>
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<tr>
<td>Intended outcomes</td>
<td><img src="#" alt="Green" /></td>
<td>Requires small number of minor actions.</td>
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<tr>
<td>Overall design</td>
<td><img src="#" alt="Amber/green" /></td>
<td>Requires some actions (some urgent and some non-urgent).</td>
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<tr>
<td>Value for money</td>
<td><img src="#" alt="Amber/red" /></td>
<td>Requires large number of urgent actions.</td>
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<td><strong>Evidence</strong></td>
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<tr>
<td>Comprehensiveness of evidence</td>
<td><img src="#" alt="Green" /></td>
<td>Requires small number of minor actions.</td>
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<td>Quality of evidence</td>
<td><img src="#" alt="Amber/green" /></td>
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<td>Application of evidence</td>
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<td>Requires large number of urgent actions.</td>
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<td><strong>Planning and Implementation</strong></td>
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<td>Action plan</td>
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<td>Requires small number of minor actions.</td>
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<td>Governance</td>
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<td>Monitoring and reporting</td>
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<td><strong>Capacity to Deliver</strong></td>
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<td>Pearson capacity and culture</td>
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<td>Customer capacity and culture</td>
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<td>Stakeholder relationships</td>
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<td>Requires large number of urgent actions.</td>
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</tbody>
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### Key
- Green: Requires small number of minor actions.
- Amber/green: Requires some actions (some urgent and some non-urgent).
- Amber/red: Requires large number of urgent actions.
- Red: Highly problematic requiring substantial number of urgent actions.
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challenging. It asks difficult questions; it demands that people think deeply about what they do and why.

Each of the four sections of the framework is intended to get at a specific vital angle of the product’s efficacy. The brief summary is as follows:

Section 1: The Efficacy Goals  What are you trying to do?

Section 2: The Evidence  Why should we believe you?

Section 3: The Plan  How do you intend to achieve your efficacy goals?

Section 4: Capacity  Do you, and those you depend on, have the knowledge, skills and relationships to deliver the efficacy goals?

The idea is that if a product team can answer the questions convincingly, then its product is likely to either already be demonstrating efficacy, or at least to be on the path to efficacy. We emphasise this phrase, ‘the path to efficacy’. We know that scientifically demonstrating efficacy for each of our products lies, in most cases, some way into the future, but we believe that right now we can put them all on the path to efficacy.

Now we can look at each section of the framework in a little more detail.

GOALS

The first section is concerned with goals or objectives. Clearly, in any business, there will be goals and targets for sales, revenue and profit. Pearson is no exception. Alongside this, the Efficacy Framework also asks for different goals – learner outcomes. What learner outcomes is the product designed to deliver, and under what circumstances? How many learners are intended to benefit and to what extent? How will progress towards these goals be measured?

In the first year or so of applying the Efficacy Framework, this section had two significant consequences. First, because it was applied to existing products where these questions had in most cases not previously been asked in a systematic way, it was very challenging for our product teams. Second, though,
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Product teams felt inspired. The challenge connected them to their core purpose. Often they had been attracted to Pearson because it is an education company, and to education because it has the capacity to transform people’s lives. The Efficacy Framework now invited them to connect their daily working life to their deeply-held beliefs. The company asked them not only to focus on education, but also to define the difference they wanted to make to learners. We stated that the Efficacy Review was not an audit, but equally we could have described it as ‘an audit that inspires’, which most people would be tempted to dismiss as a contradiction in terms.

EVIDENCE

Having asked a product team to define its efficacy goals, the second part of the framework asks for evidence that those goals can be achieved. There is a wide range of evidence that might be considered. Close to the product (and the customer), there may be data specific to the product which could provide insight into its impact on learner outcomes. Beyond that, there may be research elsewhere in our company either into the product itself or into products of a similar nature, or into one aspect of the product. For example, one strand of our research examines eye-tracking – how people’s eyes move around a screen and what difference it makes where icons appear. This could inform many of our products.

A third area of research that could be relevant to a product is the vast array of education research undertaken in universities and research centres. While it is generally accepted that education research is neither as extensive nor always of the same high quality as research in the health field, there is nevertheless extensive research with clear, replicable findings on many issues, from the micro (how children learn) to the macro (how education systems work effectively). We have an obligation to make the best use we can of the research available and this is what the Efficacy Framework demands.

This section of the framework causes people to consider this mass of evidence and think about its implications for their product. Because, in effect, during this first year or so of the efficacy drive we have been asking efficacy questions of existing, often long-standing products, the evidence section makes people think about how they could alter or refine their product better to achieve their
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learning outcome goals. As it becomes embedded in the way Pearson operates, efficacy will become ‘designed in’ at the front end, which in turn will require that the available evidence becomes central to our innovation and product development processes.

For this reason, in parallel with efficacy, we are redesigning Pearson’s research strategy to ensure that it is global in reach and focused on the biggest unanswered questions facing education. Part of the strategy is to reshape and make available our own research, both internally and externally; part is about building open research partnerships with leading institutions to do new primary research; and part is about commissioning summaries of research by world-leading experts and publishing both our and their findings in a compelling and easily accessible way.

In summary, the drive for efficacy is creating a demand across Pearson for insight from both high-quality, real-time data and more systematic longitudinal research, and the new research strategy should supply it. Both should strengthen the company’s capacity to innovate and design products which deliver measurable learner outcomes.

PLANNING

However clear the goals might be and however strong the evidence base, a product won’t deliver learner outcomes unless there is a plan for its development, marketing, delivery and application by educators.

Business planning is, of course, central to any successful product. Generally, product owners and teams are experienced and successful in this respect. The shift required by efficacy, though, is to ensure that the plan is refined or remodelled so that, in addition to delivering commercial goals, it also delivers the efficacy goals. While at a general level the two will often be consistent and, indeed, mutually reinforcing, within a given timeframe there may be trade-offs. For example, one product team realised that, in order to deliver its efficacy goals, the teacher training associated with the product would need to be significantly enhanced. Commercially, it could deliver sales, revenue and profit targets – it was a popular product – but the evidence suggested that although teachers liked it, they were often not using it in a way that would deliver the intended outcomes for students. Thus the demands of efficacy required a change of plan.
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Again, once efficacy is designed in, these kinds of changes in plan will become unnecessary. In the meantime, though, we expect the process to prompt significant changes of plan which will enhance the efficacy of products.

Successful execution of the plan requires two other features: governance, and monitoring and reporting. However good a plan is at the outset, in a rapidly-changing world, implementation rarely goes exactly ‘according to plan’. Inevitably, therefore, the plan needs to be updated or refined – and occasionally a complete ‘pivot’ will be required.

To make effective decisions as the plan unfolds requires governance – it has to be clear who decides what and when – and an effective monitoring and reporting system so that the decision-makers have reliable, clear, close to real-time feedback on implementation to inform their deliberations. It sounds simple, and conceptually it is, but in large, complex organisations – especially those that have grown by acquisition – ensuring this happens in practice is not always straightforward. The emphasis on governance as well as monitoring and reporting is a crucial element of the framework.

CAPACITY

Setting goals based as far as possible on evidence and making a plan are essential steps towards delivering efficacy, but unless all those involved have the capacity to put the plan into practice, success will be impossible.

The capacity to deliver has three distinct but related aspects. The first is the capacity of the Pearson team responsible for the product. Clearly the product team needs the knowledge, understanding and capability to oversee the production, marketing and distribution of the product. They also need the right relationships inside Pearson with the managers and/or other parts of the business – technology, for example – on whom they might be dependent. If any of this is awry, efficacy will be at risk.

For almost all education-related products, internal capacity is not enough to ensure efficacy. The capacity of the customer matters as much, perhaps more. Suppose the product is a direct-to-customer online approach to learning English. However brilliantly designed and executed, the product itself will
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not enable the customer to learn English if the customer doesn’t follow the accompanying advice – spending the required time on task, for example.

To take another example, consider online learning materials for teaching Grade 5 mathematics, which have been sold to a school district and distributed by the district to all its elementary schools. Again, however well the product is designed, it will not deliver outcomes for students unless the district officials and, in particular, the teachers responsible have the time, skills and commitment to make it happen. In fact, all the evidence with interventions such as these suggests that ‘faithful implementation’ or ‘fidelity’ to the model is essential.

In the past, a company might have rationalised as follows: “We designed the product perfectly well; it’s not our fault if the customer fails to use it as we intended…” You can almost hear people reaching for the cliché, “You can take a horse to water but you can’t make it drink”.

In the era of efficacy, this is not acceptable. If we promise efficacy, we have to deliver efficacy – that is what trust requires. Equally, it is what our mission requires. Our goal, after all, is to transform education outcomes, not to generate revenue and profit by selling products that might have transformed outcomes but didn’t.

In short, customer capacity, whether the customer is the student (as in the first example) or an intermediary (as in the second) is fundamental.

The Efficacy Framework therefore requires business leaders to address this directly. Over time, we might expect this to lead to radical changes in business strategy. For example, if customer capacity is so vital to efficacy, product owners might need to move from the one-off sale of a product to creating a partnership with a customer. The shifts from print to digital and from product to service point in this direction too. A book lends itself to the one-off sale and can only be updated every few years; online materials by contrast can be continuously updated, and the most effective way to do so is by ensuring continuous feedback from the customers or students using them.
Business strategy might change still more radically. If the materials can only be used effectively by teachers who change their practice, maybe the professional development to make that possible should not be an optional extra, but instead come bundled together with the materials themselves.

All of this, incidentally, has implications for our sales strategy and the kind of salespeople the company needs. It is increasingly the case that knowing the product is not enough; a salesperson needs to be informed about how the product works in different contexts and under which circumstances. In short, they need to be knowledgeable and in continuous dialogue with customers about teaching, learning and education systems. Furthermore, as we become more confident of delivering efficacy, we might offer the customer the choice of purchasing not the product, but the outcome.

The final aspect of the capacity to deliver builds on this point and requires examination of the relationships between the product team, the customer and the wider range of stakeholders on whom success might depend. For example, to ensure the efficacy of a programme of teacher development across a Middle Eastern country will require good relationships not just with the government (the customer) and the teachers (the intended beneficiaries), but also with a wide range of local administrators, maybe a teacher association and an inspection agency. If, for example, the teacher development programme was enabling teachers to use the latest, evidence-based pedagogical techniques but the inspectorate used an old-fashioned or outdated model of teaching to make its judgements, then the teacher development programme would be unlikely to change practice and therefore outcomes.

The Efficacy Framework is designed to ask a series of questions which require product teams to think through the logic of what it takes to secure their intended outcomes. However conceptually simple it may appear to be, the practice of delivering efficacy is a constant challenge.
CONCLUSION

This chapter has examined how we define efficacy and, crucially, how we – through the Efficacy Framework – make it operational by asking business leaders and product teams a series of questions implied by the concept.

No one is more conscious than we are that this process alone does not deliver efficacy. We believe, however, that by introducing the framework we have put efficacy, and the demand for it, firmly on the agenda of every business leader in the company. We have also created a powerful vehicle for engaging with our customers about how efficacy can be achieved. As a result, we have set off along the path to efficacy. It may be a long walk, but we are in good shape for the challenge ahead.
The previous chapter looked at the definition of efficacy and the framework we developed to put it on the agenda of leaders from all over the business. This chapter examines in more detail how we have gone about building efficacy into the way Pearson works.

The first section (Step 1) looks at what we did during 2012 and the first half of 2013, first to pilot efficacy and then to establish it as a priority for the company. The next section (Step 2), examines what we are doing to embed efficacy into the core processes of the company. The final section (Step 3) looks ahead to how we intend to make an irreversible culture of efficacy integral to Pearson’s new strategy and organisation.
STEP 1
CONDUCTING EFFICACY REVIEWS

Having designed the Efficacy Framework, we needed to develop a process for piloting it with business leaders and then encouraging its adoption across swathes of the company.

In the initial stages of this work, while there was commitment to efficacy in principle, there were questions about what could be done in practice. The Efficacy Framework soon won advocates, but it also provoked further scepticism. Would it be just another audit? How would product managers react to their products being judged on a four-point scale? How would it feel to be marked ‘Red’? The shift to starting the conversation with outcomes was a steep learning curve for some employees who were used to describing their products and services almost exclusively in terms of their input characteristics.

This scepticism was entirely understandable. Moreover, in a phase of challenging global market conditions, we were determined to avoid creating a new and expensive top-down process. In this era of austerity, we wanted to ensure that the process was economical in the demands it made on time and resources. Finally, the process had to be as un-bureaucratic as possible.

We decided, therefore, to develop efficacy as an improvisation – we would find business leaders who were interested in piloting the framework, find colleagues around the company who would like to learn about efficacy and become part of a movement and then, with the enthusiasm of these supporters, build interest and intrigue in its benefits across the rest of the organisation. Leaders were encouraging and enabling, committing to a systematic company-wide programme once we had proved the concept. Meanwhile, through this improvised approach, we were able to adapt and refine our methods as we went.

Our approach was in fact a good example of Jugaad innovation, a concept that happened to become fashionable at the same time. In the book *Jugaad Innovation* by Navi Radjou, Jaideep Prabhu and Simone Ahuja, the concept is described as follows: “Jugaad is a colloquial Hindi word that roughly translates as ‘an innovative fix; an improvised solution born from ingenuity’.”
They add: “Jugaad is, quite simply, a unique way of thinking and acting in response to challenges; it is the gutsy art of spotting opportunities in … adverse circumstances and resourcefully improvising solutions… it is about doing more with less”.7

(Saad would wish to add that Jugaad is also an Urdu word.) In any case, we used this approach to create a movement for efficacy inside the company. The first step was to take the Efficacy Framework and see whether we could design a vibrant, interactive process for applying it to a product.

THE EFFICACY REVIEW

From the outset, we wanted an Efficacy Review to be a partnership between ourselves and a product team. After all, the ultimate objectives were not the review itself, nor the report of the review: they were to increase the efficacy of the product and to increase the passion of the product team for constantly improving efficacy.

With this in mind, we made it clear from the outset that reviews would be collaborative, that they would be efficient, that they would not demand a lot of time (or paper) from very busy people, and above all that they would be action-orientated.

From the start, an Efficacy Review had three phases – the setup, the review itself and then, crucially, the implementation phase. (See Review Process, overleaf.)

The point of the setup phase was to ensure that the product leader and team understood the purposes of the review, knew what to expect and were ready to make the time commitment. It also allowed for logistics to be put in place, such as scheduling the workshops and identifying the interviewees.

Prior to the review phase, the review team – two or three people from our efficacy team, or other trained reviewers – would read their way into the product, relying only on existing documentation. We were determined not to ask for any new writing to be done or forms to be filled out, thus minimising the workload.

The review phase itself had three main activities. First, a workshop, facilitated by the leader of the review team, aimed at enabling the product team to score itself on each aspect of the framework. While the facilitator chipped in with clarification of the framework and observations on what ‘Amber-Red’ or ‘Amber-Green’ looked like, overwhelmingly the dialogue was among the members of the product team and focused on the educational impact of the product in question. Usually about six or eight members of the product team would be present but, reflecting afterwards, the product team leaders often wished more members had attended. This was because the Efficacy Review workshop was often the first time they had collectively discussed the impact of their product on learner outcomes; the first time they had considered the learning goals they’d like to achieve; the first time they had considered how to strengthen the evidence base for their product and the first time they had thought about how they could strengthen the capacity of their customers to use the product in ways that would drive efficacy.

In short, the conversation was simultaneously challenging and inspiring. The product team invariably found themselves connecting strongly with their underlying motivation for joining Pearson in the first place – they believed in the power of education to change people’s lives. Now they were discussing what it would take for their product to do exactly that. They weren’t unrealistic – sales and revenue targets were still relevant and important – but supposing you could hit them and enhance learner outcomes? Or better still, supposing you could hit them by enhancing learner outcomes?
The facilitator needed only to ensure a confidential, collaborative atmosphere – so people felt able to speak their minds – and to chivvy and cajole so that the exercise was completed in about three hours, and the magic would occur.

For the first dozen or so Efficacy Reviews, Michael was either directly involved or spoke to the product leader part way through the review. There were often ways we could improve the process at a level of detail – that is the Jugaad approach – but without fail the product team leaders spoke of the motivational benefits of the self-evaluation workshop.

After the workshop, the review team undertook a series of interviews with individual product team members, with relevant managers in Pearson and, crucially, with customers and users. They assembled the insights they gained from these interviews, compared them to the output of the self-evaluation workshop and the reading they had done in advance, and then reached their own judgements as a review team on what the colours should be on the Efficacy Framework.

In the final act of the review, the review team and the product team held a second workshop in which they debated and sought to reach agreement on the colour judgements in the Efficacy Framework. Again, for the first several reviews, Michael chaired these meetings, partly to see how they were going, and partly to bring impartial judgement to the moderation process. There are two basic facts here – the product team knows much more about the products, while the review team knows much more about the efficacy process and about the judgements reached on the framework on other products, so they are better placed to set standards. Almost always, agreement was reached on colour: where it wasn’t, Michael reserved the right to decide, with the offer that the disagreement would be acknowledged in the report.

More important than reaching these judgements was the discussion about what to do next. The idea of the Efficacy Framework and the Efficacy Review was that they would focus teams on what was required to achieve efficacy, enable them to see where they were and how they compared in achieving efficacy, but above all to decide what they could do to improve efficacy. To have an immediate effect, we set out actions for one month, three months and beyond, specifying the action, the person responsible and the deadline.
Once this exercise was over, the review team would write a brief report that
set out the colour judgements reached, the rationale for the judgements and
the actions planned and agreed. This report was then agreed with the product
team and, with their permission, shared with relevant line management.

We were able to calculate that the process up to this point required roughly
five and a half hours per person on average, with considerably more for the
review team and considerably less for most of the product team. Given the
learning, development and planned action that resulted from the process, this
seemed reasonable.

Of course the acid test was whether the team did anything differently as a
result. Would the teams then take the implementation phase seriously?
What we found was that often, initially, the will was there, but the difficulty
of changing the status quo, combined with the pressures of the daily grind and
of delivering sales, soon came to dominate again unless the product leader and
their line managers really drove the action. We set three-month and six-month
check-ins, but alone these were not enough to ensure success.

This could be seen as evidence of the limitations of the Jugaad approach we took
early on. Efficacy often requires a significant change in team culture or capacity,
which demands sustained leadership attention and focus in order to succeed.

BUILDING MOMENTUM

The first few pilot Efficacy Reviews told us firmly that we were onto something;
that a common language about learning, outcomes and efficacy was possible;
that the Efficacy Framework was practical and useful and asked the important
questions; and that the Efficacy Review process was challenging and inspiring
rather than bureaucratic and box-ticking.

To take efficacy across the company, though, we needed something else: a
movement, a growing body of people within the company who understood
efficacy, the framework and the review process and who would be willing to
join Efficacy Review teams.

In November 2011, we advertised a two-day staff efficacy training programme
to be held in London in January 2012. We asked senior leaders to promote it
and suggest people to attend, but we were determined that the training should
be available to all, regardless of their place in the hierarchy. We asked only that
those interested write us 150 words about why they were interested. In the
world of efficacy, hierarchy means nothing – it is a question of mastering a body
of knowledge and skill. About 60 people from all levels came to the sessions,
which involved not just learning about efficacy, but also the skills of conducting
a review – interviewing, questioning, negotiating, challenging, reaching
judgements – skills of generic value in work and life, but also skills specific to
achieving that combination of challenge and inspiration which we aim to sustain.

We had the start of our efficacy community, and we steadily extended it
over the following months by repeating the training in Boston in July 2012
and running efficacy training sessions and initial reviews in Pearson’s major
locations, including South Africa, China and Brazil. John Fallon, then Chief
Executive of Pearson International, was an early enthusiast and advocate.

By the middle of 2012, we had run enough reviews around the company and
established a sufficient community of interest to ask all the regional leaders to
do what the UK, Asia-Pacific and South Africa had done, which was to appoint
a dedicated efficacy leader for the region who, initially with our help, and soon
without, could conduct a series of Efficacy Reviews. By the summer of 2012,
we were able to report to the Pearson Management Committee on how the
efficacy agenda was developing and what we’d learnt. We set out ten lessons
which became the agenda for the following 12 months. As you will see, they
were a strong influence on the Ten Lessons at the end of this paper.

<table>
<thead>
<tr>
<th></th>
<th>Clear efficacy goals</th>
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<th>Customer-oriented sales force</th>
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<tbody>
<tr>
<td>2</td>
<td>Research and strategy</td>
<td>7</td>
<td>Customer capacity-building</td>
</tr>
<tr>
<td>3</td>
<td>Effective data systems</td>
<td>8</td>
<td>Engaging influential stakeholders</td>
</tr>
<tr>
<td>4</td>
<td>Agile processes</td>
<td>9</td>
<td>People development</td>
</tr>
<tr>
<td>5</td>
<td>Better inter-Business Unit (BU) coordination</td>
<td>10</td>
<td>Dedicated efficacy leadership</td>
</tr>
</tbody>
</table>

At the time of writing, we have completed 100 reviews across 15 countries.
They have covered products and services across the range of curricula, types
of learning and all ages and stages of learning. They have also ranged from
specific products that provide point solutions, through to learning processes,
and on to fully-fledged direct delivery institutions.
We are now scaling up and have 600 trained reviewers in 25 countries. This gives us the capacity to operate across the globe and in multiple languages. We’re also establishing dedicated capacity in every core area and region of our business to conduct and follow up on Efficacy Reviews. This will allow us to conduct up to 150 reviews per year, including for every new product we develop and every major investment we make across the company.

Efficacy will no longer be something new or additional. It will be a core part of the way we do business.

**STEP 2**

**EMBEDDING EFFICACY**

A traditional corporation, especially a publicly traded one, has to be driven by growing profits and delivering consistent shareholder returns. Pearson was passionate about the need to deliver not just profits but a mission as well – indeed, Marjorie Scardino, CEO of Pearson from 1997 to 2012, had routinely impressed upon the organisation that profits should sustain, but not define, the business.

If this is what you want to achieve, it is essential to make it a part of every product and service, every core business process and every employee’s motivations and aspirations. It can’t be an afterthought, a nice-to-have or an add-on. It has to be a critical factor in all significant decisions.

In his first note to Pearson colleagues as Chief Executive, John Fallon echoed Marjorie with his conviction that “great businesses have a fundamental sense of purpose and profits are a by-product of doing something valuable in society”. Quickly, he set Pearson’s leadership team a challenge to build a new Global Education Strategy, which would unite Pearson’s numerous businesses into a single global operating organisation driven by the great unmet needs in learning and education across the world. This process would begin with the key learning outcomes we thought Pearson could help to deliver, embedding efficacy principles into the heart of strategy-building.

With efficacy defined as the clear goal, this meant making the conscious decision that delivering learning outcomes was as important as delivering
profits. This means that poor learning returns have to be as clear in their role in decision-making as poor commercial returns.

Given the nature of the education sector, we are taking a bet that the overlapping space offers a significant enough market opportunity to make high returns in the immediate term, and will ultimately lead to sustainable long-term growth as well.

To convene a company around a single idea, you need to do three essential things: realign the existing portfolio around the idea, set the routines in place to embed the idea in the future, and build a community to make the change irreversible.

Reviewing the existing portfolio will help steer the current business towards delivering better outcomes. But in order to have perpetual change, we also need to shift an idea from the periphery to the centre of the organisation. You need to ensure that it’s a recurring thought, day in, day out, and a part of every employee’s routine.

In fact, you need to deconstruct the essential routines that form the core business processes of a company, and reconstruct them around the idea you’re seeking to embed. It’s the only way to ensure that future generations of employees and leaders across the company hold the values on which you depend.

We will need to address each of these to deliver ‘institutionalisation’ of efficacy at Pearson, taking all the elements of the company that keep the core business engine running and asking ourselves: “What if we could redesign these processes from scratch to ensure they resulted in delivering learning outcomes?” This section explains our progress on each of these elements.

**PRODUCT STRATEGY AND DEVELOPMENT**

It is certainly possible to shift your existing products towards a strategic objective. Doing so requires additional investment, capacity building and a change of priorities. It’s much more effective, though, to achieve the same objectives if you either build them into a product from the start or introduce them when the product comes up for a refresh.
We are in the process of redefining our product investment and development process, and as a part of that will ensure that it is aligned towards delivering strong learner outcomes. This will be a critical factor in defining the type of products we develop, and how they are improved going forward.

RESEARCH

If you want to prove delivery of outcomes, educational or otherwise, an emphasis on research and data goes a long way towards supporting that. The pharmaceutical industry is perhaps where this is done most effectively, and is, as we have mentioned, the traditional home of the concept of efficacy. In simple terms, research can impact efficacy in two ways. First, you can take the body of knowledge on an existing topic and infuse it into the product you’re developing. Second, you can do research on the product itself to study its impact and continuously improve it. Such research is a legal requirement before you can take a drug to market. Some countries similarly require this of education products in market.

This, of course, is vital: if you approve the wrong drug it could cost many people their lives. And the wrong educational product could undermine someone’s career or prevent their future happiness. Shouldn’t education products be held to standards similar as pharmaceutical ones?

As described earlier in the chapter, we have made evidence, and therefore research, a core part of the Efficacy Framework. Our aspiration was for Pearson to set out to use research as rigorously and effectively as a pharmaceutical company. Just as every new drug is based on cutting-edge biological and chemical research, we want each of our products to be based on the latest findings in the science of learning. Just as the drugs, once developed, have to be rigorously tested for their impact before they reach the consumer’s hands, we want to be absolutely sure about the impact of our products and the conditions in which they can be successful before they are used by learners.

Education research has brought us to a point where we understand the best practices of pedagogy and the delivery of world-class education. The pace of change in the world around us makes this a constantly evolving field, however, and technology enables ways of teaching and learning that weren’t possible previously. To generate the research required, we identified eight major
RESEARCH THEMES

<table>
<thead>
<tr>
<th>Theme</th>
<th>Question description</th>
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</thead>
<tbody>
<tr>
<td>1 Learning science</td>
<td>How can we apply the insights from cognitive and developmental psychology, neuroscience, and behavioural science design and deliver learning appropriate for all learners and at different stages of development?</td>
</tr>
<tr>
<td>2 Knowledge and skills</td>
<td>What should learners, at different stages of education, know, understand and be able to do, and to what standard, in order to maximise further progression in learning and work?</td>
</tr>
<tr>
<td>3 Pedagogy and educator quality</td>
<td>How can we develop, at scale, teachers and leaders with the capabilities to deliver intended learning outcomes through best-practice pedagogy?</td>
</tr>
<tr>
<td>4 Measurement and assessment</td>
<td>How can we develop the means of assessment and measurement of cognitive interpersonal and intrapersonal education outcomes that matter in the 21st century?</td>
</tr>
<tr>
<td>5 Digital and adaptive learning</td>
<td>How can we harness digital technologies, analytics and adaptive learning tools to enable personalised learning that leads to demonstrably improved outcomes?</td>
</tr>
<tr>
<td>6 Institutional improvement</td>
<td>How can we ensure the efficiency of education institutions to support improvement for all?</td>
</tr>
<tr>
<td>7 System reform and innovation</td>
<td>How can whole system reform and systemic innovation be designed and implemented in order to support organisational improvement to scale?</td>
</tr>
<tr>
<td>8 Access for all</td>
<td>How can we assure that access and equity are embedded throughout our entire research agenda?</td>
</tr>
</tbody>
</table>

The Incomplete Guide to Delivering Learning Outcomes

unanswered questions about education and have begun to commission leading thinkers to consider how to answer them. (See Research Themes, right)

We are undertaking and commissioning an extensive programme of research, and over the next year and beyond we will publish a series of publications related to these questions. We also did extensive thinking ourselves about the future of school education (Oceans of Innovation) and higher education (An Avalanche is Coming). Our intention is to build that kind of thinking into all our strategy and products to keep them up to date with the changing environment.

The Efficacy Reviews have also created a new demand for data and evidence of outcomes for individual products. This ranges from real-time data on learner usage or longer-term longitudinal studies. To meet this demand, we are creating a significant global research function. This function will strengthen
and co-ordinate research from across the company and beyond to ensure that, in time, evidence informs everything we do. Research centres dedicated to Schools, Higher Education and Professional Learning will cut across the ages and stages to develop cutting-edge research and encourage lifelong learning. And each line of our business will invest in the development of big datasets based on individual student outcome data.

In addition, we are also building an extensive repository of education research from the company and the outside world. So, whenever a business leader is faced with a decision that requires evidence, the resources are available to allow that decision to be made on the basis of research. Some research findings are more definitive, so we have invested in a partnership between Pearson and Nesta to define standards of evidence and, over time, will apply them to our research. This research will also be publicly available to our partners and customers, to help them shape their own decisions.

INVESTMENTS

Once you have the people in the company aligned around the idea, the next step is to make sure that the company’s financial future is aligned around the same principles. For a publicly traded company, this largely translates to investment and acquisition capital. One of John Fallon’s first

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acts as Chief Executive was to require that every Pearson investment above US$3m would have to demonstrate that it was on the path to delivering efficacy.

Pearson has traditionally grown and innovated through acquisitions. So integrating the idea of efficacy into acquisition choices – by evaluating the education effectiveness of a company, not just its financial returns – was a good place to start. We amended the standard acquisition process, from initial thoughts about acquiring a company and applying for a ‘hunting licence’, to the integration of the company post-acquisition. (See Sample Acquisition Process, below.)

### SAMPLE ACQUISITION PROCESS

<table>
<thead>
<tr>
<th>ACQUISITION WORKING GROUP</th>
<th>DETAILS</th>
<th>EFFICACY IMPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUNTING LICENCE</td>
<td>BU applies for hunting licence with strategic rationale</td>
<td>Target asked relevant questions on efficacy</td>
</tr>
<tr>
<td>CONCEPT PAPER</td>
<td>Once hunting licence is approved, BU develops more detailed concept paper building case for acquisition</td>
<td>Papers somewhat expanded where relevant with efficacy section</td>
</tr>
<tr>
<td>ACQUISITION WORKING GROUP</td>
<td>Key people from across Pearson functions work together to develop a more detailed plan for acquisition (and board paper if needed)</td>
<td>Efficacy team contacts added to working group</td>
</tr>
<tr>
<td>DUE DILIGENCE (DD)</td>
<td>Diligence process to verify our understanding of target</td>
<td>Efficacy questions added to DD agenda</td>
</tr>
<tr>
<td></td>
<td>Pearson team begins integration into Pearson systems and processes</td>
<td>Efficacy Review workstream in integration</td>
</tr>
<tr>
<td></td>
<td>Progress assessed on ongoing basis</td>
<td></td>
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</tbody>
</table>
Essentially this means that when we start considering a company as a target, the efficacy rationale becomes part of our strategic thinking. A really profitable company, for example, might not be acquired if it's not delivering strong outcomes or would not be able to in time. An efficacy expert would be part of every due diligence team. In the integration phase it also means that aligning the company towards efficacy is as important as making sure the technology and reporting systems are in place.

For example, we were looking to acquire a higher education technology institution in Latin America. Besides the essential financial due diligence, one of the first questions we asked the target was whether the institution could prove quantitatively that it was enabling students to learn the skills they needed to be successful upon graduation. We looked at the research, we looked at the graduation rates, and did classroom observations to ensure that the quality of teaching was excellent. All these factors were as integral to the final decision as the financial model.

Similarly, after reviewing our list of internal investments, we also decided that all internal investments that were either above US$1m, or below that threshold but of strategic importance, should be reviewed for efficacy. The efficacy implication of an investment would be highlighted as early as the initial concept note to secure approval. For major investments, a full-scale Efficacy Review could be conducted prior to final sign-off.

**LARGE PROJECTS, BIDS AND TENDERS**

Sometimes we bid for large-scale projects. These are called bids, tenders, or responses to RFPs (requests for proposals), depending on which part of the world you’re working in. As these are often the flagship efforts of a company, it’s essential that they are executed successfully and deliver their intended outcomes as a result.
Just as we would for our own investments, we went back to the drawing board and thought of ways we could ensure that our clients’ investments were delivering favourable education outcomes for learners. We looked at the end-to-end process for applying for and delivering on tenders and included an emphasis on efficacy at every stage of the project. (See Sample Tendering Process, right.)

This included deciding what outcomes the project would deliver even in the proposal stage, designing our proposals based on the best available education evidence and following up with a formal Efficacy Review to check on delivery in the actual project implementation. When proposing to build new large-scale education institutions, we design the outcomes and evidence in from the start. This approach has already been applied in our large-scale projects across North America, Europe and Asia with favourable responses from our potential clients. Those assessing proposals value our explicit focus on delivering learner outcomes.

SAMPLE TENDERING PROCESS

<table>
<thead>
<tr>
<th>EXPRESSION OF INTEREST ISSUED</th>
<th>REQUEST FOR PROPOSAL (RfP) ISSUED</th>
<th>Create first draft revised solution</th>
<th>Incorporate findings into final submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy team brief consortium</td>
<td>Efficacy team review RfP vs draft solutions create questions</td>
<td>Efficacy team review revised solutions and create questions</td>
<td>Create efficacy report for external audience</td>
</tr>
<tr>
<td>Include principles in writing grid</td>
<td>Half day workshop with consortium</td>
<td>Half day workshop with consortium</td>
<td>Circa five days commitment from efficacy team</td>
</tr>
<tr>
<td>Create draft solution</td>
<td>Create report and include in writing grid</td>
<td>Efficacy team to review</td>
<td></td>
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<tr>
<td>Efficacy team to review</td>
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40 DAYS 37 DAYS

Source: David Crowther
PEOPLE

A company’s most valuable assets are not its products or services, but its people. To unleash the potential of an idea within an organisation, you need to make its importance felt to every single employee, make it a part of how they’re motivated, how they’re evaluated and how they’re incentivised.

The idea of making a difference in the world through learning outcomes is something many people find inspiring. Pearson’s increasing focus on education over the previous decade had already attracted many excellent employees. Most people come to work for Pearson because they’re truly passionate about education. This gave us a solid foundation on which to build new people processes – we just needed a systematic nudge towards making those aspirations a reality.

We brought the most senior leaders across Pearson’s People team together in one place to think about how this could happen. Collectively, this group is responsible for shaping and delivering the personnel and human resources agenda for the entire company.

We began by mapping out every single aspect of an employee’s journey in the company from the day they hear about a job opportunity to the time they leave. We then examined how to change the way an employee interacts with the company to ensure that they emphasise keeping the learner at the heart of everything they do.

Pearson is a company of over 45,000 people with vastly differing roles, and we aimed to make efficacy central to the motivations of every employee. The essential people processes and their adaptations are summarised below.

Recruitment

An emphasis on improving learning should be at the centre of an employee’s values when joining Pearson. This means integrating it into advertisements and job descriptions. Equally importantly, an understanding of efficacy and a person’s commitment to the cause has to be built into the interview process. This ensures that, for all incoming people, delivering impact to learners is firmly on the agenda.
Welcome
Efficacy is also being built into the welcome package the employee receives on their first day at the company, the first conversation the manager has with the individual, and their introductions to their teams. This means emphasising the importance of this focus for the company, and its significance for the culture of the enterprise.

Upon completing their first 30 days at Pearson, employees will be told about the efficacy-related learning and development opportunities on offer, and their implication on performance management processes. Employees will also be encouraged to participate in Efficacy Reviews at this point.

Performance management
The skills, behaviour and mindset to deliver strong learning outcomes must be identified for each employee and included in their performance objectives. A focus on these characteristics is integral to performance reviews and ratings. For many leaders of the company this means adding efficacy KPIs to their job descriptions. In some parts of the company, overall compensation will be linked to delivering efficacy targets. This is central to the new strategy and organisation that are being put in place.

Learning and development
To ensure employees have the skills to deliver on outcomes, we initiated an efficacy learning development programme. This programme ranged from introductory e-learning modules to bring a basic understanding, through to comprehensive three-day training courses. A team of efficacy and research experts was created to support this, and in the new organisation each line of business will have a senior vice-president that leads efficacy and research.

Talent development
For the future leaders of the company, an understanding of efficacy and a solid track record of delivering it will be critical to their progression. Existing talent programmes will be adapted to make sure that high performers have the opportunity to participate in Efficacy Reviews.
Succession planning
Efficacy also has to be incorporated into succession planning to ensure that learners are not adversely impacted by employee transitions. This might involve, for example, prioritising the seamless handover of stakeholder relationships to ensure continuity.

Exiting
Employees leaving the company will be asked for their opinions on Pearson’s current performance in delivering outcomes, and for any ideas they have to strengthen that commitment. Their comments will then be fed back into the ongoing programme.

Implementing these seven principles will ensure that an employee is invited to join the company on the basis of a commitment to efficacy and is reminded about this commitment at every stage of their journey at Pearson. The new structure of the company, which will be firmly implemented in 2014, ensures that efficacy is central. This creates the robust foundation needed to build the rest of the programme.

To summarise, this section has illustrated how we intend to embed efficacy into the heart of our organisation. The key is to consider how to ensure that every major decision delivers both financial and learner outcomes. In this area, as in others, we are at the outset of a journey which will ultimately be transformational.

STEP 3
CREATING A COMMUNITY

Whenever we explain the efficacy journey to anyone, our long-term aspiration is straightforward. Ultimately, we want to shift the dialogue in both Pearson and the world of education towards an emphasis on outcomes. We know that if we can unleash the will of 45,000 employees around the world to focus on this, it could be a game changer – a catalyst that would enable people outside of Pearson and across the world of education to ask for more as well. Indeed, as we have said, part of the purpose of this publication is to take a step towards bringing this about.
PUTTING EFFICACY INTO PRACTICE

To change how people behave, you have to build an active and engaged community that will debate the idea, test it, repeat and refine the process and, ultimately, become active leaders who promote that idea.

Early on in the efficacy journey at Pearson, we made two design decisions for building the community that we think have worked well. The first was to take an approach perhaps best described by Eric Ries in *The Lean Startup*[^8] instead of trying to form the perfect strategy and waiting until it is flawless to execute it (by which time it is sure to be outdated), it’s best to start with something good enough and continuously hone it as you proceed. The second was to take a distributed approach to change as opposed to a centralised one. Thousands of people becoming change agents because they believe in an idea is much more powerful than a tightly centralised group mandating that change.

With the intention of seeding the community that would create ever-widening circles of leadership, as described above, we launched an efficacy training programme in January 2012. The focus was on the art of getting things done generally (such as how to negotiate and build strong relationships), and delivering education outcomes more specifically (such as the Efficacy Framework and review process). Over a vibrant two days, we debated and discussed what efficacy truly meant, what our hypothesis for an approach was, and what it would take to really seed the revolution. The outcome of the training was a group of passionate people each of whom would go on to be efficacy leaders in their part of the company – from conducting the early Efficacy Reviews to being the force for communicating about efficacy. We have since repeated this training all over the world, and at last count had trained 600 leaders across the globe. They have been the driving force for conducting reviews and embedding efficacy into the heart of the company.

In this early community we also found people who were so passionate about the idea that they volunteered to lead efficacy for entire regions or business units on top of their day jobs – a group we later came to formalise as the Efficacy Steering Committee. This group formed the guiding coalition that has driven the change we describe here.

Once the core group was established, the next step was to widen the community to the next level of enthusiasts. These people would not be able to do reviews, but would still play an integral role in embedding efficacy in the company. We designed a workshop for them to serve three purposes: it gives the participants an understanding of efficacy; lets them practice applying the framework to their part of the business to identify its current state; and generates an approach to enhance the efficacy of the group. These workshops were then conducted across the globe and have registered 5,500 participants to date. A core part of the workshop is to get the participants (sometimes in groups of over 100 people) to assess the collective efficacy of the business unit (Pearson Seoul for example) and identify the steps needed to improve it. Interestingly, we quickly went into fundamental issues that would affect the overall business strategy of the region. The output of these workshops was fed back to the leadership groups and provided them with unprecedented insight.

After reaching the critical tipping point, we decided that it was time to scale and institutionalise the community we had started to build. In early 2013 we started developing an e-learning module for training that would allow people to join the debate from wherever they happened to be. People didn’t have to wait for efficacy training to come their way, they could get up to speed and apply what they learnt as soon as possible. In fact, John Fallon, our CEO, mandated that every employee take at least the introductory course to get a basic understanding of where the company is headed. Over half of our 45,000 people have already completed the online module. This, combined with the people processes outlined in the previous chapter, is ensuring that the focus on delivering learning outcomes will rapidly reach every employee in the company.

The grassroots support was connected to the leaders of the company – the board and investors. The monthly report on progress for the board of directors was amended to include regular bulletins on efficacy. This was a major milestone, as the board realised it could hold the company to account not just on financial return to shareholders, but also on education outcomes for learners.
This commitment has already been clearly communicated to investors, and over time learning outcomes will be integrated into our company reporting. By sharing this data, we will equip our shareholders and stakeholders with the information they need to hold us to account for our ‘learning footprint’, just as they do for our carbon footprint, our environmental sustainability and, of course, our achievement of financial goals. Identifying the most meaningful learning metrics to track against, and the systems needed to do so, is priority work which is continuing at pace.

And now, through this publication and the associated activities, we are attempting to build the community further, to extend outside of Pearson and include the wider education community. As we’ve said before, this guide is incomplete and we’re opening this up to you in the same spirit as the first efficacy training conducted 18 months ago. If you’ve come this far and are still reading, then you’re surely interested in efficacy and the mission to deliver education outcomes better and faster. We want you to examine the approach, critique it, tell us how to improve it and let us know what we can do to help you apply it.

9 Asking More: The Path to Efficacy, a series of essays from education leaders around the world, is published alongside the Incomplete Guide. Pearson also shares an interactive version of our Efficacy Framework at https://efficacy.pearson.com, and we invite our peers across the education community to use, comment and improve upon our approach.
From schools to universities, from assessment systems to learning software, and from early-stage start-ups to acquisitions worth hundreds of millions of dollars, we’ve looked at what it really takes to deliver outcomes for learners – and what could be done to enhance these outcomes.

Conducting a meta-analysis of 100 of our products effectively gives us a snapshot of the current state of educational solutions, and highlights the greatest opportunities for improvement. We know, for example, that customer capacity is often the most overlooked element for educational products, especially digital ones. We can develop beautiful, user-friendly products, but if they are not in line with the learner or teacher’s technical capabilities, they won’t deliver efficacy.
Our analysis of the Efficacy Reviews so far leads to some clear messages for our future strategy. These are summarised in what we are calling our Ten Lessons of Delivering Learning Outcomes. They reflect what we’ve seen in our work over the past 18 months and of course there could well be additional lessons beyond these. What we would say is that these lessons represent a practical agenda to enhance the efficacy of what we’re doing and are, at the minimum, a good starting point for us.

**LESSON 1:**
**SET CLEAR EFFICACY GOALS**

It’s essential to define clearly the outcomes that the product will deliver for a learner from the very beginning. This definition has to be as specific as possible and set a clear progression route linked to metrics and leading indicators. It’s not sufficient, for example, to say that English language software will help someone learn English. It has to be defined at the level of the skills achieved (such as an improvement in the Pearson Global Test of English score) and the time required (one year of usage at five hours per week, for example). This has to be clearly communicated to the entire product team as a guiding principle as well as to the customer and learner.

For Pearson as a whole, we will set clear efficacy goals, too, which demonstrate our global impact on learner outcomes, and we will report on our progress in achieving them.
As discussed previously, there’s a wealth of research freely available in the world on the best practices in education. It’s highly likely that you’ll end up with a more effective product if you underpin it with evidence. You should think of yourself and your entire team as adding to that wealth of knowledge as well – whether it’s through focus groups, surveys or user experience studies. You can continuously assess the impact your product is having, and tweak the levers to understand what will drive better outcomes. For certain products or services (such as high stakes assessments), it’s essential to support the shorter-term research with longer-term longitudinal studies.

Lesson 3: Build and Use Effective Data Systems

Lesson 2 cannot be achieved without effective data systems. First, you should build a minimum data footprint (the time taken to complete an activity, or the number of tries required, for example) into your products from the start. The ability to track progression is the most critical – this means collecting individual, student-level data so that it is possible, for example, to understand the graduation and ultimate employability rates for a university or a vocational qualification. It is also vital to collect ongoing customer feedback so that the product can be improved.

Lesson 4: Employ Iterative Processes

The pace of change in the world around us has made five-year product plans pretty much obsolete. To truly deliver better outcomes than your competitors, you need to have an iterative product development process – one where you test your product in market quickly, improve it, launch it again and improve it further. For digital, cloud-based products, these cycles could be extremely short, but even for traditional products, being in a constant state of ‘beta’ or improvement will push you towards delivering the best outcomes.
LESSON 5: TAKE AN OPEN APPROACH

Often there are many more variables involved in delivering education outcomes than you have direct control over. You might have a great e-book, but are teachers using it effectively? You might run a great school, but are parents providing the engagement needed to have the desired impact? Trying to solve the educational challenge in conflict with some of the other elements of the system will yield minimal results, but an open approach that builds partnerships and focuses everyone on the desired outcome can have a huge impact.

LESSON 6: UNDERSTAND THE LEARNERS’ DESIRED OUTCOMES

A salesperson, district administrator or government official that has a solution-oriented mindset and is knowledgeable about learning outcomes is able to serve schools and learners infinitely better.

The Singapore government, for example, insists that its teachers take a ‘learner-centric’ view. At Pearson, taking this view relies on strong links between product development, sales teams and customers to understand the intended design, and feed customer requirements and complaints back into the development process. In government, this can include open conversations between policymakers and school leaders about what works in practice. Where possible, districts, teachers and learners should have a single point of contact who both understands their efficacy goals and helps them to achieve them.

LESSON 7: TRAIN YOUR CUSTOMERS TO USE YOUR PRODUCT

As mentioned earlier, no matter how fantastic your product, you won’t get learning outcomes if the teacher and learner aren’t able to or don’t use it effectively. Yet many products reach the market today without the necessary support. It’s essential that this support is available either as a core part of the product or as an optional service. If traditional face-to-face training is not possible given the price point of the product, you should think of creative...
ways to bring costs down. E-learning modules are easy substitutes and we’ve seen peer-mentoring networks (sometimes even subsidised by the company developing the product) provide creative solutions. Another option is to bundle the product and training together as one.

LESSON 8: SHAPE THE DEBATE WITH INFLUENTIAL STAKEHOLDERS

n the world of social media, anyone with a good argument can have a strong influence on shaping the global debate. No matter the outcome your product is trying to deliver (such as learning English) or the sphere you operate in (higher education, for example) it’s increasingly important not to be a passive consumer of opinions, but to actively voice your views and opinions and get them out into the sphere of consciousness. Whether it’s through active engagement on Twitter, conferences or public debates, you now have the opportunity to shape policy instead of being confined by it. At every level, we want to be part of the global conversation about education and improving learner outcomes. This is why we are building a growing range of open research relationships and why, last year, we published The Learning Curve, which provided an open dataset and new insights into the connections between educational inputs, educational outputs and social outcomes. We want to be part of the global conversation about education and how to improve outcomes.

LESSON 9: GIVE YOUR PEOPLE THE INCENTIVE TO FOCUS ON OUTCOMES

lthough people are universally excited about delivering learning outcomes, the day-to-day pressures of delivering against deadlines, revenue targets and other immediate commitments can become barriers to delivering efficacy. To help people refocus on efficacy, you have to use the incentive system. Staff should have education outcome goals as a part of their performance evaluation alongside the standard targets. Doing this can unleash people’s passions to make a difference in the world.
Lesson 10: Start Now

Improving outcomes for learners everywhere and of every age is one of the most urgent and important challenges facing humanity. In the digital age, people’s quality of life as well as their living standards depend upon it. We have taken the first demanding steps and know how much more we have to do. Wherever you are and whatever you do, we urge you to join us on the path to efficacy.

About the Authors

Michael is a leading authority on education systems and reform. As Chief Education Advisor, he heads Pearson’s worldwide programme of research into education policy and efficacy. Previously a Partner at McKinsey and Head of their global education practice, he is also Distinguished Visiting Fellow at the Harvard Graduate School of Education and holds an honorary doctorate from the University of Exeter. He served the UK government as Head of the Prime Minister’s Delivery Unit (2001-2005) and as Chief Advisor to the Secretary of State for Education on School Standards (1997-2001). Before joining government he was a professor at the Institute of Education at the University of London.

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