

By Michael Barber and Amar Kumar

On the Road...

to Delivering
Learner Outcomes



About Pearson

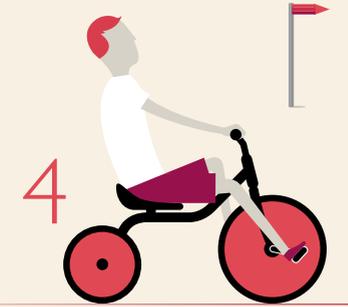
Pearson is the world's leading learning company, with 40,000 employees in over 70 countries working to help people of all ages make measurable progress in their lives through learning.

We provide learning materials, technologies, assessments and services to teachers and students in order to help people everywhere aim higher and fulfil their potential.

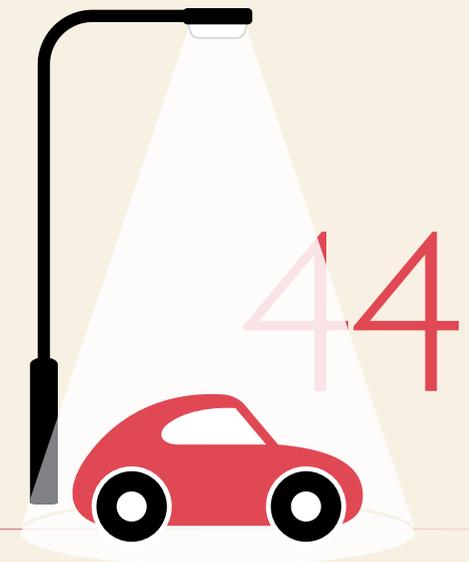
We put the learner at the centre of everything we do.

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CHAPTER ONE

Introduction

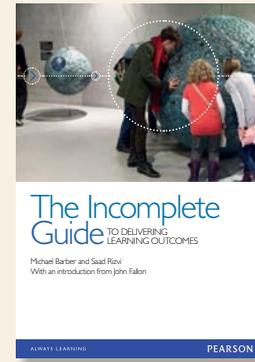


What the world needs isn't just more education, but better education: education that translates into improved and enriched lives.

Over a billion children will go to school tomorrow morning. It hasn't always been that way.

In the past several decades, access to education has expanded at unprecedented rates. More children than ever are going to school. More high school graduates are going to colleges and universities. More adults are taking courses to develop new skills.

The world's education systems are in greater demand than ever before. But, is all of this education turning into enough learning? Far too many children return home from school without foundational skills and knowledge. Far too many graduates leave university without the promise of a career. And far too many adults lack skills for the new economy.



When we published *The Incomplete Guide to Delivering Learning Outcomes* in November 2013, we had just announced our commitment to improving outcomes delivered by our products and services and to publicly report on our progress and results. Pearson made this promise because we wanted to galvanise our company, our customers, our learners, and the sector behind a single mission: improved outcomes for the billions of learners around the world.

We wrote that publication to serve as an explanation of our commitment, to share the lessons we learned, and to gather feedback. From the start of our journey, we have not compromised on three key principles: be ambitious, be transparent, and act with humility. It is in that spirit that we have written *On the Road... to Delivering Learner Outcomes**

***What is the difference between learning and learner outcomes?**
Learn more on p20 →

As with the previous publication, our purpose here is to describe our journey, to share some early successes and lessons, and to get feedback. In this edition, we are also sharing examples of people and organisations outside of Pearson, which have informed our own work through their respective efficacy journeys.

We hope this guide provides a sense of where we are and where we are going. We don't know everything that lies ahead, but we are confident that in partnership with all those interested in improving outcomes, we can learn by doing. As always, we look forward to hearing feedback.



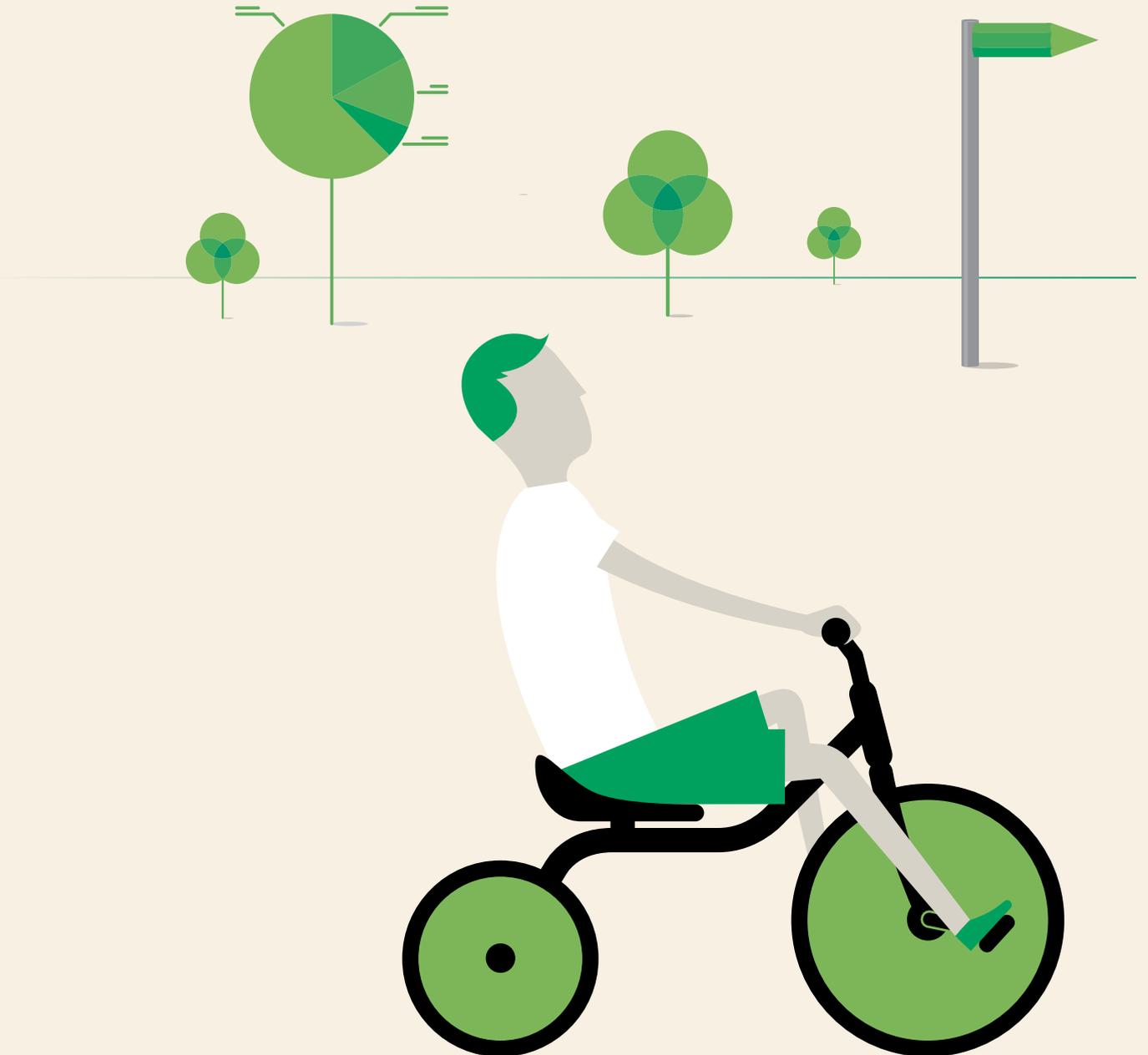
CHAPTER TWO

The journey we're on

Over the past year, efficacy has become more clearly defined, and is starting to be delivered.

At Pearson, our mission is to help people make measurable progress in their lives through learning. Efficacy is therefore our company's core value: when you use one of our products, we want you to know that it is based on robust research and has been shown to deliver meaningful, measurable outcomes. And if it turns out that one of our products doesn't deliver what it promises and we can't improve it, we won't be selling it anymore.

This is what efficacy means to us.



CHAPTER TWO

The journey we're on continued

When we take a pill, we expect to feel better. When we hire a car mechanic, we expect our car to work again. Similarly, when a child goes to school, she and her parents expect certain outcomes. When a student goes to university, he expects to learn, grow, and develop. When an adult receives skills training, she expects to enhance her job prospects.

With our drive towards efficacy, we want to help deliver on those expectations by continuously improving every single one of our products. But we cannot do it alone. Despite being one of the largest learning companies in the world, we only touch the lives of a tiny portion of the world's learners.

For there to be a major improvement in the world's education systems, we need all buyers and users of education products to participate: by asking hard questions and demanding better outcomes. Only then will we see all education providers improve what they deliver. A portion of this guide is devoted to examples of others in our sector (including some of our competitors) who are embracing this concept. It is only in partnership with our peers and customers that we can hope for outcomes to improve worldwide.

Cultural change This aspiration requires us to bring about a significant shift within our company culture and the way we work. Everything we do – from research, to product development, to marketing, to sales – must become even more learner-centric. Every product we develop must define its outcomes for the learner before we allocate resources to it. Every new acquisition or investment must show it can deliver robust outcomes. And our relationships with customers must become deeper and more strategic than ever before.

It's not hard to see why all this matters. It's time to make sure everyone getting an education is actually learning something that leads to meaningful outcomes.

Our commitment renewed We have made a promise to measure and improve learner outcomes for our products. To hold ourselves accountable, we have also promised to report publicly on the efficacy of products across our portfolio by 2018, with the same rigour and at the same time as our annual financial results. This new efficacy report will be audited by an external firm, which will validate our approach, data, and conclusions. Each year, starting now, we will take steps in this direction. We have never been more committed to making these promises a reality. [Learn more at efficacy.pearson.com](http://efficacy.pearson.com) →

External reaction In the past 12 months, we have been encouraged by the support for our mission and promise – not only by our customers and education experts, but even more rewardingly, by our learners. They say they hear us making a more explicit promise to stand behind our products and services. They are seeing first-hand what our mission statement – to 'help people make measurable progress in their lives through learning' – means in reality.

Understandably, there is also scepticism. One common criticism has been that it is impractical to measure the efficacy of education products. There are too many confounding variables and it is impossible to identify the effect of one intervention from another (e.g. the impact on outcomes of a personalised learning platform from the effect of a great classroom teacher).

But such scepticism is no reason to give up. The medical sector learned long ago how to isolate the effects of a pharmaceutical intervention from many variables (e.g. diet, health, genetics); and this issue is tackled by social science research of all kinds. We are confident that, with the world's best education researchers, we can do the same for our sector. With unprecedented talent and capital going into education, it is time we work towards commonly agreed upon research or efficacy frameworks to evaluate what works and why.

The most sceptical reaction to our commitment has been that efficacy is 'window dressing' or a cleverly disguised marketing campaign. Critics will need more than just words to be convinced. We will have to change what we build, how we work and the relationships we form with our customers and learners. On behalf of the scores of researchers, education experts and efficacy leaders who are leading the charge with us – and more importantly the students, teachers and parents who are the ultimate beneficiaries of this – we hope this guide will be read with an open mind.



With unprecedented talent and capital going into education, it is time we work towards commonly agreed upon research or efficacy frameworks.



CHAPTER THREE

What we've learned

Over the past 18 months, we have run hundreds of efficacy reviews and completed scores of efficacy studies of our products and services, and with the feedback from our customers, we have used evidence and insight to set more of our products and services on the path to ever-improving learner outcomes. See further for more details on our product improvement processes.

As we reflect on our journey, there are clear lessons that are helping to evolve our approach and priorities.



CHAPTER THREE

What we've learned
continued

Lesson 3

Acknowledge
the role we play

It is a simple truth that learner outcomes are not solely reliant on any one product or individual. They are the result of a combination of factors ranging from the student's motivation to the products that are used and the quality of the interaction between instructor and student.

In his work, *Visible Learning*, John Hattie discusses 15 years of education research to determine the factors that work in increasing student achievement. He synthesises this research into six contributing factors: the student, home, learning institution, curricula, teacher, and teaching strategies. Each of these has several sub-factors that, in various ways, contribute to improving learner outcomes. As providers of curricula, teacher training, professional development, or even as school operators, we are only a part of the ecosystem. We have embraced our role, and through our customer implementation teams, we are helping teachers deliver better outcomes. To deliver on our efficacy promises we'll need to continue to work closely with partners including administrators, instructors and students themselves. No product, however good, will deliver outcomes unless it is used in the right way.

Lesson 2

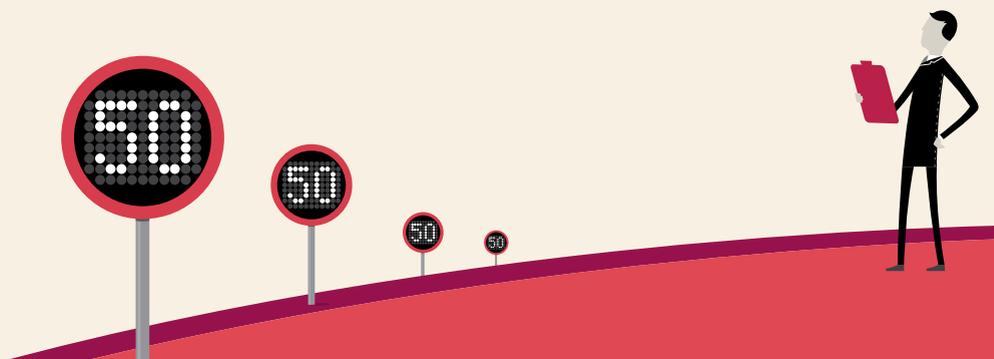
Keep stating the vision

We started our efficacy journey with a bold vision to influence how education products are made and delivered. That, and the public commitment to reporting transparently and widely on the outcomes of our products, galvanised our company. Large transformations often forget the importance of setting an ambitious vision alongside the operational changes, such as new frameworks, tools, processes, and people. Looking at the path ahead, we have to remind ourselves that our major contribution won't just be those new tools. In addition, it'll be the ambition we are setting for ourselves and other creators of education products and services. And we've learned that while we work through the day-to-day challenges, we have to keep re-stating the vision throughout the organisation so that all 40,000+ of our employees know where we are heading and that there's no turning back.

Lesson 1

Start and end
with outcomes

Fundamentally, efficacy is about defining what outcomes we need to achieve for our learners and building in the capabilities to measure and improve those outcomes. Starting with outcomes requires a shift in the way education companies build and market their products and services. Internally, this focus is re-energising our product development efforts and making them far more learner-centric. As we work ever more closely with our customers to co-define those outcomes, it will also help us build better relationships with them. Finally, applying learning from the measurement of outcomes back into product development should close the feedback loop that leads to ever-improving learner outcomes.



CHAPTER THREE

What we've learned
continued

Lesson 4

Share in the
accountability

For too long, instructors and institutional leaders have had to singularly shoulder accountability for their learners' outcomes.

Many countries have even instituted laws and regulations to improve learner outcomes, with the burden of compliance falling to those closest to the students: the instructors. When we made our commitment in 2013, we expected instructors and institutional leaders to be supportive but cautious. However, increasingly, instructors have been energised to see that we are accepting some of the responsibility for the outcomes of their learners.

Many institutional and system leaders have acknowledged that efficacy is a game-changer and something no education company has offered to them before. One went so far as to say, "Welcome to our mess! We're glad you've joined us."

CHAPTER THREE

What we've learned
continued

Lesson 5

Aim for irreversibility

To ensure that efficacy isn't dismissed as 'yet another corporate initiative', our efficacy teams are always focused on achieving irreversibility: that elusive tipping point where we cannot roll back to the old ways of working, no matter what. We must get to the point where all major internal processes have been further oriented or re-invented so that they are learner-centric in ways that can be implemented within our day-to-day constraints. We have neither the luxury nor the desire to invent new bureaucracies to drive efficacy. Our new product lifecycle is rooted in the principles of efficacy and agile development; we'll prioritise the products that we know will have the biggest impact on outcomes, and we'll stop selling the ones that don't – and can't – be improved. As we embed this principle deeper into our company, our culture will evolve to be firmly rooted in doing what's best for learners.



Lesson 6

Embrace positive deviance

A key component of our strategy has been to empower change-makers across the company to implement and advocate for efficacy. To ensure quality and consistency, the central efficacy leadership team agrees on the core components that are non-negotiable (i.e. the rules of the game) and each business unit is empowered to define the rest. It is implementation by open-source. For example, we realised early on that a common understanding of what makes a good outcome will be vital to ensuring efficacy is consistently adopted.

However, given the diversity of our product and service portfolio, there was no way to define one set of shared outcomes across the company. Therefore, a cross-company working group was formed to develop an initial set of learner outcome categories. The group then designed a workshop for efficacy leaders to use with product teams for defining their own specific outcomes, and a peer-review process of those outcomes to ensure consistency. In this way efficacy leaders in each business will work with their product teams to define product-level outcomes with a link back to the global definitions.

It's an approach that has built pride of authorship, and therefore ownership. It has reduced the burden of the central efficacy teams by building internal capacity and capabilities. Most importantly, it means we are embracing the power of positive deviance – centrally, we don't always know exactly what will work best, where and why. So why not let the definitions and guidelines improve as they filter through the organisation?



Lesson 7

Acknowledge the link
between efficacy and
business priorities

We believe in the concept of shared value: that long-term financial success is a direct result of delivering positive social outcomes. So for us, efficacy makes perfect business sense. If our products deliver what our customers and learners need, we will be commercially successful. But, in a business facing significant headwinds and disruption (e.g. the shift from print to digital), we have to explicitly connect the dots between short-term business results and longer-term efficacy priorities. For example, if one of our universities improves student experience (a particular learner outcome), it is likely to increase student retention, which in turn will be good for us.

Unsurprisingly, in the early days, we faced resistance from colleagues who said they didn't have time for efficacy because they had to deliver a product or meet their numbers. Over time, we are learning that such resistance is not because these colleagues don't acknowledge the importance of efficacy; rather it is that efficacy, as communicated, feels additive to business as usual. To respond, we have started to improve how we communicate about efficacy and are increasingly integrating it into the regular course of business (e.g. product development, sales and marketing, investments and acquisitions).

CHAPTER THREE

What we've learned
continued

Lesson 10

March to the same beat



It's a devastatingly obvious insight that the success of a company-wide transformation depends on the entire company – its employees, but also its other stakeholders, such as customers, shareholders and suppliers. As we have moved along this journey, we have discovered what role each part of the company plays in making this a reality. For example, our executive team and senior efficacy leadership set the vision and ambition for efficacy. A central team defines the 'wiring' of efficacy – including the systems, processes, monitoring, and new ways of working. Our communications colleagues stimulate the external conversation on efficacy, ensuring that others are embracing the concept of improved learner outcomes. And, of course, the bulk of the effort falls on our teams in each business unit and country: the on-the-ground reality-changers. From top to bottom, every individual in our company will need to recognise how their job contributes to the grand vision, and embody the values and principles of efficacy in their behaviours.

Lesson 9

Focus on data systems and analytics capabilities early

A company-wide programme on efficacy requires us to build new tools and capabilities to store, analyse and apply data and insights on our products. With the leadership of our global technology teams, we are developing a definition for the optimal learner data footprint that combines the needs of our research with regulations and policies on data security and data privacy. We are also working with our human resources colleagues to recruit talented individuals with the capabilities to analyse this data and apply what we learn into our new product development.

Lesson 8

Embed research early in the process



Efficacy is about measuring the impact our products have on learner outcomes and generating insights in order to improve those products. To do this well, we are starting on a research programme in each of our three Lines of Business (School, Higher Education and Professional). When a product team identifies learner outcomes, a research plan will be developed to measure those outcomes and analyse how to improve them. And because not all outcomes have the same impact on learning, we are also going to aim for a target standard of evidence for each outcome or product.

For example, we can measure student satisfaction in a chain of online schools using a survey. But, to determine graduation rates, we may need much more robust research. In each of our businesses, the efficacy and research teams will work hand-in-hand to ensure that product teams are thinking about research from the time they start product development. In addition, we are starting to incorporate research frameworks from education research institutions such as NESTA and the Institute for Education Sciences (part of the US Department of Education) into our efficacy approach.



CHAPTER FOUR

Efficacy in practice

Our company has a clear vision: to help people make measurable progress in their lives through learning. We will continue to do this by developing best in class products and services for learners of all ages and stages. Efficacy helps us evidence that our products truly are best in class and continue to improve them as we learn more. In this chapter we outline some of the major activities going on internally to make our vision a reality.



CHAPTER FOUR

Efficacy in practice continued

Defining learner outcomes



“If you’re focusing on how much time is spent sitting in the classroom, you’re focusing on the wrong end of the student.”

James Applegate Illinois Board of Higher Education

Outcomes first Building a product without explicitly defining our intended outcomes is like getting in a car and driving before thinking about where to go. For us to know that our products are improving learner outcomes, we first need to define what those outcomes are. They could be as simple as a child having learned long division or as complex as a college graduate getting a job in her field of study.

Learner and learning outcomes There is also an important distinction to be made between learner outcomes (the term we’ve started to use) and learning outcomes (the term that’s more commonly used). Learning outcomes are statements about what has been learned. A learner outcome is far more expansive – it is the way a human life is transformed by an educational experience.

Internally, we identify these learner outcomes with the help of several tools, including logic models, outcomes workshops, and feedback from our customers and learners. And since outcomes come in many shapes and sizes, we have developed an initial set of categories that cover the breadth of learner outcomes we aspire to deliver. [See table opposite.](#)



EFFICACY: TYPES OF OUTCOMES			
Category	Level of aspiration and value	Definition	Example learner outcomes
Access The learner access and experience	Utility	The degree to which learners can access a product (e.g. in terms of technology and socio-economic access) The level of learner satisfaction The level of motivation and confidence that the learner gains	All learners can access digital learning materials from a personal computer, tablet or smart phone anytime Learners enjoy using the product and have a positive learning experience
Completion The timeliness of completion	Usage rhythm as designed	The progress that the learner makes through the course The time taken to achieve the standard or competence	Learners complete course of work within one semester
Achievement The standard of achievement or level of competence	Competencies and skills achieved	Qualification gained The level of performance on a standardised test Course-specific competencies demonstrated The acquisition of specific skills	Learner earns a bachelor's degree Learner will be able to demonstrate mastery of the English course material
Progression Learner progression	'Door unlocked'	Ability of learner to progress to next course of study, training, or employment	Learner gets gainful employment in field of study



Product outcomes Each of our products will have a set of outcomes defined in concert with customers, instructors and learners. These outcomes will then become the benchmark to assess the efficacy of the product.

[Learn more at efficacy.pearson.com](http://efficacy.pearson.com)

CHAPTER FOUR

Efficacy in practice continued

Conducting efficacy reviews



Before data is available on learner outcomes, product teams often wonder whether they're doing the right things to deliver the outcomes they want. What we needed was a quick but accurate leading indicator to help teams see whether they were on the path to efficacy.

Efficacy reviews The efficacy review is that indicator. An efficacy review is a workshop with the product team and relevant partners from sales, marketing, finance, and technology. Facilitated by an efficacy expert, the workshop poses targeted questions designed to predict the likelihood a product will have an impact on outcomes. This is followed by in-depth interviews with key stakeholders including our customers and learners, too, if the product is already in market. For our efficacy review framework and questions, [see table below](#). We are continuing to refine the framework as we learn and receive your feedback.

How it works Using this framework we assess the potential efficacy of a product or programme against 12 criteria. By giving each criteria a rating on the four point scale (green to red) we gauge the likely overall effectiveness of a product.

The framework serves to identify specific areas which, if improved, will increase the likelihood of impact. Teams are able to focus their activity on taking these steps before the product is assessed again.



Efficacy ratings After the review, a report summarises the team's ratings on each of the dimensions of the framework and more importantly, lays out a clear product improvement plan with specific actions. The efficacy teams in each unit are starting to mentor and guide the product teams to support completion of these improvement actions and to remove any roadblocks. We also schedule follow-up reviews with product teams to ensure they are on track to deliver their recommended actions and to provide them with support where needed.

Follow-ups In addition to over 175 efficacy reviews, we have also conducted many follow-ups to existing reviews. Drawing on those insights, we have noticed that as products develop and the context shifts (e.g. from an early stage product to a mature product in a stable market), the types of conversations in the workshop and the actions for the product teams also change. This led to significant variability in our review reports; we are now creating peer review tools to ensure that all reviews subscribe to a consistent standard of quality, while allowing room for the significant variability in our business models and stages of product development.

Ongoing reviews Efficacy reviews will take place throughout the product lifecycle, from early concept to post-implementation. When done well, they have also led to a productive dialogue with product teams and customers. However, reports on their own do not evidence the impact of our products in the real world, with real students, in a real school, university or centre of learning. That's where efficacy evidence comes in.

THE EFFICACY FRAMEWORK

- **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.

CRITERIA AREA	RATING	RATIONALE SUMMARY	CRITERIA AREA	RATING	RATIONALE SUMMARY
1. OUTCOMES					
Intended Outcomes	Green	Overall design	Value for money	Amber/green	Overall design
Overall design	Green				
Value for money	Green				
2. EVIDENCE					
Comprehensiveness of evidence	Green	Quality of evidence	Application of evidence	Amber/green	Quality of evidence
Quality of evidence	Green				
Application of evidence	Green				
3. PLANNING AND IMPLEMENTATION					
Action plan	Green	Governance	Monitoring and reporting	Amber/green	Governance
Governance	Green				
Monitoring and reporting	Green				
4. CAPACITY TO DELIVER					
Person capacity and culture	Green	Customer capacity and culture	Stakeholder relationships	Amber/green	Customer capacity and culture
Customer capacity and culture	Green				
Stakeholder relationships	Green				



CHAPTER FOUR

Efficacy in practice
continuedGathering efficacy
evidence

To assess the impact of our products on learner outcomes, we need to dive into the world of data and research. We are starting to gather efficacy evidence in partnership with our customers around the world to understand the impact of our products on their learners. This evidence can be as simple as user surveys and as complex as randomised-controlled trials or longitudinal research.

Evidence planning To decide on the right type of evidence, we start with the learner outcomes. Our aim is to have a research plan mapped to a target standard of evidence for each learner outcome, based on the Standards of Evidence produced by NESTA, a UK-based research organisation¹, and guidance and standards provided by the US Department of Education and the National Science Foundation². For some outcomes, we may want or need to choose a higher target standard of evidence. For example, to study whether our universities in South Africa are adequately preparing graduates for careers, we might plan to do a longitudinal analysis to measure career outcomes over time. On the other hand, to study whether those graduates felt satisfied with their education, we may conduct a simple online survey before they graduate. The stage of maturity of a product will also impact the type and quantity of evidence available.

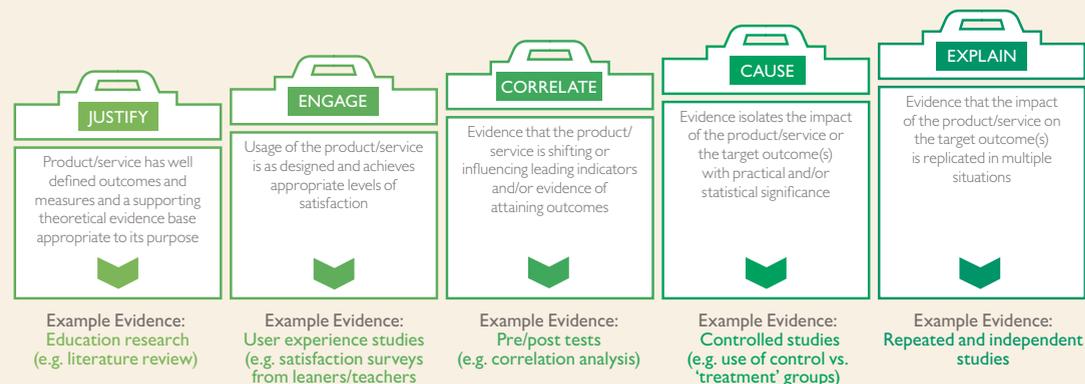
The standards of evidence, increasing in levels of rigour, are expressed below.

Notes

¹ http://www.nesta.org.uk/sites/default/files/standards_of_evidence.pdf

² <http://www.nsf.gov/pubs/2013/nsf13126/nsf13126.pdf> and <http://ies.ed.gov/ncee/wwc/>

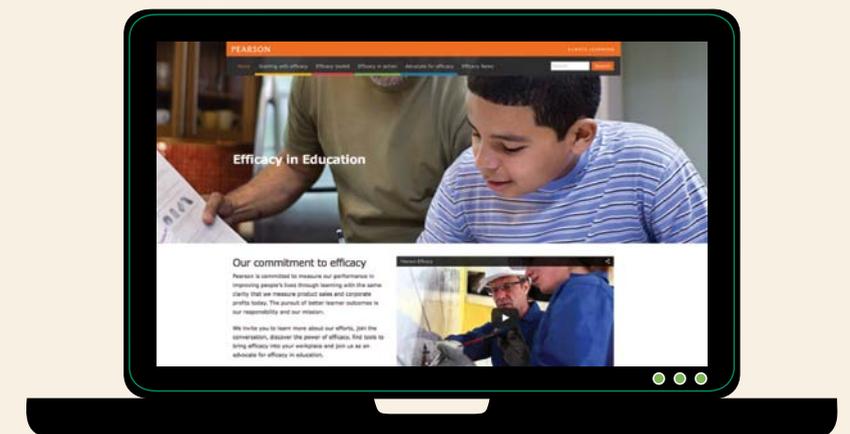
LEVELS OF EVIDENCE



Ongoing product improvement The analytics we conduct on the data we gather will allow us to improve our products on an ongoing basis as well as show the impact our products are having on learner outcomes over a given period of study.

Evidence partnerships Most importantly, evidence is not gathered in a vacuum. It must involve real Pearson customers and users – institutions, educators, and learners – in order to evidence that the impact we are measuring is real and transferable to other contexts. A primary focus for Pearson's customer facing teams in the coming years will be to find partners for research studies and to build the evidence base for our products. These research programmes will not only generate insights for how to improve our products, but will help us build better relationships with our customers too. Customers who work with us on studies have expressed a desire to access the resources Pearson provides in its research and analytic capabilities; as the entire education sector becomes more data-driven, this is increasingly appealing.

Learn more at efficacy.pearson.com/progress →



Learn more at efficacy.pearson.com →

CHAPTER FOUR

Efficacy in practice
continued

Supporting customer design, analysis and implementation



In the world of textbooks, implementation was relatively straightforward. Instructors used textbooks to support lesson plans and assign homework. Today, with education products going online in new and unfamiliar formats, implementation becomes more complex. Technology also brings new possibilities for measurement and visibility into the classroom.

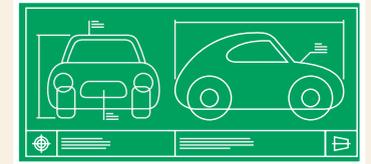
Evidence drives improvement As we gather efficacy evidence, we learn more about how best to use our products. For example, analytics on an online maths programme might indicate that the programme is more likely to support improvements in course completion when used with a teacher for at least an hour a day, three times a week. Analytics on an English language tutorial might enable us to predict that if students struggle with the first few questions, they will need individual help from an instructor before going any further. These insights allow us to support our customers and help them get better outcomes. We are building an evidence base to show what works, how, and why. Our evidence base grows with each implementation.

Companies in healthcare, technology, and aviation have made the transition from selling products to solutions. We are starting the same shift, supported by a mountain of evidence on what works. Each of these solutions will be obsessively focused on outcomes. Our customer conversations have started shifting from “What product do you need?” to “What outcomes do you need?”

Building team expertise We have started to build these new skills across our sales teams and account managers to support this solutions-driven approach. While we have always provided instructions on how our products should be used, research-based implementation support will focus on ensuring that our products have the biggest impact on the outcomes most important to our customers and learners.



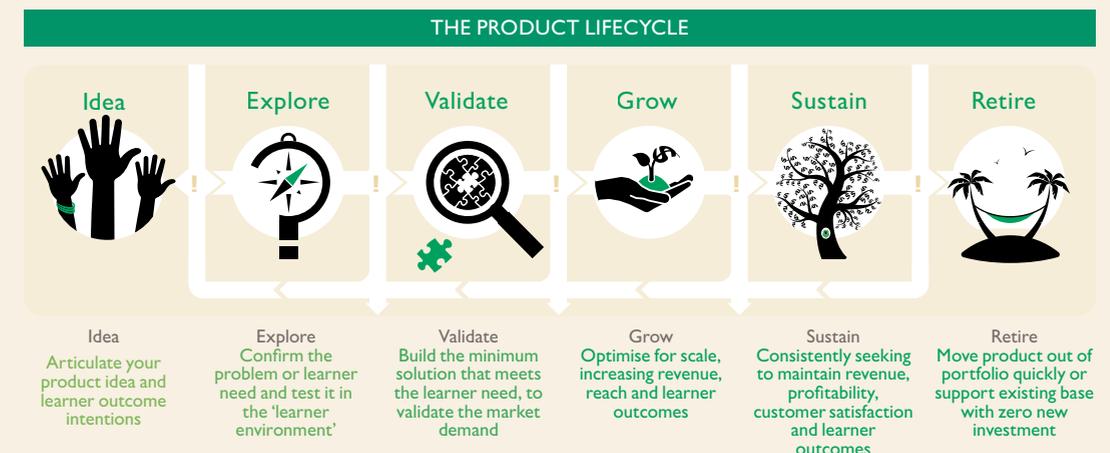
Developing products



In the words of one of our efficacy experts, changing the way we develop products to be far more learner-centric will require a “seismic shift.” But seismic shifts don’t come about effortlessly or glamorously. Like geologic events, they result from incremental movements, pressures applied internally and externally to the foundations – sometimes imperceptible but always relentless.

In addition to the frameworks we use to evaluate products, we are implementing many new processes that support our renewed focus on efficacy.

New product development process We have worked with Pearson’s product and investment teams to ensure that the principles of efficacy will be integral to all products in the portfolio. The company’s new product lifecycle (PLC) is a unified framework for defining how the company creates, develops, launches and supports new products. It will also inform the evaluation of existing products. The PLC includes six stages of a product’s development, from Idea (a pitch for a new product) to Retire (a decision to divest or close a product). The PLC draws on agile and lean frameworks for product and service development, which are highly user-centric, data-driven, and multidisciplinary – making it an ideal vehicle for the principles of efficacy. Every stage in the PLC now has requirements for defined and, eventually, demonstrated, learner outcomes supported by research.



CHAPTER FOUR

Efficacy in practice
continuedImproving our
acquisitions

Efficacy in acquisitions Some of the most successful businesses (both commercially and with regard to efficacy) in Pearson's product family are the result of acquisitions: Connections Education and Edexcel being just two examples. To identify more successful targets such as these, we are actively embedding efficacy into the due diligence processes associated with new investments. Future acquisitions and partnerships are now going through efficacy reviews by teams within the Lines of Business or the global efficacy team. In cases where there isn't sufficient confidence that a product improves outcomes or could be put on the path to efficacy, the clear recommendation will be to withdraw interest in the target. In other cases, there will be goals put in place to improve the target's capacity to have a measurable impact on learner outcomes.

Using efficacy to inform decisions In early 2014, Pearson considered a multi-million dollar investment in a school chain in an emerging market. The financial projections and operational metrics cleared our investment hurdles with flying colours. Academically, however, the schools weren't geared up to deliver improved learner outcomes. The founders' mission and values were also more geared towards financial metrics than academic outcomes. Despite months of diligence and research, we declined the investment on grounds of efficacy. Education is no longer just about the buildings, the classrooms, and warm bodies in the front of the classroom; if learning isn't happening, we are not interested.



CHAPTER FOUR

Efficacy in practice
continuedEmbedding experts
into the company

“ For organisational or systemic change, you actually have to motivate hordes of people to do something ”

Michael Fullan *The Six Secrets of Change*

Efficacy across Pearson While the seeds for the initial efficacy programme were planted by central efficacy teams, the roots are taking hold in the rest of the company – product development, sales & marketing, quality, technology, among others. Efficacy champions are starting to sprout all around the world – from Australia to South Africa. To nurture their growth, in 2013 we decided to embed efficacy experts within each business unit rather than keep it as a global corporate function. Each efficacy leader reports to a business or geography leader and is responsible for helping improve the efficacy of the products in their portfolio. Crucially, these efficacy leaders work with lean teams; we truly believe that we must invent and implement efficacy within our day-to-day business constraints and avoid unnecessary bureaucracies or processes.

Efficacy leaders Today, there are approximately 100 people whose primary role is to improve the efficacy of our products or work with customers and learners to improve outcomes. These experts split their time among helping define learner outcomes, conducting efficacy reviews, researching the efficacy of our products, and working with customers to implement our products with fidelity. These experts also serve as role models and inspire new behaviours in others – put the learner first, use data to make decisions, and move ever closer to our customers.

I'm happy to be in a company that is so well aligned with my personal philosophies about education.

Employee Survey

Communicating
better

I think efficacy is a great initiative and really aligns with our customer-centric vision... my concerns are around whether the business will actually support this in reality with funding and resourcing. It is transforming the way that Pearson approaches everything...

Employee Survey



Show, don't tell. Listen, don't talk Efficacy is starting to take hold within Pearson, but in the midst of so much change it has also led to more anxiety. To develop a fuller picture of how our 40,000 employees were feeling about efficacy, we launched a company-wide survey in mid-2014.

The insights were sobering. While they felt confident that this was the right direction, many of our own people weren't sure whether we were serious about the change or if this was another corporate initiative to be started and abandoned in a year. More worryingly, many of them didn't think we had the tools and capabilities to pull this off.

Open, shared experiences The survey results were a wake-up call: it wasn't enough to just do the work; we also had to share stories of success and the lessons we were learning from failures. In addition, efficacy leaders have to continuously remind people of the link to our mission and illustrate the ways that each of them is contributing to the end goal. We have since then started a campaign to increase the dialogue including an internal efficacy blog, efficacy town halls around the world, and much more communication on what efficacy means for our business, from our leaders at every level. We are beginning to show, not tell, and to listen, not talk.

Communicating externally In addition, we've also started to take efficacy to our customers and external partners. We are starting to embed it in more of our partnerships and are using it to evaluate many future investments and deals. Not only do we have the chance to strengthen our external relationships through this two-way dialogue, but we gain invaluable insights on what efficacy means to them and what it means in their context.



I can't make the leap from partnering with our customers to proving our products work, to improving products. I find it hard to discuss efficacy with customers without it sounding like a sales pitch rather than a mission.

Employee Survey



CHAPTER FOUR

Efficacy in practice
continued

Reporting and auditing



The promise to report in a publicly auditable manner on our learner outcomes is a core part of our commitment. To that end, we have started a major work stream to build towards the reports in 2015, 2016 and 2017.

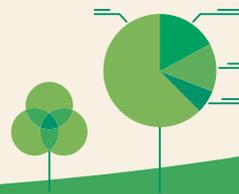
We have engaged PricewaterhouseCoopers (PwC) to be our external partner and support us in building the systems and processes to deliver on this commitment in a way that will be useful to our customers and learners. We will also partner with global academic institutions to ensure that our outcomes and research programmes subscribe to the highest standards of research. Finally, we will continue to use our Annual report and investor calls to feature our commitment to efficacy and provide regular updates to our external community.



CHAPTER FIVE

Efficacy in context with educators

While we started by incorporating the principles of efficacy within our company, we have not neglected working with our customers to define efficacy in their context. Our customers are teachers, faculty, administrators, and institutional leaders, among others involved in the design and delivery of education. They are closest to our learners and we want to work in partnership with them to define outcomes, evaluate our products, and help ensure that our products are used as intended. There are several examples where this is starting to happen across the company and across the world.



CHAPTER FIVE

Efficacy in context
with educators
continued

Defining outcomes We conducted a workshop to define learner outcomes with a team from Pearson and one of our large assessment programme customers. This activity was preparation for our first large assessment programme efficacy review. We are developing customer facing efficacy reviews as a standard practice for selected large assessment programmes. It also offers a customer team-building opportunity and fresh insight to challenges and risks on large assessment programmes.

Running efficacy reviews An outcome is a promise. A commitment to a learner. This commitment is fundamental, but it is also just the start. The real test is whether we as educators deliver and efficacy reviews help ensure we are on track. At the start, we ran these reviews internally – and still do. Increasingly, though, we are conducting reviews in partnership with our customers and the users of our products. The strength of these partnerships is fundamental to help students learn. We will only succeed if we have a broader network of partners (whether educators, parents, or otherwise) rallying around every student.

Efficacy review example 1**Nikkei**

One of the earliest examples of an external efficacy review was conducted in partnership with Nikkei in Japan. Nikkei, who run one of the highest circulated newspapers, is a brand that Japanese corporate leaders trust for accurate information and business insight. In 2012, Nikkei partnered with Pearson to address Japanese business leaders' demand for additional international business and language skills – with a clear outcome in mind.

The Nikkei-Pearson partnership started with a focus on English skills for Japanese business leaders. The learner outcomes were clear – to provide executives with the skills they need to conduct business in English and run international divisions. The learning objectives were equally apparent, including core business skills like writing emails, facilitating meetings and conducting negotiations in English. Working backwards from these outcomes and objectives, we conducted an efficacy review to ensure that Nikkei and Pearson had the right plans and teams in place to meet our learners' needs; and that we were able to track and monitor the real outcomes over time.

The review considered an existing solution to provide online English language learning designed specifically for business executives. As a result of the efficacy review, we were able to identify some early strengths of the programme – including tailored, relevant business English content; in-person seminars to increase motivation and retention; goal tracking sheets to review individual progress over time; and motivational emails and peer-to-peer networks to increase engagement and encourage further study.



CHAPTER FIVE

Efficacy in context
with educators
continued

Nikkei continued

We also set out some plans to make the programme even stronger – including an increase in the blended learning components; additional optional one-on-one coaching; and a plan to develop a total solution that links the online instruction to offline curriculum, instruction and assessment. These actions helped strengthen the Nikkei-Pearson partnership, and are improving the experience and, ultimately, the outcomes for learners (in this case corporate executives) that use the programme.

Efficacy review example 2

Calgary Board of Education

In May 2014 the Calgary Board of Education (CBE) contracted Pearson Education Canada to conduct an efficacy review involving students, parents, teachers, school administrators and staff, superintendents, and other senior leaders at the Calgary Board of Education and the Alberta Ministry of Education. The purpose of the review was to assess the current state of efficacy for the Collaborative Online Resource Environment (CORE)¹ in enabling schools to meet the expectations of the learning strategy in the province of Alberta.

The exercise led to several improvement actions, including the need to further align CORE with other teaching and learning programmes across the province. The participants also identified the data requirements for qualitative and quantitative analysis of learner outcomes. Not only did the review result in a joint action plan, but it also led to a much deeper partnership between Pearson and CBE.

Efficacy review example 3

Nunavut Ministry of Education

Similarly, in autumn 2014, Pearson Education Canada conducted an efficacy review with the Nunavut Ministry of Education. The purpose of the review was to help senior leadership and representatives from the territory investigate the current efficacy of the territory-wide Literacy Initiative.

The review process provided the Ministry and participants with a pragmatic action plan for moving forward. By clarifying the intended outcomes, the process helped to put the learner at the centre of the initiative and underlined the importance of a data collection strategy to monitor progress and inform implementation. Lastly, the conversations also helped uncover the range of professional learning opportunities that will be required to achieve short, medium and long-term goals to sustain improvement.

Notes

¹ <https://www.albertacore.ca/EQ-CORE-LDAPAuthentication/Welcome.jsp>

CHAPTER FIVE

Efficacy in context with educators continued

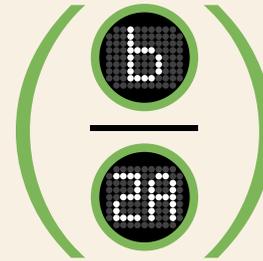
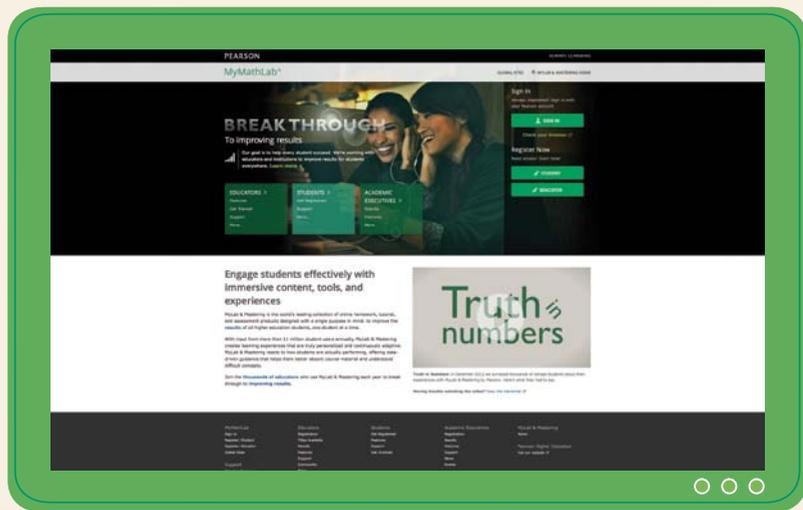
Using evidence to improve outcomes For our first Higher Education clients who have embraced an outcomes-focused partnership at an institution-wide level, we are providing service experts in teaching and learning design, implementation and data analysis. In these engagements, together we are:

Evidence partnerships example 1

Improving predictions of learner performance

We are enabling Southern Illinois University Carbondale's predictive model with dashboards to show key metrics from MyMathLab that are 80% accurate in predicting learner success in a course. In autumn 2014, they provided faculty learner interventions based on the key metrics and increased student completion rates by 20%.

We are now collaborating with a goal to scale the data-driven interventions and outcomes gains with new faculty and student dashboards for other first-year courses at the university.



Evidence partnerships example 2

Research to evaluate first-year algebra performance

We are developing a research framework with a leading university to evaluate all inputs related to student performance in a first-year algebra course and their impact on learner outcomes. Once we validate our approach, the university intends to re-apply our research framework to continually improve and iterate course designs for their first-year general education courses.

Evidence partnerships example 3

New learning model to improve pass rate

We are designing and delivering a new mastery learning model at a partner institution that increased a first-year course passing rate by 16% in 2014, with all other course design elements remaining constant. We are staying engaged to analyse learner and instructor behaviour performance patterns and to support continual iteration and improvement.



Evidence partnerships example 4

Studying effect of digital learning

We are studying the impact of enabling access to digital learning content and solutions on the first day of class at a Higher Education customer, and creating a large-scale plan for supporting all instructors making a shift to digital learning in their courses.



Commitments for 2015

We know that 2015 is a critical year to making progress on embedding efficacy throughout our company. Our priority will be on demonstrating the impact of efficacy on our strategic products and ensuring irreversibility within our company. Our four key priorities for the year are outlined here.

1 The first wave of products to have gone through efficacy reviews in 2014 will continue to make demonstrable progress on the path to efficacy. This means the teams will be working to complete the improvement actions identified during efficacy reviews, gathering efficacy evidence, and refining their efficacy plans through follow-on dialogue with customers.

2 We will identify the next set of products to be the focus for efficacy efforts, a 'second wave,' and the relevant teams will identify clear learner outcomes to be delivered by their products, as well as go through their first efficacy reviews.

3 We will increase awareness and adoption of efficacy internally, across all functions and geographies, and will rework major internal processes to align with the efficacy agenda (including, for example, product strategy, portfolio prioritisation, and recruiting).

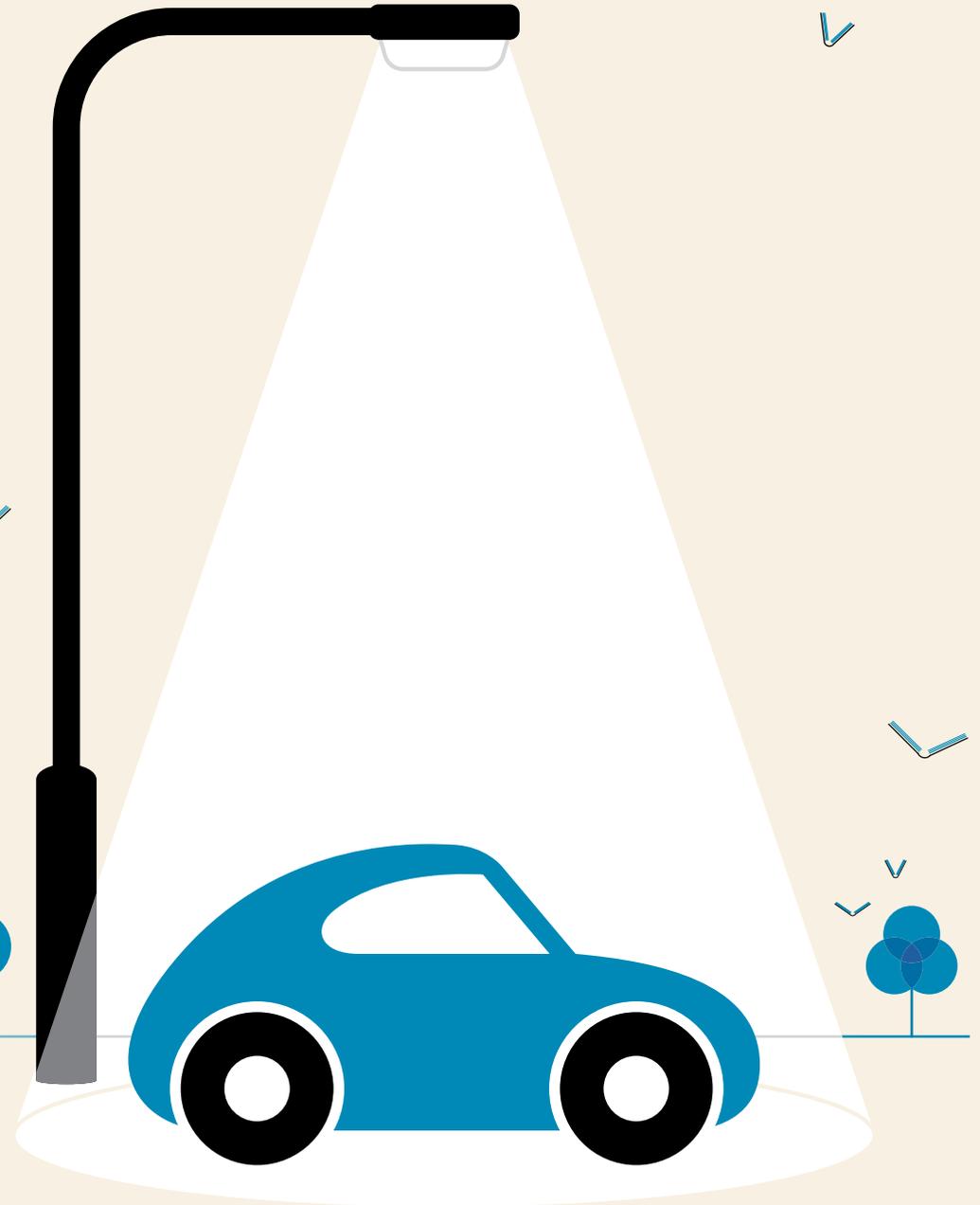
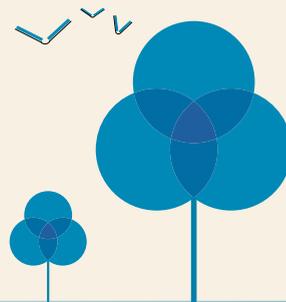
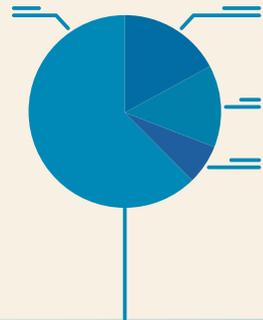
4 We will increase external awareness of efficacy through our work, and promote the adoption of outcomes-based approaches to education in the market.



CHAPTER SEVEN

Spotlight on our products

Our internal efforts have been focused on achieving irreversibility: the moment when we are sure that efficacy is fully in our DNA and will not be rolled back with leadership changes or budget pressures.



CHAPTER SEVEN

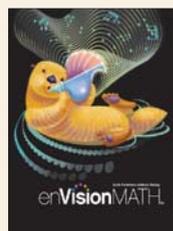
Spotlight on our products continued

Learn more at efficacy.pearson.com/progress →



Irreversibility requires a steady and relentless focus on implementation and constantly sharing accomplishments and lessons learned. Early on, we decided to focus our efficacy efforts on a high-priority, but representative, subset of our products and services so we could learn by doing. These products are global, span our businesses, support learners of all ages and stages, and are in different phases of development. They will also likely form the basis of our first external reporting about efficacy. Below we share a few examples of how efficacy has had an impact on some of those products and put them on the path to improved learner outcomes.

Learn more at efficacy.pearson.com/progress →



enVisionmath 2.0 is a comprehensive next-generation elementary mathematics curriculum that was based on research on instructional practices and on the highly successful enVisionMATH that reaches over six million learners. enVisionMATH users achieve significantly greater growth in math proficiency compared to users of other programmes, as evidenced by an independent randomised control trial.



Wall Street English provides premium English language programmes for young professionals. In-depth efficacy reviews of operations were carried out in four countries and have led to a variety of improvements, from helping learners to better define their goals to measuring their progress against these.

MasteringChemistry for General Chemistry is an online homework, tutorial and assessment programme serving up to 250,000 learners annually in the United States with 30,000 learners annually across 60 other countries. For seven years, our product team and the efficacy results team in North America have worked with educators to collect evidence about the impact of MasteringChemistry on learning and have generated 17 sets of user-generated results. In addition, several independent peer-reviewed academic articles have documented the efficacy of MasteringChemistry both in and outside the US. We are mobilising a wider set of efficacy activities in 2015 to support further product improvements and document impact on learner outcomes across a broader set of geographies.



MyEnglishLab provides learners in secondary school and higher education with interactive online practice, homework and assessments, and teachers with a range of diagnostic tools for English language blended-learning programmes. More than 450,000 new learners in 25 countries used MyEnglishLabs in 2014. The efficacy review has led to a variety of improvements, from UX to curriculum design. Efficacy studies were also completed with more than 25 institutions around the world.



CTI and MGI provide pathways for the emergent middle-class to gain access to higher education in South Africa and the economic and personal advancement opportunities that this provides. Currently, they serve 14,000 students across 12 CTI and 13 MGI campuses. Our efficacy efforts provide objective evidence of these opportunities to date and our ongoing efficacy programme is focused on constantly improving opportunities for our students and graduates.



CHAPTER EIGHT

Efficacy in other contexts

From the beginning, we have known that we aren't alone in the pursuit of improved learner outcomes. While we may have started the dialogue and hope to lead the debate, examples are popping up around the world.

Here are just a few examples of companies and institutions, large and small, that are embracing a focus on outcomes. We have worked with some of these organisations to build an outcomes-focused culture and we have heard about others through our partners or in the press.



CHAPTER EIGHT

Efficacy externally
continued

Our approach to efficacy has been deliberately open and transparent, with the hope of starting a two-way dialogue with our peers and competitors about improving outcomes for learners. We won't be satisfied just with improved outcomes for Pearson's learners; for there to be meaningful change, we need many, many more educational institutions to embrace the concept.

The Bill and Melinda Gates
Foundation

The Bill and Melinda Gates Foundation recognised a need to connect school leaders who were struggling to identify which education technology to implement and education technology companies who were struggling to demonstrate the effectiveness of their products. In August 2013, the Foundation launched a matching process to facilitate "short-cycle feedback on product efficacy so that teachers, school decision-makers, and parents have better information about the effectiveness of digital courseware, and developers of such products

Global Partnership
for Education

GPE is a multilateral organisation that works across public, private, and social sectors to improve the access to and quality of education for children in developing countries. The GPE helps developing country partners develop sound education plans, mobilise domestic funding for education and gain access to international funding from its donor governments.

The GPE is actively moving to a results-based financing model which means countries must demonstrate significant performance results in equity, efficiency and learning outcomes to receive part (30%) of a grant distribution. At the GPE Summit in the summer of 2014, Pearson pledged to provide services to recipient countries to help them define intended outcomes, to conduct efficacy reviews, and to provide access to our research base.

receive more rapid input to improve their offerings."¹ As a result, start-ups are being matched to New York City schools that are interested in piloting new ed-tech solutions and to local research institutions to conduct rapid-cycle efficacy studies of these ed-tech interventions. The aim of these studies is to create quick and effective models that schools can use to evaluate whether a product will have the intended effect, and whether a school should keep it or move on.

Source

¹ <http://gettingsmart.com/2013/12/short-cycle-eficacy-trials-key-personalized-learning/>

LinkedIn



The premier career-focused social network is trying valiantly to shake up the field of higher education rankings by announcing their own index based on graduate career outcomes. They have leveraged their database of more than 300 million members to analyse which programmes at which universities are best positioned to get graduates into a particular career.

Higher education rankings have long been focused on inputs (e.g. number of professors, student-to-teacher ratio, campus buildings), but this is one of the most data-driven rankings focused on a real outcome: in this case, employment. Graduates considering a career at a particular company or in a particular field can find the universities that have had the most success in achieving that outcome for other students. In the US, the student debt crisis has made outcomes-focused rankings like this an absolutely critical tool for students.

CfBT
Education Trust

CfBT Education Trust is an international education provider. Globally, they run schools, support school improvement programmes, and deliver English language learning and employability services. The CfBT has long had a culture of measuring the progress their learners make as a result of their interventions.

All projects at the CfBT are being evaluated on a balanced scorecard of educational outcomes, customer satisfaction and financial success. Over the past few years, the CfBT has also built depth in research and evaluation methods for educational interventions and used those to improve the quality of their products and services.

Cengage



Cengage is a major international education company, and is a competitor to Pearson. The company publishes books, develops technology, and provides services for schools and universities. Cengage's efficacy work has been focused on improving student engagement and achievement. To date, it has published several research-based whitepapers on its products showing impact on learner outcomes.

We appreciate how Cengage's research-driven approach raises the bar for education companies to show demonstrable learner outcomes. This is precisely the shift that is needed across all education providers.

The Aldridge
Foundation

The Aldridge Foundation is an educational charity founded by Sir Rod Aldridge to help young people reach their potential and improve their communities, mainly through the sponsorship of entrepreneurial academy schools and colleges. Using freely available tools like the efficacy framework, the foundation is hoping to add systematic educational rigour and measurement to their ambitious vision.

One of their insights was that while they had clearly defined outcomes, they didn't have any way of knowing when they had been successful. As a result of the efficacy review process, they also articulated what a "model" Aldridge institution looks like as they look to scale their programmes.

CHAPTER NINE

Challenges ahead

No journey worth undertaking is without its bumps. From listening to our own employees, our customers, our learners, and external experts, we know our journey is no different. But rather than let these bumps become roadblocks, we are learning by doing. We are making mistakes, learning, and moving on.

The challenges we list in the chapter are by no means the only ones we anticipate but do represent the most substantial of what we are working with. In sharing these transparently, it is our hope that we ignite a conversation on how we can address them.



CHAPTER NINE

Challenges ahead
continuedIsolating the impact of
educational products

The state of education research isn't nearly as advanced as research into health or the physical sciences. Despite all we've learned in the last century, the brain is still a black box and pedagogy is still very much an art. Education technology is unproven at scale. And, many classrooms of today still look quite a lot like they did a century ago. In the midst of such ambiguity, it would be naive of us to assume we will be able to isolate the impact of our education products independently of all the other variables that impact our learners' lives: instructors, learning environment, parents, health, among others.

Rather than let that stop us, we are starting to collaborate with the world's foremost experts on education research and measurement and inviting them to help us advance what we know about how people learn and predict the face of education in the 21st century.

[There are] major barriers to making efficacy the 'true north' of policy or organisational practice. Greatest among these is complexity. Competing goals, competing organisational responsibilities (intra and inter) and competing incentives all confound and distract from a focus on the outcomes that most matter...

Matthew Taylor

Chief executive of the Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA)

Maintaining
momentum

The vast graveyard of failed transformation programmes is not something to be taken lightly. The majority of change programmes fail due to issues with implementation or change fatigue. We embark on this journey fully acknowledging that there is a long and hard road ahead. The challenge will be in keeping our eyes on the horizon as we face uncertainties in our business models and economic volatility. Do our employees and our systems have what it takes to undergo the largest transformation in our history?

They have shown so far that they are up to the task, but preserving that momentum is simultaneously nobody's job and everybody's job.

This strategy is intrinsically frugal: it shifts the focus from inputs (designing and delivering educational content, tools and services) to outcomes (measurable impact on learners). And this in turn forces Pearson to do more with less – that is, deliver more rapidly the highest impact and value for its learners while maximising the value of its educational assets.

Navi Radjou

4 CEOs Who Are Making Frugal Innovation Work

Committing
financial resources

We are serious about efficacy and that comes with serious financial commitments. There is a real cost to devoting dedicated efficacy resources, to running reviews and major research programmes around the world, to investing in new data systems, to changing or divesting existing products that may not end up being efficacious, to being more data-driven in the development of new products, and to working more closely and collaboratively with our customers. But we have known from the beginning that efficacy will be a long-term bet which requires near-term financial expenditures. So far, our company has shown a real commitment to the programme and acknowledged that the increase in short-run costs is justified for long-term gain. The real test will be our ability to keep our eyes focused on the long-term potential of this shift despite challenging fiscal environments.

Changing customer
decision-making to
be outcomes-based

For outcomes to improve for billions of learners around the world, those who are accessing education need to demand more from those who are providing. Buying decisions need to be more focused on efficacy and learner outcomes than relationships, price, or brand name. We fully acknowledge that as one of the world's largest learning companies, we may have the most to lose here. But we do fundamentally believe that we will only do well by doing good; that our business outcomes are a result of our social outcomes. But what will it take for customers to hold us accountable for what we sell? We would never buy a pill if we didn't believe that it would work; why do we not hold our education to the same standard?

If I were to hear that Pearson's sales force made a habit of encouraging district decision-makers to apply this efficacy framework to the educational products of Pearson (and others) that would be a huge step forward."

Daniel Willingham

Professor of Psychology, University of Virginia



CHAPTER NINE

Challenges ahead
continued

Getting others on board



Pearson only touches a fraction of the world's learners. For meaningful improvement in the lives of the billions of others, the entire education sector, including our competitors, will need to be on board. We have profiled a few examples of leading organisations on pages 50-51, but we will need many, many more to make a commitment to efficacy. There will always be players in the education sector who don't use our language or our frameworks, but we'd ask that they act with the learner in mind – and that others begin to share their successes and lessons with the world. Improving the world's quality of education is such a big challenge that we must approach it openly and collaboratively.



CHAPTER TEN

Conclusions

We recognise the tremendous scope of the task ahead. We are changing how a 40,000-person company with a 170-year history makes and sells its products in the midst of major disruptions, major economic headwinds, and major crises for its customers.

The scale and complexity loom ahead of us – in this moment we must acknowledge that not only have we made the decision to climb the mountain, but that we have already reached the base camp. The gear is packed, the crew is ready, and the march is on.

We have our detractors, our critics, our naysayers – those who say it cannot be done – and we always will. We believe, however, that efficacy is real at Pearson and it is starting to show results. Even though our 2018 public Efficacy Report is three years away, we are not waiting until then; we are aiming for irreversibility in 2015. When this report is renewed next year, we will once again renew our commitment to our learners and share more examples and lessons we've learned.

We hope this guide serves as a call to action for everyone in education. If you sell a product or service, we hope this encourages you to think more proactively about the outcomes you are delivering and how to improve them.

Really?
That's what you're doing?
That seems impossible.

Education expert



While they were
saying among
themselves it
cannot be done,
it was done.

Helen Keller



To our competitors, we hope you challenge us in the marketplace on the basis of outcomes that we each deliver for the learners.

If you buy education products, we hope this encourages you to ask more questions when making future buying decisions. Ask for evidence that what you are buying will do what it says.

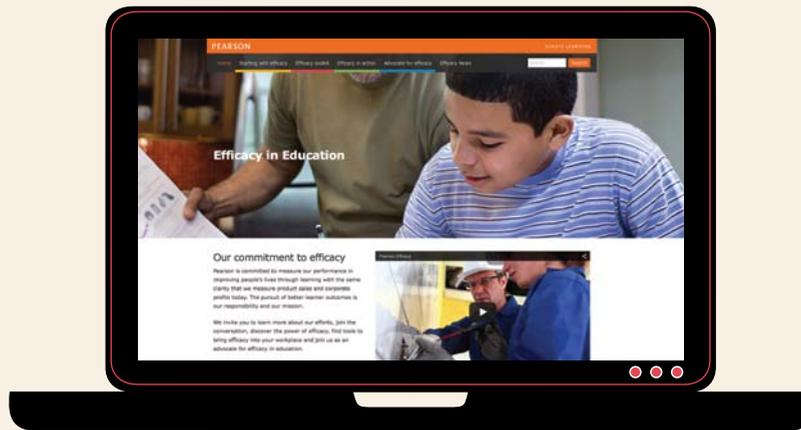
If you are a learner and use these products, ask the tough questions. What outcomes does this product promise me? What's the evidence that shows whether it can even deliver those outcomes? How will my life be improved as a result?

This guide is an attempt to document our journey, share our successes and failures, and to get comments. We hope it has been successful in providing a sense of where we are and where we are going. As always, we look forward to hearing feedback.

Engage more

Key to our efficacy programme is our engagement and conversations with all stakeholders. We'd like to hear from you. Visit our efficacy site to participate.

Learn more at efficacy.pearson.com →



With thanks to...

Our internal colleagues who are designing and delivering efficacy every day

Our external partners who have informed our approach

Our customers who are singularly dedicated to improving outcomes for their learners

And to our learners for trusting us to help them make progress in their lives.



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