Learning for life

Pearson Annual report and accounts 2018

Enabling employability, connecting the education ecosystem and supporting lifelong learning.

In this report

STRATEGIC REPORT

Strategy and performance reporting
The strategic report up to and including p76 is formed of three sections: 'Overview', 'Our strategy in action' and 'Our performance', and was approved for issue by the Board on 11 March 2019 and signed on its behalf by:

Coram Williams Chief Financial Officer

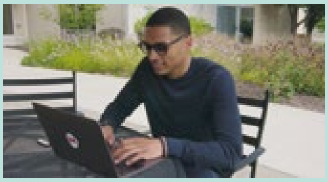
Education has never been more important. In an ever-changing and increasingly connected world, many people pursue an education to get a better job and to build a more prosperous life for themselves and their families.

To keep up with the pace of change, we are all going to need to be lifelong learners, continuously acquiring new knowledge and skills to stay on top of new technologies and a rapidly changing world of work.

For every individual, at every stage of their life, education is the path to opportunity and fulfilment. We are here to help keep the whole world learning – because wherever learning flourishes, so do people.

Our strategy see p18

Connections Academy offers flexible education for its students see p15



Studying an online degree powered by Pearson, at Maryville University see p6

BTECs provide students with real-world experience see p52

Glossary of major products and services see p226

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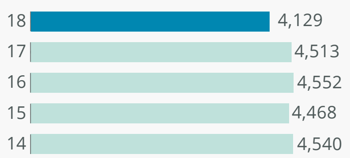
Key performance indicators

Financial measures

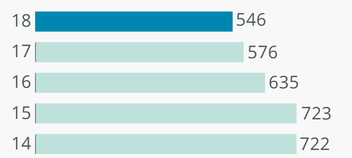
Sales £million, underlying change ®

£4,129m -1%



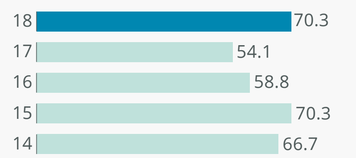
Adjusted operating profit[1] £million, underlying change ®

£546m +8%



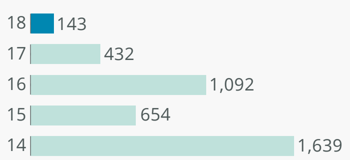
Adjusted earnings per share[1] pence, headline change ®

70.3p +30%



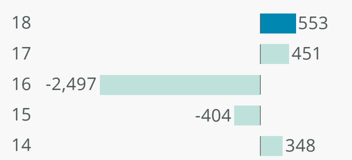
Net debt £million, headline change

£143m -67%



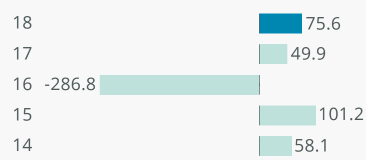
Operating profit/loss[2] £million, headline change

£553m +23%



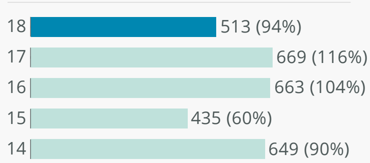
Basic earnings per share[2] pence, headline change

75.6p +52%



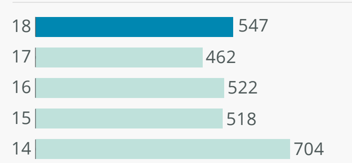
Operating cash flow and cash conversion[1] £million, headline change ®

£513m -23%



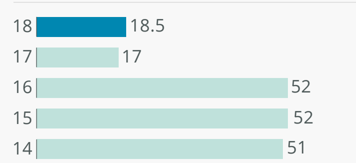
Net cash generated from operations[2] £million, headline change

£547m +18%



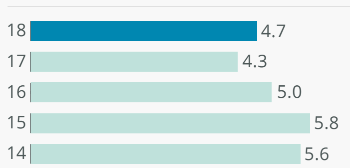
Dividend per share pence, headline change

18.5p +9%



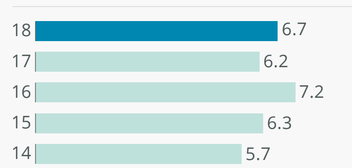
Return on invested capital (gross basis) %, headline change ®

4.7% +9%



Return on invested capital (net basis) %, headline change

6.7% +8%



Total shareholder returns[3] ®

+30.4% 1 year TSR

+47.1% 3 year TSR

-12.1% 5 year TSR

1 See p46–47 for an explanation of these alternative performance measures.
2 Equivalent statutory measure.
3 Source: Datastream.

Note: Underlying growth rates exclude currency movements, portfolio changes and accounting changes. See p222–225 for full reconciliation of the alternative performance measures to the equivalent statutory measure and definitions of headline and underlying variances.

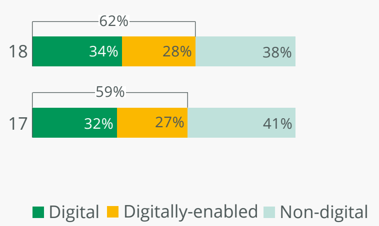
® See how we link strategy to management reward on p110.

Business measures

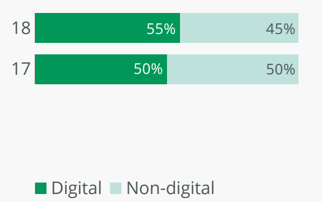
1 Grow market share through digital transformation of our courseware and assessment businesses (R)

p20

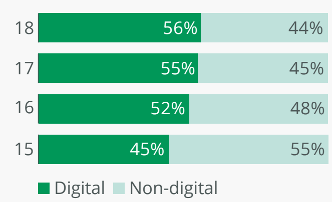
Digital revenue[4] %



US Higher Education Courseware



Shift from physical to digital test papers marked for US Assessment %



4 Excludes WSE, US K12 Courseware and GEDU. WSE was sold in 2018; US K12 Courseware was held for sale in 2018 and we announced the agreement to sell this business in 2019; and GEDU was sold in 2017

2 Invest in structural growth markets

p22

Virtual Schools (Connections Academy)	Growth
Underlying revenue	+8%
FTE students in continuing partner schools	+11%

Professional Certification (Pearson VUE)	Growth
Underlying revenue	+4%
Test volume	+4%

Global Online Program Management	Growth
Underlying revenue	+10%
Enrolments	+14%

English	Growth
English Courseware underlying revenue	+3%
PTE Academic test volume	+30%

3 Become a simpler, more efficient and more sustainable business (R)

This strategic priority is captured in more detail in the strategy section on p24.

p24

Non-financial measures

Talent and employee engagement p37	
Employees who took part in our 2018 organisational health survey	57%
Participating employees who agreed with our organisational health approach	59%

Reduce our carbon footprint p39		
Global greenhouse gas emissions (Metric Tonnes of CO_2e)	84,649	-19%

Deliver gender diversity	2018	2017
Female Board members	30%	30%
Female senior managers[5]	31%	30%
Female employees	62%	61%
UK median gender pay gap	14%	15%

5 Two reporting lines from the Chief Executive.

p38

Note: Underlying growth rates exclude currency movements, portfolio changes and accounting changes.

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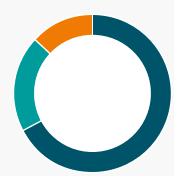
About Pearson

We are the world's learning company operating in 70 countries around the world with more than 24,000 employees, providing a range of products and services that help people make progress in their lives through learning.

Where we operate

We operate in 70 markets worldwide, with a focus on those below. We report by geography because this is how we deliver learning: providing a range of educational products and services to institutions, governments, professional bodies and individual learners in our key markets around the world to help people everywhere aim higher and fulfil their true potential.

Sales by geography



- North America £2,784m
- Core markets £806m
- Growth markets £539m

North America

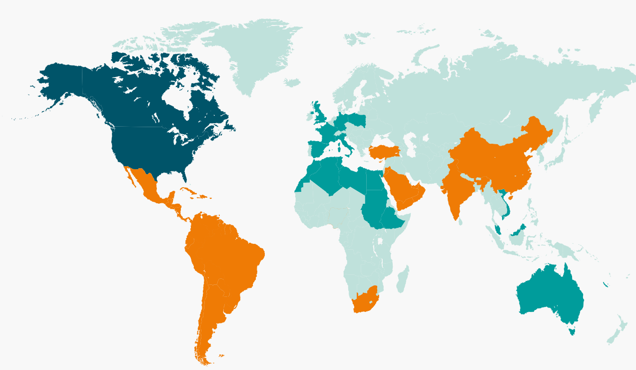
Our largest market including all 50 US states and Canada.

Core markets

Our international business in established and mature education markets including the UK, Europe, APAC and North Africa.

Growth markets

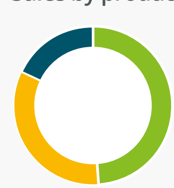
Our growth markets are emerging and developing economies with investment priorities in Brazil, India, South Africa, Hispano-America, Hong Kong & China and the Middle East.



What we offer

We provide content, assessment and digital services to schools, colleges and universities, as well as professional and vocational education to learners to help increase their skills and employability prospects. Increasingly, we do this through partnership models where we bring investment, expertise and scale to help deliver better learning outcomes.

Sales by products and services



- Courseware 49%
- Assessment 33%
- Services 18%

Our major businesses are focused on two key strategic priorities:

See our strategic priorities, p20

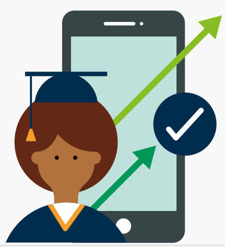
1 Grow market share through digital transformation

Digitisation enables us to drive improvements in learning outcomes. It allows us to build a more sustainable and profitable business with a more visible and predictable revenue profile, based around access not ownership models.

Higher Education Courseware

Our course content and digital resources help educators gain better insights on their students and unlock learners' potential. We increasingly sell directly to consumers and to educational institutions enabling our business to become more predictable. The shift to digital means students can come to class better prepared from day one. This helps drive better learning experiences and outcomes.

See case study, p55



US Assessment

We partner with US educators and states to develop new, personalised ways of learning through effective, scalable assessments that measure 21st century skills and inform instruction for all learners.

UK Assessment & Qualifications

In the UK, Pearson is a market leading organisation offering academic and vocational qualifications including GCSEs, A Levels and BTECs. We are driving the adoption of AI in assessment to support better learning.

See case study, p52

2 Invest in structural growth markets

Fast growing areas that will be the long-term growth drivers of Pearson – such as Online Program Management (OPM), Virtual Schools, Professional Certification and English Language Learning.

Online Program Management

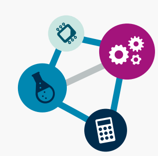
Pearson helps higher education institutions launch or expand online degrees, enabling them to increase enrolments, support online learning, boost graduation rates and deliver on employability.

See case study, p6

Virtual Schools

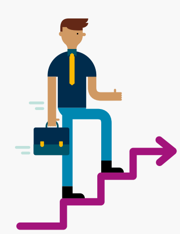
Pearson delivers K12 online education to schools and students across the US and world. Solutions include the accredited Connections Academy, an online school programme which is delivered via full time, online public schools. This is an option for families seeking personalised learning and a high-quality alternative to the traditional classroom. A global online private school, International Connections Academy, is also available.

See case study, p15



Professional Certification

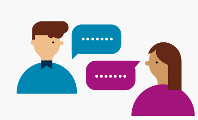
We help organisations measure and make improvements to ensure the success of employees and learners, helping support lifelong learning. Test owners and test takers across the world choose us to help develop, manage, deliver and grow their computer-based testing programmes. With some of the industry's most secure testing environments, we are a leader in computer-based testing.



English

Pearson English language teaching develops courses, qualifications and learning tools to make teaching English easier. Our fast-growing test, Pearson Test of English Academic, is a leading computer-based test of English for study abroad and immigration.

See case study, p42



I can work full time as a 19 year old. I can get my experience way before a lot of my generation so that's been a great opportunity for me.

JORDAN DAVIS
MARYVILLE UNIVERSITY

Jordan Davis is a sophomore at Maryville University studying cybersecurity. Like most of his college-age peers, he also has a job. It can be hard to balance schoolwork with the demands of a job.

Since OPM courses are delivered online, learners have the freedom and flexibility to learn when and where they need to, and faculty members are able to engage students in courses designed with rich content and robust learning activities.

Pearson helps institutions expand their educational reach through effective online program management solutions. By delivering online degree programs or extending the reach of existing online programs, students like Jordan have the opportunity to excel at school and at work.

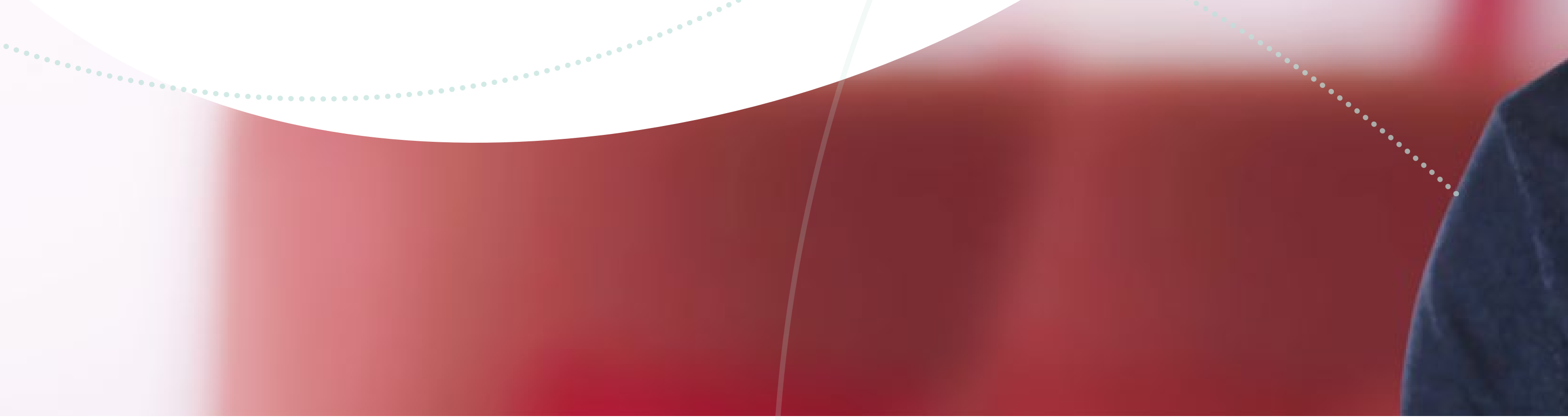
Pearson currently supports more than 40 academic partners and runs nearly 350 global programs with 400,000+ course registrations in 2018, to give learners more control over their education and help them get a better job and a better life.

Global Online Program Management

£234m
Revenue

+10%
Underlying revenue growth

2 Aligned to strategic priority, p22



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Chair's introduction

2018 has been a pivotal year for Pearson as we returned to underlying profit growth and laid a firm foundation for further progress in 2019.

Sidney Taurel
Chair

Dear Shareholders,

2018 has been a pivotal year for Pearson. The pace of our strategic delivery over the past year has been strong, improving both our operational and financial performance as we returned to underlying adjusted operating profit growth for the first time since 2014. This marks an important milestone for us, with the business meeting strategic expectations and hitting its financial targets.

While we are still in the midst of a transformation and the environment in a key business, US Higher Education Courseware, remains challenging, a strong performance in our structural growth opportunities in 2018 largely offset the declines we saw in this market. Furthermore, we continued to make good progress with our digital transformation increasing digital and digitally-enabled sales to 62%[1].

I do not underestimate the scale of the transformation we are undertaking but believe we delivered real and sustainable momentum in 2018. Management continues to faithfully execute on our strategy, further simplifying the company, growing our digital capabilities and investing in structurally growing businesses. Our near-term prospects look increasingly bright and the long-term opportunities remain significant.

Making progress implementing our short-to-medium-term strategy

As a Board, in 2018 we spent considerable time monitoring our progress on implementation against Pearson's three immediate strategic goals – growing market share through our digital transformation, investing in structural growth markets, and becoming a simpler, more efficient and more sustainable business.

A key tenet of our strategy has been the steady investment in the business to support our digital transformation. This is an area the Board has fully supported and, in 2018, the business made good progress as it lays plans to develop a digital first approach built around artificial intelligence and data analytics – a digitally-enabled offering that will deliver value to customers faster, while at the same time ensuring better outcomes. This will be crucial to our future competitiveness as well as our ability to retain and attract the best and brightest talent to support our transition to a digital led model.

We are continuing to invest in structural growth markets that promote lifelong learning, delivering good growth across each of these four businesses – Professional Certification, Virtual Schools, Online Program Management (OPM) and English language learning and assessment.

Our simplification programme, which we embarked upon in 2017, is performing ahead of plan as we strive to make Pearson an efficient and more focused business. During 2018, we increased and accelerated our cost savings and now expect to deliver total annualised cost savings in excess of £330m by the end of 2019. This is ahead of our original plan of £300m of savings.

We also continued the process of simplifying the portfolio in 2018, to enable us to focus on the biggest opportunities in education. We completed the disposal of Wall Street English and our stake in Mexican joint venture, UTEL, in the first half of the year. The proceeds of these sales helped strengthen our balance sheet further and improve our cash position. We have recently announced the disposal of our US K12 Courseware business, which is a further milestone in our simplification journey.

You can read more about these accomplishments in the Chief Executive's overview that follows.

Focusing on Pearson's longer-term future

As the Board has become more confident in progress on implementation against Pearson's three immediate strategic goals, it has focused even more on the company's longer-term future, evaluating and planning our long-term strategy, to ensure we continue to evolve and meet our strategic vision of delivering lifelong learning to customers, leading to increased employability and work-related skills, as part of a wider ecosystem of delivery partners and stakeholders.

As we now look ahead, we expect to build on our performance in 2018 and deliver further profit growth in 2019 and for revenue to stabilise. We remain confident about Pearson's longer-term prospects and on building shareholder value through the delivery of profitable growth and strong cash generation, while continuing to invest for the future.

Focused on shareholder returns

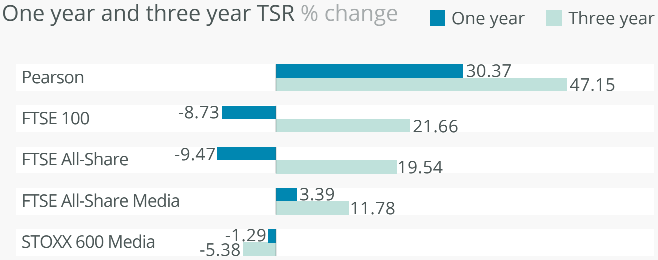
As Chair it is my job to protect and grow shareholder value through the prudent allocation of capital.

Pearson's capital allocation policy remains unchanged: to maintain a strong balance sheet and a solid investment grade rating, to continue to invest in the business, to have a sustainable and progressive dividend policy, and to return surplus cash to our shareholders where appropriate.

In recent years, we have navigated through a period of significant change – both within Pearson and across the industry as a whole. Tight financial and cash management and oversight of the business means that, while there is still much to be done, we are now in a significantly stronger financial position than we have been for several years. This financial strength underpins our business transformation and continuing investment in the company.

1 Excluding WSE and US K12 Courseware.
Underlying growth rates exclude currency movement portfolio changes and accounting changes.

One year and three year TSR % change



Progress over the last three years

	2016	2017	2018
Adjusted earnings per share[1]	58.8p	54.1p	70.3p
Dividend per share	52p	17p	18.5p
Net debt	£1,092m	£432m	£143m

In terms of the dividend, when we made the hard decision to cut the dividend in 2017, we said that we would reset it to be sustainable and progressive going forward. We have proposed a final 2018 dividend of 13p, an increase of 8%, equating to a full year dividend of 18.5p per share. This reflects the Board's continued confidence in the future growth of the business.

We also completed a £300m share buyback in February 2018, following our disposal of a 22% stake in Penguin Random House in October 2017.

I am pleased to report that our UK pension Plan is in surplus, with a well-run Plan for the benefit of all its members. In early 2019, the Plan purchased a further insurance buy-in policy with Legal & General, amounting to c.£500m, putting the Plan in an even stronger position and further reducing our future pension funding risk, at no additional cost to Pearson.

The continued stabilisation of the business, combined with disciplined capital management, helped Pearson to become one of the top five FTSE 100 companies in 2018 for shareholder returns.

Ongoing focus on corporate governance

Corporate governance remains an important area of focus for the Board and I enjoyed spending time throughout the year with many of our shareholders to ensure we maintained an open, transparent dialogue on our strategy and progress. More broadly, our Board members have been engaging with employees, educators, learners, community and thought leaders, and other stakeholders in a variety of ways throughout the year.

During the year my fellow Board members and I visited some of our offices across the Pearson network including in Milan, Italy and Cape Town, South Africa, to meet and engage with employees and other stakeholders, and hold meetings to share learnings around some of the exciting opportunities coming out of our Core and Growth markets – for example fast growing products such as the Pearson Test of English Academic.

This continues to be a focus for us in the year ahead.

Talent

I would like to thank all colleagues in the business for their efforts in achieving a successful 2018. Our people are key to the future of Pearson and as a Board we are increasingly focused on ensuring we have a corporate culture that is inclusive, innovative and meritocratic.

My fellow Board members and I are delighted to be able to help support our talent pipeline through the introduction of a new mentoring programme. You can read more about our employee engagement and talent initiatives in the Governance section which begins on p77.

Board composition

Our Board benefits from having a wide range of experience, skills and backgrounds spanning business strategy, innovation, education, digital & technology, sustainability, international, regulatory affairs and more.

We saw two changes to the Board over the course of 2018. In February 2018 Michael Lynton joined us as a Non-Executive Director. Meanwhile we said goodbye to Harish Manwani, a Non-Executive Director of Pearson since 2013, who retired from the Board at the AGM in May. I thank Harish for his commitment and contribution to Pearson.

Looking ahead

We will continue to transform the business through moving our US Higher Education Courseware business into a more digital and direct to consumer business, and continue to invest in and develop our long-term structural growth opportunities. Through our simplification programme we will emerge a simpler, more efficient and agile company with a cost base that is considered optimal for the size and scale of the business.

Pearson has proved resilient, we have laid solid foundations for growth and the Board is confident that the management team continues to execute faithfully on the strategy as we look to deliver another good performance in the year ahead.

We remain confident about Pearson's longer-term prospects and on building shareholder value through the delivery of profitable growth and strong cash generation, while continuing to invest for the future.

I look forward to seeing you in the coming year and thank you for your ongoing support.

Sidney Taurel
Chair

Governance at Pearson

For more information on corporate governance visit www.pearson.com/governance see p77

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CEO's strategic overview

Technology is radically changing the way we live, work, and learn, and we are only in the early stages of what is possible.

John Fallon
Chief Executive

Dear Shareholders,

A year of progress

We are making good progress, financially, operationally and strategically. Underlying adjusted operating profit increased by 8% last year, with a healthy 94% of that profit converted into cash. We outperformed on our cost savings plan and are now on track to achieve more than £330m in annualised cost savings by the end of this year. We strengthened our balance sheet even further, allowing us to invest more than ever in the digital transformation of our company. The demand for dynamic, evidence-based, outcome led, digital first education products and services is growing all the time. So we are investing in the digital platforms, products and services that help people make progress in their lives through learning – and it is starting to pay off. Our digital and digitally-enabled revenues now account for 62%[1] of our sales and we expect them to grow steadily over time.

A strategy for future, sustainable growth

There is, however, a lot still to do. On the measure that is the best indicator of our company's long-term success – sustainable and profitable growth in like for like sales – we are not yet where we need to be. Underlying sales were down by a further one percent last year. What is encouraging, though, is that we expect revenues to stabilise this year – an important step in the Pearson recovery – before starting to grow again in 2020 and future years.

That growth will be driven by our compelling vision of Pearson's future, a clear understanding of the capabilities – the competitive edge – that will get us there, and what we need to be focusing on today to secure that future.

Pearson is the world's learning company. Our purpose is to empower people to progress in their lives through learning, enabling them to acquire the knowledge and skills to thrive in an ever-changing and increasingly connected world. As the link between education and employment becomes both more important and explicit, we aim to be at the heart of a wider ecosystem of partners, shaping the future of learning.

We will be able to play that role because of the world-class capabilities we bring to bear, and the ways in which we combine them to achieve better learning outcomes. We will get there by focusing on the three things that are starting to change the growth dynamic of Pearson:

- One, we are leading the digital transformation of our courseware and assessment businesses. These businesses make up 65% of our sales today. Their collective sales fell by 4% underlying last year as we are at a point in the technological disruption of these businesses where the impact of the decline in analogue sales (from textbooks and paper and pen testing) is still greater than the benefit of growing digital uptake. We are now close to a tipping point in these businesses, however, where the momentum shifts. As these businesses become increasingly digital first, the rate of decline will gradually lessen before revenues stabilise and, in time, grow again.
- Two, we are investing more in our businesses in structurally growing markets. These businesses, all fully digital or digitally-enabled, make up 35% of our sales today and grew 7% underlying last year. As we invest more, these businesses will grow more quickly and, as they become a bigger part of Pearson, they help the company as a whole to start to grow again.
- And three, making Pearson simpler and more efficient. This does not just cut costs. It also provides an important platform for future growth because it enables us to reallocate investment to our growth areas more quickly, innovate at scale, and build a more direct, longer-term relationship with the tens of millions of learners who use Pearson products each year.

A digital first approach

The increasingly digital nature of our courseware and assessment businesses can be seen in the work we do with American schools and universities. Digital now accounts for 56% of all tests we administer in US schools and 55% of our US Higher Education Courseware revenue.

This digital first approach is driving our product innovation and investment. Our Global Learning Platform (GLP) will accelerate our ability to develop, test, and deliver highly personalised experiences across all of our products and services, eventually becoming a platform for growth for the whole company.

Revel, our first fully integrated digital courseware product, increased subscribers by over 40% last year. New Revel titles, with enhanced assignment options and sophisticated data analytics, will be the first products to launch commercially later this year on the GLP.

We will also launch our first Artificial Intelligence (AI) powered maths tutor, as a mobile app marketed directly to Calculus students around the world, providing step by step feedback instantaneously on hand written attempts to solve a problem.

1 Excluding WSE and US K12 Courseware.
Underlying growth rates exclude currency movement portfolio changes and accounting changes.

We will partner with universities on our first AI powered essay marker, that will adapt to the personal style of any professor. And we expect to bring a new adaptive maths product, which we are currently piloting, to commercial launch early next year.

This growing, innovative product pipeline signals we are now ready to shift our higher education product portfolio to a digital first model, with frequent releases of content, features and updates no longer tied to an edition cycle.

Print resources will be available, but as rental or an "add on" service. This means better customer choice with simple, affordable and convenient access to the courseware that enables students to be successful – and all giving better insights for instructors to enable better outcomes. A digital first, subscription-based business is also, of course, a much more stable one.

Increased investment in our structural growth opportunities is also paying off. Online Program Management, (OPM) our business helping universities scale online, increased underlying sales 10% last year, with global course registrations growing 14%. We signed a new OPM contract with leading European business school ESSEC in France – the fourth global market we have entered in OPM – allowing students to study AI and big data in an online masters format.

Our virtual schools business, Connections Academy, grew underlying revenue by 8%. Professional Certification grew underlying revenue by 4% with over 70 new contracts signed during the year.

The Pearson Test of English Academic, our homegrown test of English aptitude, increased test volumes by 30% in part driven by the extension of the Australian immigration office contract for a further two years. This has opened up additional opportunities with governments and educational institutions that we are currently exploring. The Pearson Test of English is also a good example of how, as we become a simpler and more efficient company, we are also able to operate much more globally, sharing innovation more quickly with customers all over the world.

Key achievements in 2018

Adjusted operating profit[1]

£546m

Achieved 2018 adjusted operating profit in the upper half of our guidance range.

1 See p46–47 for an explanation of this alternative performance measure and p222–225 for full reconciliation of the numbers to the equivalent statutory measure.

Strong balance sheet, low net debt

£143m

Net debt down from £432m in 2017 as we continue to strengthen our balance sheet, enabling us to navigate a large transformation.

Continuing organic investment

£700m+

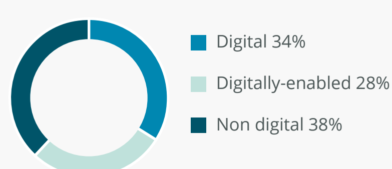
Continued investment in fastest growing businesses in order to build a pipeline to grow revenue over the next few years.

Simplification programme ahead of plan

£130m

In year cost savings for 2018 running ahead of our plan enabling further investment back into the business. Total annualised cost savings now expected to be £330m+.

Pearson's digital revenue 2018 Percent of sales[2]



2 Excludes WSE and US K12 Courseware.

CEO's strategic overview

A wider trend in lifelong learning is the growing demand for employer certified and applied, career relevant education. Our leadership in BTEC and apprenticeship programmes is an interesting opportunity to grow internationally – and we are working on some promising initiatives in Thailand, Vietnam and China.

It is by focusing on these three priorities – leading the digital transformation of our courseware and assessment businesses; investing more in our structurally growing businesses; and making Pearson simpler and more efficient – that we will set Pearson growing again. As we accelerate our move to digital, Pearson also becomes more sustainably profitable and scalable, with a more reliable and predictable revenue and cash profile.

Our commitment to efficacy and impact

Underpinning all of this work is our commitment to efficacy, to achieving the very best learning outcomes. Last year, we became the first education company in the world to publish externally audited and independently reviewed reports about the efficacy of our products. This year, we are releasing our second series of reports. These reports give us confidence that our existing products can be used to impact on outcomes that matter to our customers and learners. Our public commitment to efficacy is also influencing others in the sector to now take up similar work. What is most exciting, though, is how we are applying what we are learning to the next generation of digital first products and services that we are launching this year. We are able to explicitly connect the outcomes that matter most to our customers: evidence-based content, assessment, and technology, all designed to be implemented in ways that maximise the impact on learning. This enables us to shape the future of learning so educators, learners, employers – and shareholders – all get the best possible return for the investments we make.

Promoting talent and diversity through a time of great change

Making an impact matters to the highly motivated and talented colleagues who, inspired by our mission and purpose, are committed to driving the company through what is, by any definition, a major transformation. Many new and talented employees are joining Pearson, but we also continue to say goodbye to some long-standing friends and colleagues. As we align our cost base, and bring everything we do in line with the future direction of the company, the scale and pace of change can be disruptive and difficult for many colleagues. This makes it all the more important that we are very focused on the overall health of the organisation, and in fostering a culture that enables people to learn, to grow, and to be able to innovate, through these times of change.

To do that, we are focusing on developing talent at all levels, and we remain firmly committed to improving diversity and inclusion across the company. For example, as required by UK legislation, we now publish an annual gender pay report covering our UK employees, which reveals a median pay gap, in favour of men, of 14%. The only way to close this gap is to have more women in more senior positions in the company, and we are taking concerted actions that we believe will help us to achieve this over time. As a global company, we think it is important to hold ourselves to account on that basis, so we are planning to publish a company-wide gender pay report next year.

We continue to make progress. We are proud to be recognised on Forbes Best Employers for Diversity in 2019 and Bloomberg's Gender Equality Index. We are also proud of the progress and the external recognition of our sustainability work. In January 2019, we were named as one of the Global 100 Most Sustainable Corporations in the World, which ranks large companies on their performance of reducing carbon and waste, their gender diversity among leadership, revenues derived from clean products and overall sustainability.

A simpler portfolio

We have now reached an agreement to sell our US K12 Courseware business to Nexus Capital Management. School publishing in America has been an important part of Pearson for many years, and what it does matters to teachers and students across the country. We are pleased to have found new owners who are committed to its future, and we wish it every success. The sale frees us up to focus on the digital first strategy that will drive our future growth. Through our assessment, virtual schools, advanced placement and career education businesses, we will still serve schools across America and we will now be better placed to focus on the areas in which we can help students to be successful in their studies and future careers.

Looking ahead

Last year, Viscount Blakenham, Pearson's former Chairman and CEO, and the last member of the Pearson family to lead the company, sadly passed away. Michael was widely regarded for his staunch defence of editorial independence and freedom of speech, his commitment to international growth and expansion, and his personal embodiment of Pearson's values.

In terms of its focus and operations, Pearson is now quite different from the company he stepped down from 23 years ago. What has not changed is our commitment to taking a long-term view, and creating sustainable value for our shareholders by providing important services to our customers in entrepreneurial and innovative ways.

Accelerating the move to more accessible, more affordable and better learning is as important as anything that this company has taken on in its 175 year history. We are confident that our strategy will deliver long-term sustainable growth, and we expect to make further progress in 2019.

Thank you for your ongoing support.

John Fallon

John Fallon
Chief Executive

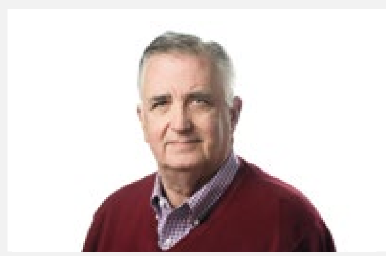
Executive team

John Fallon Chief Executive

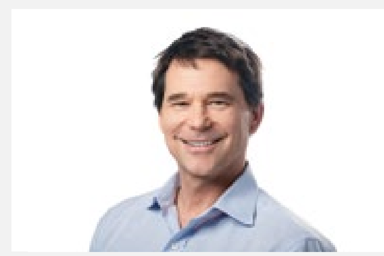
Coram Williams Chief Financial Officer

Albert Hitchcock Chief Technology & Operations Officer

Anna Vikström Persson
Chief Human Resources Officer

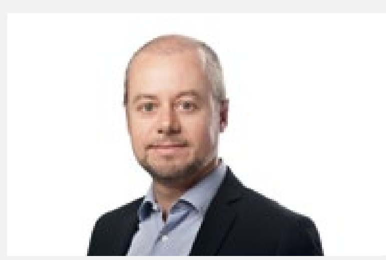


Bob Whelan President Pearson Assessments



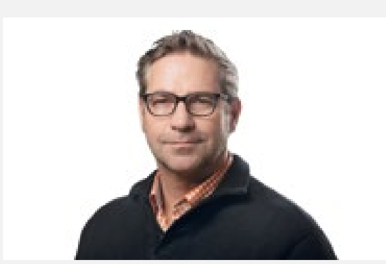
Bjarne Tellmann General Counsel & Chief Legal Officer

Deirdre Latour Chief Corporate Affairs Officer



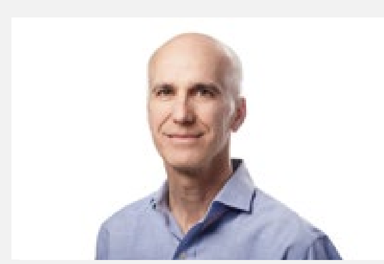
Giovanni Giovannelli
President Growth Markets

Jonathan Chocqueel-Mangan
Chief Strategy Officer



Kevin Capitani President North America

Rod Bristow President UK & Core Markets



Tim Bozik President Global Product

Online learning is the only way for me to keep up with school because I can set the pace for my coursework.

ARUWIN SALEHHUDDIN
STUDENT ATHLETE

Aruwin chose Colorado Connections Academy, a virtual school, because it offered her the flexibility to pursue her dream of becoming a professional alpine skier.

In between practice sessions and competitions, Aruwin spends time planning for her future. After high school, she hopes to attend Cornell University, with the goal of becoming an architect or industrial designer after her skiing career.

Connections Academy allows students like Aruwin to pursue their dreams today, while also preparing them for the careers they want later. Connections Academy schools are tuition-free, online public schools for students in grades K through 12.

At Connections, students can work at their own pace and are supported by certified teachers who create personalised learning plans. Over 70,000 students in the US take advantage of this virtual option, while international students can enroll in our online private school. This way of providing education to even more learners has been hugely successful – 93% of parents with enrolled students say they would recommend the programme to others.

Virtual schools

£288m
Revenue

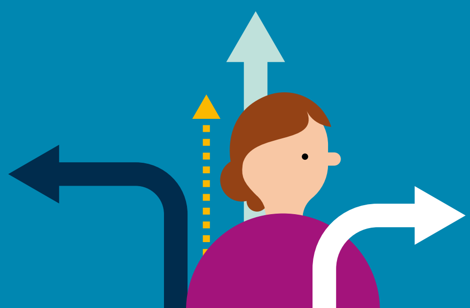
+8%
Underlying revenue growth

2 Aligned to strategic priority, p22

Market trends

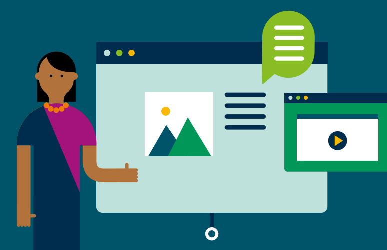
Technology is changing expectations and increasing possibilities in education.

The rise of choice



Technology and access means young people today have more choices than ever – and expect it everywhere, even in how they learn. While institutions continue to influence and drive learning, students are playing a bigger role in their own learning, whether it is choosing what they need to pass a course or where they obtain their learning or credentials from.

Gen-Z needs tech + teachers



Young people believe in the value of education and expect their learning experiences to mimic other experiences in their lives that have been enabled by technology – making everything more seamless, efficient, accessible and intuitive. Teachers have a vital role to play and now technology is enabling teachers to teach and reach students more effectively.

The career-driven learner

Everything will be affected by the changing nature of work in the decades to come. How learners react to that, however, is going to vary based on context, personality, and background.

While traditional learners may continue to gravitate towards formal educational settings, there will be a new crop of multi-generational, driven, "Career-Learners" who will seek out flexible learning for continued success in life.

Non-traditional paths to success

A traditional education is not always in reach for an increasingly diverse student population, despite the inherent belief that one needs an education to be successful.

Many young students struggle in school or have other barriers to attending higher education, and believe that traditional university is not for them.

As the future of learning evolves, educators are preparing students for a world of work whether or not they go to university.

We can take advantage of AI techniques to create more engaging teaching and learning experiences.

MILENA MARINOVA
SVP, ARTIFICIAL INTELLIGENCE (AI) PRODUCT & SOLUTIONS, SAN FRANCISCO, CA

AI and education

I joined Pearson in 2018 as the SVP of Artificial Intelligence (AI) Products and Solutions. In this role, I make sure we are taking advantage of advancements in Machine Learning – or AI broadly – to create more engaging teaching and learning experiences.

Pearson's digital transformation is helping more people develop the skills they need to prosper, and we are well positioned to engage with millions of learners across the world because of our reach and expertise.

Education has the potential to benefit hugely from digital disruption and advancements in AI. The opportunity to utilise AI to improve the learning experience, and ultimately to better prepare people for their career in the future, is an incredibly exciting prospect.

AI as the solution

Currently, I am working on developing human-centric solutions – this means making learning experiences better for students and teachers; enabling lifelong learning through more accessible and affordable products; and, building better products and solutions using new technologies.

Many companies don't have a deep enough understanding of how to use AI to solve the biggest problems they have. It is important to be really clear on the problem in order to identify the right approach. In addition, the problem must determine which AI algorithms are used, not the other way around.

At Pearson the problem we are trying to solve is clear: how to make learning experiences better through products and services that deliver increased engagement and improved outcomes for more learners around the globe.

Our strategy

Pearson

Our mission is to help people make progress in their lives through learning.

Our Vision

is to have a direct relationship with millions of lifelong learners and to link education to the way people aspire to live and work every day. To do that, we will collaborate with a wide group of partners to help shape the future of learning.

Our Capabilities

include combining world-class educational content and assessment, powered by services and technology, to enable more effective teaching and personalised learning at scale. Our capabilities are based on our deep expertise in how people learn, and we apply them to our three strategic priorities:

Our strategic priorities

1 Grow market share through the digital transformation of our courseware and assessment businesses

- Shift from selling ownership of our content to selling print or digital services
- Global Learning Platform: A cloud-based, scalable product platform

2 Invest in structural growth opportunities

- Online Program Management
- Virtual Schools
- English Language Learning & Assessment
- Professional Certifications & Licensure

3 Become a simpler, more efficient and more sustainable business

- Eliminate duplication and speed up innovation
- Increase standardisation to reduce costs and improve scalability
- Provide world-class customer experiences that improve efficacy and outcomes
- Ensure access to quality education for all

Our values are **brave**, **imaginative**, **decent** and **accountable**

We are the world's learning company

Strategic advantages

Insights and capabilities

We partner with world-class authors to develop our content and we take a data-driven approach to product design, based on proven learning science and pedagogy. This enables huge advancements in rich content, personalised learning and effective analytics.

Investing back into our business

Pearson's strong balance sheet underpins the continuing investment in our digital transformation and structural growth markets. We are investing record levels to become the winners in digital education.

Global reach and scale

We have a truly global scale and focus. We operate in 70 markets worldwide. Our products and services benefit from being centrally developed, globally deployed with local expertise and capabilities ensuring success.

Capital allocation

- Maintain a strong balance sheet
- Maintain an investment grade credit rating
- Invest in our business – we are investing over £700m in our digital future
- Return capital via a sustainable and progressive dividend
- Return any excess capital via special returns where appropriate

Delivering long-term value for all stakeholders

Customer experience

Our customers, including learners, educators, employers, governments and more, benefit from a great consumer experience with consistent focus on learning outcomes.

Supporting sustainable growth

Delivering returns for our shareholders through a long-term improvement in top line and bottom line growth. Over time this helps increase the share price and maintain a progressive, sustainable dividend.

Employee engagement

Through our transformation we are focused on supporting our people, driving equality and diversity, and helping them make progress at Pearson and in their lives.

Strengthen sustainability

Through our sustainability and social innovation work we are helping increase access to quality education for more people around the world and reducing our environmental footprint.

To read more about the value we create for our stakeholders
see p26

Our business model and strategic priorities

Read more about our three strategic priorities:

1. Grow market share through digital transformation
2. Invest in structural growth markets
3. Become a simpler, more efficient and more sustainable business.

1 Grow market share through digital transformation

US Higher Education Courseware

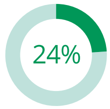
PERFORMANCE

2018 revenue

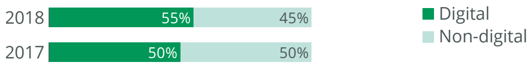
£976m

-5%[1]

Percentage of total revenue



Digital revenue



MARKET

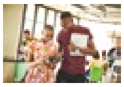
40%+[2]

Market share

PROGRESS AND PRIORITIES

- Total revenue in this segment declined by 5%[1] in 2018 due to a continuation of underlying market pressures on print courseware revenue
- Digital revenue grew 2% in 2018
- Accelerated shift to affordable and access initiatives, including our partner print rental programme, eBooks and Inclusive Access
- In Inclusive Access we signed 192 new institutions in 2018, taking the total of not-for profit and public institutions served to 617. See p227 for more on IA
- 8% of 2018 revenue in this segment derives from IA, equating to roughly 1.4m course enrolments
- Transitioning our product portfolio from primarily print-led product experiences to digital first products
- Launch of Global Learning Platform with Revel in 2019

Mastering makes learning personal see p55



BUSINESS MODEL

- Continuing to lead and shape the market by moving to digital first model
- Ability to deliver a portfolio of dynamic evidence-based, outcome-led, product experiences
- Investing heavily in IP and systems enabling us to draw on the latest technology, including AI and machine learning
- Greater customer choice with simple, affordable, convenient access
- Better data and insights for instructors to enable better outcomes

1 Underlying revenue growth.
2 Source: MPI.

US Student Assessment

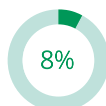
PERFORMANCE

2018 revenue

£332m

-4%[1]

Percentage of total revenue



Digital tests v paper tests – 2018 v prior year %

MARKET

c.$1.2bn[2]

Size of market

PROGRESS AND PRIORITIES

- Revenue declined moderately in 2018 due to the faster than expected contraction in revenue associated with our PARCC and ACT-Aspire multi-state volume-based contracts and our disciplined competitive approach
- These factors will extend into 2019, where we expect a modest decline in revenue in this segment
- Beyond 2019, we expect the business to benefit from continued good momentum in subcontractor contract wins leveraging our digital leadership and a strong pipeline of opportunities in key states
- Digital tests now account for 56% of all tests administered
- Digital tests enable a future of fewer, better tests more embedded in the workflow of teaching
- 33% of open questions marked by AI

BUSINESS MODEL

- We are the largest vendor in the market and we have led the shift towards digital testing with our best-in-class platform TestNav

Our strengths include:

- Investment in innovation
- Pioneer of digital assessment platform to encourage fewer, better tests
- Track record of delivery at scale

Core Student Assessment and Qualifications

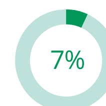
PERFORMANCE

2018 revenue

£292m

-3%[1]

Percentage of total revenue



BTEC registrations

2018	2017
922,000	1,009,000

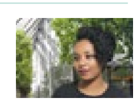
MARKET

c.£0.7bn	#1	#2	#1
Size of market	Market position	GCSE and A level market position	Vocational qualifications market position

PROGRESS AND PRIORITIES

- Total revenue fell 3%[1] in this segment in 2018
- In UK Assessment revenue fell as modest growth in BTEC Firsts and GCE A-Level was more than offset by declines in AS levels, international GCSEs in the UK and UK apprenticeships due to policy changes in the schools qualifications and the apprenticeships market
- After disruption in 2018, 2019 will benefit from new product investment coming through
- Identifying new opportunities in our Growth markets, working on promising initiatives in Thailand, Vietnam and China

BTECs provide students with real-world experience
see p52



BUSINESS MODEL

- We serve students, teachers, schools and government through our qualifications business where we are the awarding body and own the IP.

Our strengths include:

- Ability to leverage strong Intellectual Property
- Track record of delivery at scale
- Pioneering digital assessment platforms
- Investment in innovation and new products

1 Underlying revenue growth.
2 Source: Pearson estimate.

Overview
Our strategy in action
Our performance
Governance
Financial statements

Our business model and strategic priorities

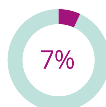
2 Invest in structural growth markets

Virtual Schools

PERFORMANCE

2018 revenue
£288m
+8%[1]

Percentage of total revenue



Enrolments (Full Time Equivalent, continuing)

2018	2017
73,000	65,000

MARKET

>$1.5bn[2]
Total market size

>5%[2]
Market growth potential

PROGRESS AND PRIORITIES

- Full Time Equivalent students in continuing partner schools up 11% on last year
- Three new full time online partner schools opened for 2018-2019
- Strong pipeline – two to five new schools in 2019
- Scale up in existing states; target states with high growth potential

Connections allows students to learn at their own pace see p15

BUSINESS MODEL

A digital business where we offer complete services for charter school partners, support for district programmes and blended offerings.

Our strengths include:

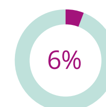
- Strong brand
- Domain knowledge; end-to-end solution, and can further leverage strengths in content and assessment
- Proven partner school model
- Strong parental satisfaction, good learning outcomes and efficacy results

Global Online Program Management

PERFORMANCE

2018 revenue
£234m
+10%[1]

Percentage of total revenue



Global registrations

2018	2017
401,000	352,000

MARKET

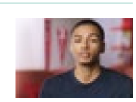
+10%[2]
Global OPM market growth per annum

c.9%
US graduate OPM market growth per annum

PROGRESS AND PRIORITIES

- Signed 57 programs in the year globally
- Global course registration growth of 14%
- Growth in 2019 from programs launched in previous years and 60+ programs to launch in 2019
- Entered new global market with ESSEC partnership in France
- Pipeline of new partnerships

OPM gives students the flexibility they need see p6



BUSINESS MODEL

The digital promise of "anywhere, anytime learning" opens up one of our biggest structural growth markets: Helping universities scale online.

Competitive advantages include:

- Unique position to offer services globally across postgraduate, undergraduate and short courses
- Strong brand and track record
- Domain knowledge; end-to-end solution, and can leverage further strengths in content and assessment

1 Underlying revenue growth.
2 Source: Pearson estimate.

Professional Certification

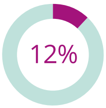
PERFORMANCE

2018 revenue

£482m

+4%[1]

Percentage of total revenue



Global test volumes

2018

15.2m

2017

14.6m

MARKET

c.$1.2bn[2]

Size of market

PROGRESS AND PRIORITIES

- Delivering testing programmes to 450+ credential owners
- Near-term growth from US MCAT; long-term a proven winner in a growing market
- Secured extension on DVSA contract to run the UK theory test

BUSINESS MODEL

From online practice tests to high-stakes, proctored exams that require the industry's most secure testing environments, Pearson VUE is a leader in computer-based testing.

Our competitive strengths include:

- Digital delivery, leading digital platform
- Flexibility and scalability of testing network: 20,000 centres worldwide
- Proven track record of secure test administration, reliable and accurate scoring

English

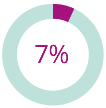
PERFORMANCE

2018 revenue

£305m

+7%[1]

Percentage of total revenue



PTE Academic test volume growth

2018

30%

MARKET

c.1.7bn[2]

Global English speakers

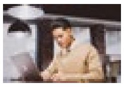
c.£1bn[2]

Size of market

PROGRESS AND PRIORITIES

- Secured two year extension of Australian immigration office contract
- Opportunity to obtain recognition for UK, Canada and China immigration/employment

PTE Academic trusted by universities, colleges and governments see p42



BUSINESS MODEL

We are one of the leaders in the global English language learning market.

Our competitive strengths include:

- Digital platform – taking a test on a computer, with consistent test-taking conditions and avoids human bias
- Global test centre utilising VUE network allowing more flexibility for time of test
- Faster, more accurate and consistent results – 95% of scores returned in five working days
- Aligned to Pearson's Global Scale of English

1 Underlying revenue growth.

2 Source: Pearson estimate.

Our business model and strategic priorities

3 Become a simpler, more efficient and more sustainable business

2017-2020 focus areas

Further simplification through **shared service centres**

Leaner organisations through **reduction in headcount**

Reduction in number of **legacy applications**, data centres and office locations

Progress in 2018

New US enterprise resource planning system go-live

>900
applications decommissioned

42
data centre and office closures

£130m
Incremental cost savings achieved in 2018 as our cost efficiency programme runs ahead of plan

Supply chain consolidation

Sale of One Southwark Bridge

Simplification in practice

In 2018, Pearson sold its property at One Southwark Bridge for £115m. The sale represents further progress in Pearson's ongoing simplification strategy and the consolidation of its London property footprint, as Pearson becomes a leaner and more efficient company.

The education sector is undergoing tremendous change – we need to help our customers through that, rather than add complexity.

MARYKAY WELLS
SVP & CHIEF INFORMATION OFFICER, NORTH CAROLINA, USA

As CIO, I'm here to modernise and simplify Pearson's technology estate to enable better experiences and outcomes for Pearson's millions of customers and learners globally.

The education sector is undergoing tremendous change – we need to help our customers through that, rather than add complexity. Success rides on us striking a healthy balance, allowing the global platforms we build to be used and enjoyed worldwide without compromising either unique regional needs or the ability to personalise learning experiences. Aiding, not impeding, each learner's progress is our goal.

This means Information Technology can't sit in isolation from the business or at arm's length from customers. We all have a stake in improving learning, so fostering the right partnerships and relationships is embedded in to my team's DNA.

Driving a culture of talent and innovation

Doing all of this requires something I'm really passionate about: building high-performing and innovative teams that are customer focused and as diverse as our learners across the globe.

This is unlocking great potential in our people, allowing us to test and use advanced technologies like robotics and artificial intelligence to deliver massive efficiencies in processes – whether internally or in the classroom to free up teachers to spend more time with their students and to personalise digital learning experiences.

We're also making further strides in diversity and inclusion through the launch of Pearson's new Women in Technology program, active participation in UK apprentice and US internship schemes, and increasing graduate hires.

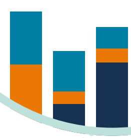
It doesn't end there. Having built an environment where we can constructively challenge ourselves and each other each day, we can continue to push the boundaries on how we can bring innovation to the learning experience.

Value created for our stakeholders

Our strategy is driven by the belief that education is evolving to meet the changing demands of today's learners. In an increasingly digital world, we are a driving force behind that change. This enables us to create long-term sustainable growth for our investors and all stakeholders of the company.

£130m

Cost efficiency savings in 2018, enabling the modernisation and digital transformation of Pearson

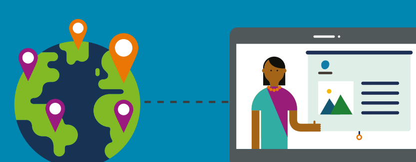


1000+

2018 members of Pearson's Alumni Network since launch in September 2018

89%

Educators surveyed said Pearson products allow students to study anywhere, anytime



3400+

Pearson employees across 40 countries participated in our Innovation Jam over 64 consecutive hours, to drive internal innovation

90%

BTEC students who are employed full time after graduation

How we serve and engage		Key concerns	Our response
Employees			
Our mission-driven employees are key to the sustainable success of Pearson. 57% of employees took part in our 2018 organisational health survey (OHS)	In 2018, we invited all our employees to take part in a survey to get a better understanding of where we can continue to improve. We started several bottom-up innovation programmes; held town halls with senior leaders and global conversations with our CEO. We launched a Pearson Alumni network to connect former, present and future Pearson people.	Three main themes emerge from our OHS findings: Our people want to feel aligned to Pearson's vision, strategy, culture and values; they want to be able to deliver with current capabilities and processes; and they want to understand more about Pearson's ability to innovate, and adapt to change. Our Innovation Jam generated ideas around how we can facilitate learning and design for a "YouTube" generation.	We are focused on creating a healthier company, encouraging and enabling more people to progress. We are working to grow and develop talent, drive more diversity, ensure greater employee engagement, drive innovation, support accessibility and inclusion efforts, and improve sharing of best practice across the company.
Shareholders			
We have a broad range of investors who entrust their capital with us. 625 investor meetings with 344 institutions in 2018	We engage with our investors on an ongoing basis. We communicate with them regularly, including at our financial results, our AGM and at investor meetings and conferences around the globe.	Our shareholder base has a diverse range of views covering financial, environmental and social issues.	We have a positive, ongoing dialogue with our shareholder base. We aim to deliver long-term sustainable value for our investors and all our company stakeholders.
Learners			
Pearson helps millions of learners across the world progress throughout their lives. 80% of students surveyed say our products help them get more out of the class	We regularly talk to and survey learners to understand how learning is evolving, observe changing demographics, attitudes and buying behaviour. We put learner needs at the centre of what we do and work to build world-class digital products and services to deliver amazing experiences and improve learning outcomes.	Learners have increasing expectations over the value of their education. They expect experiences both inside and outside the classroom that are more rewarding, more engaging and less time consuming. Digital is a normal, integral part of their day-to-day life and they expect digital education products to meet this expectation.	We are matching this expectation. For example, we are using predictive analytics to give us early alerts to identify where students are struggling much earlier in the process and therefore can help to get them back on track quickly.
Educational institutions & educators			
We work with teachers, instructors and educators across all stages of education. 89% of educators surveyed said our products allow students to study anywhere, anytime	We collaborate with educators on thought leadership and product development in order to give the next generation of learners the tools they need to be successful.	In a cost conscious environment, educators are focused on delivering high quality educational experiences that set their students on a course to a better career and life for them and their families.	We aim to provide more engaging ways to connect educators with their students, accelerated through the move to digital. This enables more timely feedback on student progress to help set them up for success. We also continue to listen and observe how things are changing in the classroom to adapt to the next generation of learners.

Read more on our approach to stakeholder engagement in the Governance report, on p93

Value created for our stakeholders

How we serve and engage		Key concerns	Our response
Employers			
Pearson works with employers, trade associations and industry bodies to meet the demands of the workforce and equip learners with the skills they need to progress and thrive. 62% of large UK companies recruited graduates with a BTEC (CBI Skills Survey 2018)	Through assessment and qualifications, micro-certification, online learning, and professional badging, among other solutions, we are supporting the efforts of industry to prepare workers for the jobs of today and of the future.	Industry is looking for education systems to help drive innovation, tackle the global skills gap and contribute to long-term economic growth by ensuring learners enter the world of work better prepared to succeed in their careers.	We have listened hard to employers and are designing products that meet the needs of industry head on, whilst providing learners with the skills to succeed in the workforce. For example, in the UK our new generation BTEC offers career-focused pathways and a high-quality route into higher education or employment.
Governments & Regulators			
We partner with governments (local, state, federal, national) to ensure students have access to and can become proficient with world-class learning standards. 50 US States and a wide range of global markets in which Pearson works with government stakeholders	These standards will address students' needs, close skills gaps and meet the demands of the workforce. Governments and regulators also set policy to ensure that both businesses and consumers are provided with the most effective legislative frameworks that help drive sustainable growth and ensure that learners have access to affordable education and training opportunities.	Governments are looking for effective approaches to better connect educational institutions to employer needs, improving student outcomes.	We are committed to building strong relationships with political and educational leaders. We do not make policy. Instead, we share best practices, inform the policy-making process, and forge innovative partnerships aimed at increasing student access, affordability, and success.
Business partners			
From technology providers to suppliers, channel partners to our authors, we have a broad range of partners across our global business. 25 key global suppliers who help us deliver on our commitment to offering world-class business processes, systems and technologies	We are focused on building successful business partnerships across the education ecosystem to ensure joint success and growth.	We share similar goals and priorities with our business partners – from driving business transformation to developing world-class products; enhancing customer experience to ensuring adherence to data privacy and information security processes; managing political and regulatory risk to developing talent – and more. We align with our business partners and expect them to share our values.	We build relationships with world-class partners and suppliers for the benefit of all our stakeholders. We believe that working with partners who share our commitments not just to best-in-class business practices – but also best practice and international standards for human rights and environmental stewardship strengthens our value chain and reduces our business costs and risks.
Communities			
Educational opportunities and outcomes are closely linked to the prosperity of local communities and global development. £5.7m social contributions in 2018	We partner with organisations working to improve education for vulnerable, marginalised groups, and those focused on the impact of business on society and the environment. We partner to deliver programmes that strengthen global education systems.	Our communities around the world are interested and engaged in how we are using our products, services and community investments to reach the learners who need it most and the steps we are taking to have a positive impact on society and the environment.	We are investing in important areas of social innovation where we can reach learners who need it most, such as through Tomorrow's Markets Incubator and our partnership with Save the Children. Read more on this in our sustainability section, p35.

The best part of my job is **working directly with learners.**

LEAH JEWELL
MD, CAREER DEVELOPMENT & EMPLOYABILITY. HOBOKEN, NJ

I started at Pearson 31 years ago as a sales representative in higher education. Now, I'm the Managing Director for Career Development & Employability. My team helps high school, college, and adult learners prepare for their first job and a lifetime of learning around the skills needed for the future.

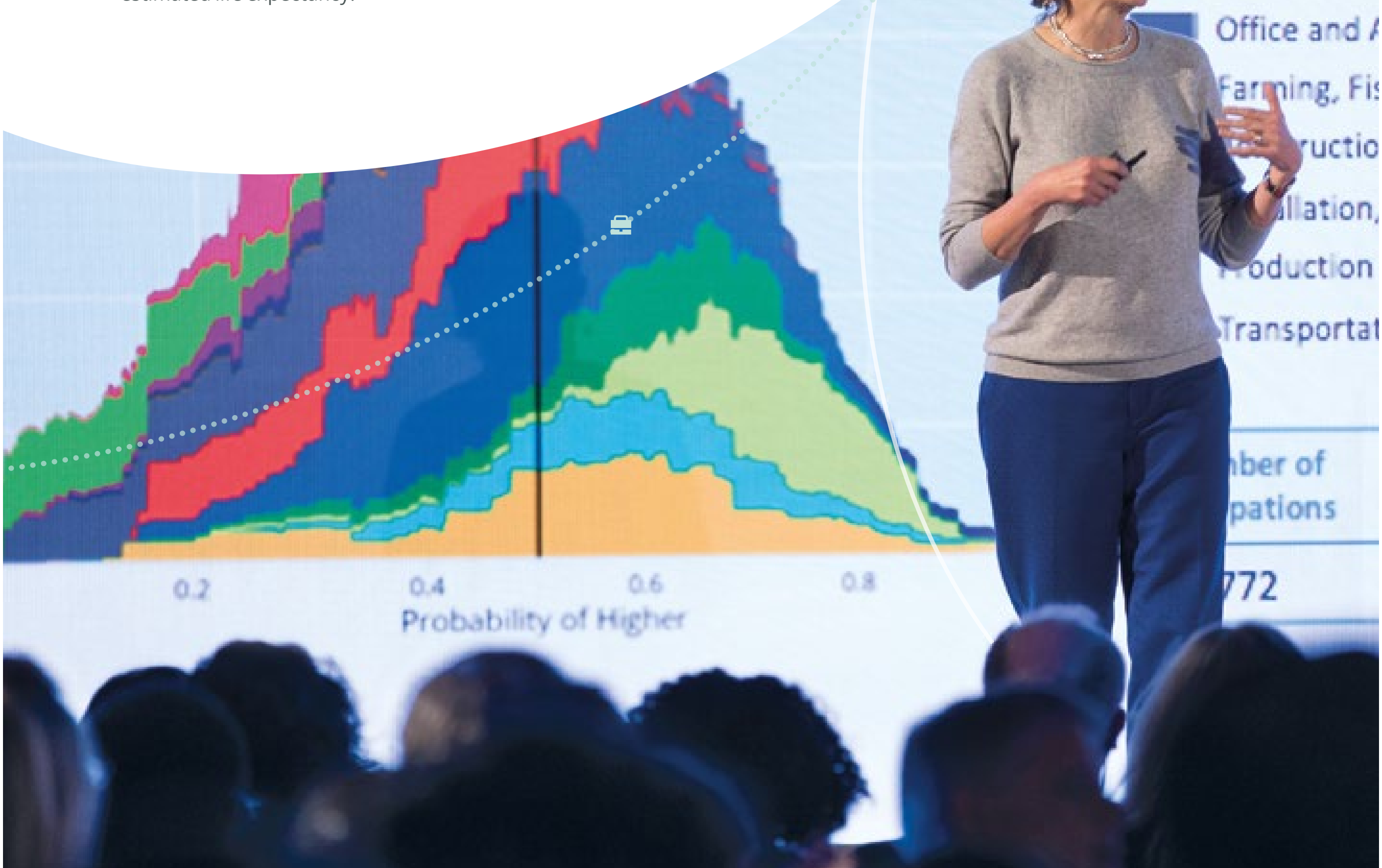
Career-driven learning

The best part of my job is working directly with learners to help them navigate multiple learning pathways, both traditional and non-traditional, and to build skills for future jobs. When I was in school, a degree prepared you for a lifetime career, but people born today will need continuous learning and training for what could amount to one hundred years in the workforce based on estimated life expectancy!

Embracing alternative pathways

I decided to pursue an alternative certification pathway myself, recently completing the 'Entrepreneurship & Innovation' certificate programme at Stanford University. The flexible, self-paced programme worked for me, and helped me obtain knowledge and skills for my current role as well as possible new jobs. I will also use my experience as a learner in that environment to help us build out services and solutions at Pearson.

At Pearson, we are helping people explore, understand, navigate, and successfully complete lifelong learning and up-skilling regardless of their pathway. It's what I'm passionate about and what our employability team does at Pearson.



Overview
Our strategy in action
Our performance
Governance
Financial statements

Efficacy

Efficacy helps build trust with learners, educators, instructors and all our company stakeholders.

Pearson's mission is to help people make progress in their lives through learning. That's why efficacy is core to what we do: we are identifying the outcomes that matter most to learners and educators, designing products based on evidence of what works to improve those outcomes, measuring the impact the use of our products can have on learning, and continuously improving.

In 2013, Pearson made a commitment to begin reporting, by 2018, on the impact of use of our products on outcomes for learners. We reached this major milestone in April 2018, when we were the first education company to release publicly audited and peer reviewed Efficacy Reports. The reports help build a better understanding of not just what works, but how it works and in what context.

Our commitment to efficacy is a continuing and ongoing process. We are releasing a further series of efficacy reports this year, and will do so annually, staying true to our efficacy commitment.

The 2019 efficacy reports include the three rigorous efficacy research studies that were completed across the company over the last year and also cover one of our most frequently used assessment products. The reports highlight how those products are being used to support learners in their learning journey.

This includes three product efficacy reports:

1. Revel Psychology in North America,

2. MyPedia in India, and

3. Sistema COC in Brazil.

As well as an assessment product: Pearson Test of English Academic.

Listening to educators

We gathered feedback from educators and thought leaders around the world about the 2018 reports. While our commitment to efficacy was received positively, we were encouraged to find ways of ensuring that our reports supported changing teaching and learning practices when using digital products. We are responding by focusing on exploring examples of implementation in the research design and including guidance about how the findings can be applied in the reporting materials. In addition, we are working through multiple channels to engage in more, and more fruitful, conversations with educators about efficacy.

What we are doing next

Releasing an efficacy report is just one step in the process of supporting educators and learners to use our products to help improve outcomes that matter to them. In the last five years, efficacy at Pearson has evolved from focusing primarily on efficacy reporting and implementing outcomes-focused evidence-based product design, development and ongoing product improvement. As part of this broader approach, we are helping make foundational improvements across our content, our assessments, our technology capabilities and how our products are implemented.

We are also broadening the range of outcomes we are seeking to support. The 2018 Efficacy Reports focused on course and exam achievement outcomes because these are some of the outcomes that matter most to our customers and learners. Going forward, drawing on insights from our customers and learners and from the Employment in 2030: Future of Skills research we conducted with researchers from the Oxford Martin School and Nesta, we are committed to both designing products for, and evaluating impact on, a wider range of outcomes including skills to support learners' career readiness and employability prospects. In the process helping meet the needs of industry and government in tackling the skills gap – a growing global productivity challenge.

Pearson remains committed to learning and continuously improving our efficacy work to help Pearson grow and help more learners, learn more throughout their lives.

Explore more: www.pearson.com/corporate/efficacy-and-research.html

MyPedia India Efficacy Report Spotlight

MyPedia is a blended teaching and learning solution intended to help teachers improve their pedagogy, assessment and digital skills, and to give learners a positive, engaging experience that improves their skills and abilities.

In a study conducted with schools across India, research shows that teachers using MyPedia change their classroom practices over time—for the better.

› Averaged across classrooms, MyPedia teaching quality ratings increased each quarter from 2017 to 2018 moving from "does not meet standards" to "meets standards."

– The percentage of teachers whose average MyPedia teaching quality rating indicated they were "meeting standards" increased from 50% in the first and second quarters of 2017 to 67% in the second quarter of 2018.

› Teacher self-rated confidence in teaching with MyPedia also increased each quarter between 2017 and 2018.

– 18% of teachers were rated "very confident" in the first and second quarters of 2017, whereas 27% were "very confident" in the second quarter of 2018.

These higher observed MyPedia teaching quality ratings are then associated with better end-of-year student test scores.

› A one point increase in the MyPedia teaching quality rating is related to a 0.44 standard deviation increase (i.e., 17 percentile points) in students' end-of-year test scores.

› A one point increase in MyPedia teacher impact rating is related to a 0.71 standard deviation increase (i.e., 26 percentile points) in students' end-of-year test scores.

DIGITAL CAPABILITIES

Real-time data analytics

Virtual and augmented reality

Connecting our learning research to Pearson's product design process **to enhance impact on outcomes.**

DR KRISTEN DICERBO
VP, LEARNING RESEARCH & DESIGN

I've been at Pearson for seven years. As the VP of Learning Research & Design, I make sure we're connecting our learning research to the way we design products in order to impact the outcomes we want to achieve.

Uniquely human skills

In 2017 we embarked on an ambitious piece of research with the Oxford Martin School and Nesta, to map the future of work and skills. Our research shows that uniquely human skills, such as complex thinking, and interpersonal capabilities like collaboration and leadership, will be increasingly important in the jobs of the future. What makes us human is what will make us employable in the future.

We are working to apply insights from the learning sciences about how to teach and assess those skills consistently across our portfolio, and are designing and developing capabilities for our products based on this evidence that can support learners to develop these uniquely human skills.

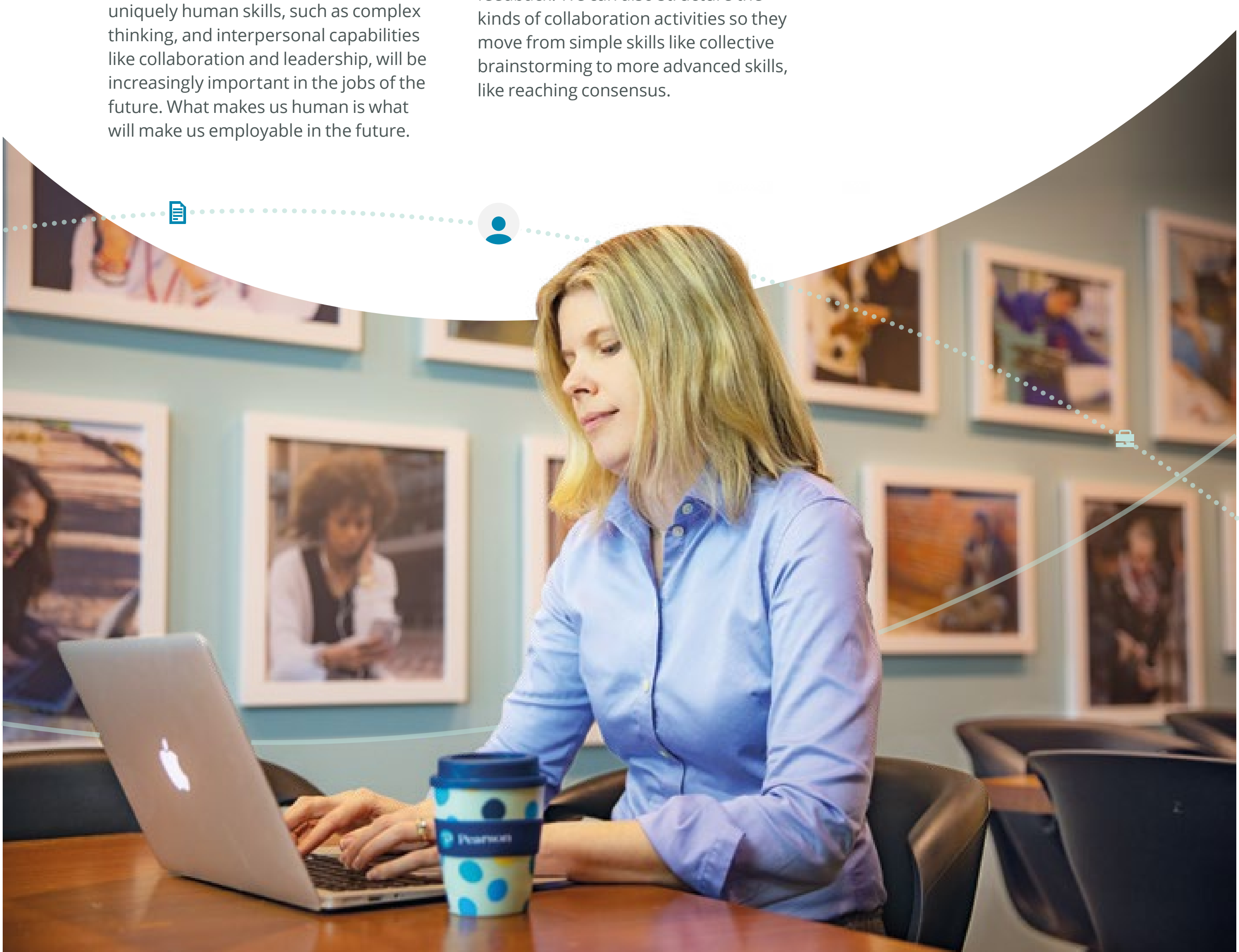
If we take collaboration skills as an example, we know that having students do more group work does not automatically improve these skills. They need opportunities to practice different roles within a group, and receive feedback. We can also structure the kinds of collaboration activities so they move from simple skills like collective brainstorming to more advanced skills, like reaching consensus.

Leading with outcomes

We are increasingly taking a 'backwards design' approach. That is, we start with the outcome we are trying to improve, then apply evidence from the learning sciences to the design and development of the product, and then evaluate and report on the impact of product use on the outcome we are looking to improve. Our goal is to help more learners, learn more and in doing so help shape the future of learning.

Research supporting design

Efficacy & Research, once a standalone team and programme, has now become a key capability in our global product organisation. Specialist capabilities in outcomes-focused, evidence-based product design and development and the measurement of impact on learning are now integral parts of our research and development, innovation and product development process.



Sustainability

Sustainability is integral to our strategy and fundamental to achieving our mission to help people make progress in their lives through learning. Through our 2020 Sustainability Plan, we made a commitment to embed social and environmental issues across our business. We recognise the role sustainability plays in driving our long-term growth and in helping build a better society.

Our 2020 Sustainability Plan drives us to find innovative ways to reach new markets by helping learners overcome barriers, keeping abreast of the changing education landscape, and earning the trust of our stakeholders. By aligning with the UN Sustainable Development Goals (SDGs), the Plan ensures we think about business success in the context of our wider responsibilities as part of the global community. We have prioritised SDG 4 on quality education, SDG 8 on decent work and economic growth and SDG 10 on reducing inequalities.

2020 Sustainability Plan

Three focus areas drive our commitment to sustainability:

1. Reach more learners
2. Shape the future of learning
3. Be a trusted partner.

More information on our performance in each of these areas will be available later in 2019 when we publish our 2018 Sustainability Report, available at www.pearson.com/sustainability.

In this section, we:

› Set out the key material issues for the company and how these relate to our risk management process

› Outline how sustainability is governed at Pearson

› Report on highlights from each of the three pillars.

Our material issues

Our 2020 Sustainability Plan is informed by our material issues – those most relevant to the sustainability of the business. They were identified in consultation with senior leaders, employees, external experts and other stakeholders. We have prioritised nine key issues, which represent both opportunities for growth as well as operational risks. We map these sustainability issues against our enterprise risk management process.

As part of our risk management process, company-wide risks are tracked across geographies and functions.

See *Our material issues* matrix p33.

Sustainability governance

The Reputation & Responsibility Committee, a formal committee of the Board, provides ongoing oversight, scrutiny and challenge on matters relating to our sustainability strategy and our corporate reputation. Learn more on p106.

The Pearson Executive oversees implementation of business and sustainability strategy. The Responsible Business Leadership Council drives implementation of the strategy on behalf of the Board. It is chaired by our Chief Corporate Affairs Officer and comprises senior leaders from across the business.

1 Reach more learners

› Improve access to and affordability of products and services

› Collaborate to reach underserved learners

2 Shape the future of learning

› Build skills that foster employability and inclusive economic growth

› Promote education for sustainable development

› Engage in multi-stakeholder research, dialogue, and collective action to solve global challenges

3 Be a trusted partner

› Respect and support our people, customers, and communities

› Protect our natural environment

› Build a sustainable supply chain

Our material issues

Materiality matrix

The following matrix shows how we mapped our material issues, and highlights the nine that we have prioritised.

We will evaluate, refine and talk with stakeholders about our material issues on an ongoing basis, in the spirit of continuous iteration and improvement.

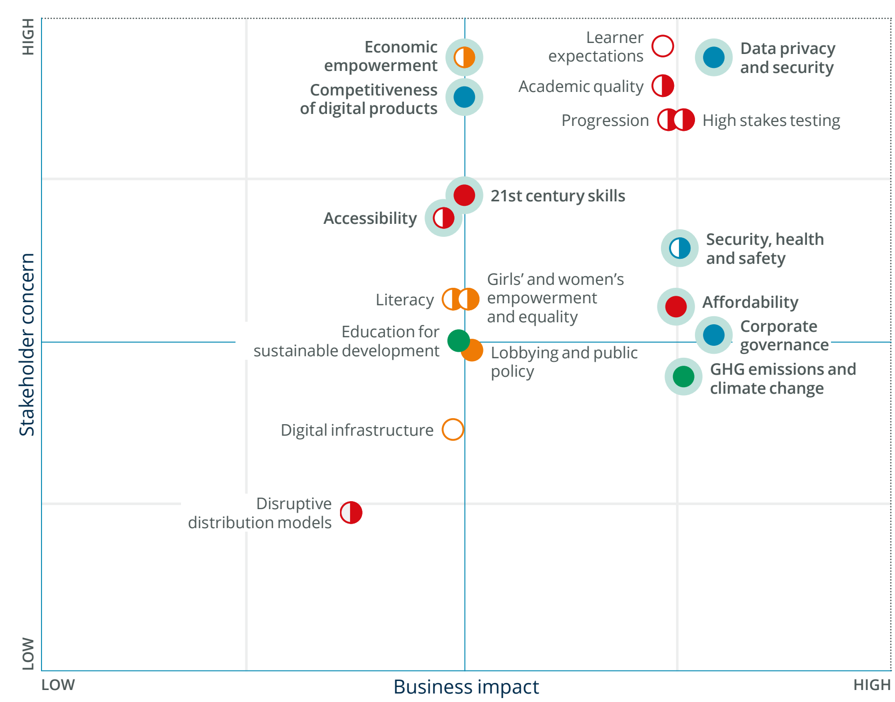
Key to material issues

Nine material issues in our sustainability plan and reporting

- Corporate functions
- Societal issues
- Education industry
- Environmental issues

Degree of control

High Medium Low



Alignment of material issues to principal and other Pearson risks

Sustainability Material issues	Annual report 2018 Principal risk	Company-wide risk	Business area risk monitoring		
Disruptive distribution models	2	YES	› Global Product › Core › Growth › North America › Environmental, Social & Governance		
Competitiveness of digital products	2				
Affordability	2				
Learner expectations	2				
Academic quality	2				
High stakes testing	5	YES	› Assessment	› Core	
Lobbying and public policy	4	YES	› Core › Growth	› North America › Assessment	
Data privacy and security	11	YES	› Global Product › Core › Growth	› North America › Assessment	› Legal › Tech & Ops
Digital infrastructure	8	YES	› Global Product	› North America	› Tech & Ops
Security, health and safety	6 7	YES	› Core › Growth › North America › HR	› Assessment › Environmental, Social & Governance	
Accessibility[1]	–	–	› Assessment	› Legal	› Environmental, Social & Governance
GHG emissions and climate change	–	–	› Environmental, Social & Governance		

1 Emerging risk.

See *Principal risks and uncertainties*, p62

Sustainability

1 Reach more learners

Commitments:

- Improve access to and affordability of products and services
- Collaborate to reach underserved learners

Our continued commitment is to better address the needs of vulnerable groups through our products, services and partnerships. We work to identify and remove barriers to education so that all learners can improve their lives – regardless of their income level, the way they learn, or their background. Reaching more learners helps us to innovate and grow our business, and it supports our commitment to quality education for all, decent jobs, and equality in line with the UN SDGs. Harnessing the power of new technologies to bring education and opportunities to more people in more places is central to these efforts.

Improve access to and affordability of products and services

In 2018, we continued to advance our commitment to improve access to and affordability of education through our core business offerings.

Our corporate education benefit programme, Accelerated Pathways (see p51), leverages tuition assistance funds to help adult learners overcome challenges to education attainment while positively impacting recruitment and retention initiatives. Through this benefit, employees have access to coaches and advisors, courses, certificates, degrees, and an education assistance platform that support skills and career development. Education programs are delivered online and are mobile optimised, so employees can learn anytime and anywhere.

Connections Academy, a tuition free, fully-accredited, US-based online public school for students in grades K12, offers an inclusive, collaborative learning experience that meets the unique needs of learners with a wide variety of backgrounds and abilities. An alternative to brick-and-mortar public schools, Connections provides a valuable option for students who are not finding success in the traditional classroom. For example, students with serious health issues, who have been bullied, or are struggling or advanced academically can benefit from attending a Connections Academy online school.

Our Inclusive Access model helps college students access their materials at a lower price.

Accessibility for Learners with Disabilities

Pearson has established a Global Accessibility Steering Group to drive support for people with disabilities through the intentional integration of accessibility standards in product development. We are committing to a process of continual improvement to increase the accessibility of both new and existing products.

As an employer, we work to ensure that appropriate procedures, training and support are in place for people with disabilities to ensure fair access to career and progression opportunities. One of our eight employee resource groups is Pearson Able – its remit is to improve company practice for learners and employees.

Tomorrow's Markets Incubator

The Tomorrow's Markets Incubator develops new products, services, and business models for low-income and underserved market segments by engaging employees in a robust venture innovation process. The incubator is Pearson's first step in reaching this market of more than 4 billion people in size and $5 trillion in value.

Supporting students with Smarthinking tutors

Service: Smarthinking

In a study we conducted with Morgan State University, instructors teaching writing-intensive courses indicated that their students' writing skills, confidence, and work quality improved as a result of the interaction with Pearson's Smarthinking tutors.

Morgan State is a leading public research university in Maryland. Many arrive with a mix of writing skill strengths and weaknesses. For the courses in the study, all students were required to use either Smarthinking or another tutor – the first time many of them were exposed to tutoring. The aim was to help all students, especially those who were behind or struggling, feel it is normal to use a tutor and empower them to use the resource for other courses going forward. Students expressed appreciation for the fast turnaround and expert grammar and writing assistance provided by Smarthinking tutors.

Learn more at: go.pearson.com/PearsonMorganState

Following a selection process, employee-led incubator teams receive seed funding and access to thought leaders and coaches with deep expertise in venture creation for new markets. These tools support teams to innovate commercially sustainable and socially impactful solutions, as well as develop their own professional skills and capabilities.

Today, the incubator has a global portfolio of ventures at different stages of maturity. Teams are selected by an investment committee comprising Pearson executives. They must demonstrate a compelling, feasible commercial solution that will improve learner outcomes and deliver social impact.

Collaborate to reach underserved learners

Through partnerships, we are tackling some of the biggest education challenges.

Every Child Learning

Since 2015, Pearson has been working with Save the Children on "Every Child Learning," a partnership delivering high-quality education to Syrian refugees and host community children in Jordan, and innovating new solutions that improve the delivery of education in emergency and conflict-affected settings. Between 2015 and 2019, Pearson has committed £4.5m.

The project includes "Space Hero" (Batlalfada), a fun and engaging maths learning app, designed by Pearson in collaboration with refugee and Jordanian children, aged 9-12, to strengthen their maths skills. In 2018, the app, which is available to download for free on Google Play, had over 28,000 new users and over 4,000 weekly average users regularly playing the game. It is Pearson's highest rated app in the Google Playstore. Space Hero also supports a broader in-school programme, led by Save the Children, that focuses on teacher training, school-community relations, after-school learning, and psychosocial support.

In 2019, 19 schools will be implementing the Every Child Learning programme, with the aim of impacting over 25,000 children.

Pearson Affordable Learning Fund

The Pearson Affordable Learning Fund invests 'patient capital' in independently run, for-profit, education start-ups using innovative approaches to improving learning outcomes and increasing access, at scale.

Social contributions

In 2018 our social contributions comprised £4.7m in community contributions and £1.0m invested in socially innovative business initiatives. Together this was equivalent to 1.1% of our pre-tax profits for the year. It included:

	Social contributions
Every Child Learning (see p35)	**£1.6m**
Tomorrow's Markets Incubator (see p34)	**£1.0m (social innovation)**
Camfed Learner Guides	**£0.1m**
Project Literacy	**£1.7m**
Employee Giving	**£0.7m**
Employee Volunteering	**£0.2m**
Programme Management	**£0.4m**
Total	**£5.7m**

Through Every Child Learning, we are helping Khaled*, 11, to achieve his dream of becoming a dentist

* name changed to protect identity.

Core4Stem Volunteering

Every year, the San Antonio Hispanic Chamber of Commerce hosts its CORE4 STEM event, which brings together more than 5,000 middle school students, from five inner city school districts to celebrate STEM education and career opportunities.

In 2018, a group of Pearson volunteers from the Infrastructure and Operations team in Assessment hosted a cloud infrastructure and security simulation at this event, with the goal of teaching these 7th and 8th grade students how we deliver technology today.

The Pearson simulation had students deploy and securely host a discreet application in the "cloud" building basic coding and platform management skills. These are the foundation of the skills that STEM employers need but schools in these districts struggle to find support for the programmes that build these skills, leaving a gap between the skills students need and the jobs they want.

Pearson aims to help fill the gap, understanding the skills employers need, and finding ways to work with schools in the district to help students build these skills. Pearson's simulation at CORE4 STEM was so well received that it's going to be scaled across a number of San Antonio School Districts. This is just one way Pearson is helping to connect the dots between employers, schools, and students.

Sustainability

2 Shape the future of learning

Commitments:

› Build skills that foster employability and inclusive economic growth

› Promote education for sustainable development

› Engage in multi-stakeholder research, dialogue, and collective action to solve global challenges

The pace of change in education is faster than ever before. We envision a future in which learners are equipped with the skills they need to build careers and navigate the future of work, and where learning contributes to more inclusive, equitable societies and economies.

Pearson has focused on guiding students toward their career aspirations and equipping them with crucial workplace skills. We help learners prepare to enter specific careers – delivering vocational training, providing industry-focused qualifications and assessments, and teaching skills such as science, technology, engineering, maths and English.

For example, Pearson Career Success (see p55) aims to meet the needs of both colleges and employers by providing a digital suite of assessments, learning modules and tools that help students identify career goals and the gaps in their academic and career skills that they need to fill.

In response to our customers, we have developed content, courses, qualifications and other services that help students learn about sustainability. By integrating sustainability-related content into our products, we can explore new market opportunities while making a direct contribution to the SDGs and inspiring the next generation to improve their world. We work with a number of authors and professors who have made sustainability part of the materials they create for Pearson. We have also developed a number of sustainability qualifications, and have embedded sustainability within BTEC qualifications across sectors, including engineering, warehouse operations, animal management, science, and IT.

Education and training for sustainable development

In October 2018, Pearson collaborated with Business Fights Poverty, Arizona State University and the UN Principles for Responsible Management Education (an initiative of the UN Global Compact) to publish ‘The Role of Business in Education and Training for Sustainable Development’. Based on interviews with educators and companies, the report shared insights and recommendations for business to help people gain the skills and knowledge required to meet sustainability challenges, improve lives, and contribute to long-term prosperity and wellbeing.

3 Be a trusted partner

Commitments:

› Respect and support our people, customers and communities

› Protect our natural environment

› Build a sustainable supply chain

We are committed to being the best partner we can be to learners, educators, suppliers, and communities: living our values through how we do business, treat people, and protect the environment.

Respect human rights

Our vision is to respect and promote human rights, including the right to education, throughout our operations and with our customers, employees, contractors, and supply chain. We have a corporate responsibility to respect human rights, and our approach is guided by the Universal Declaration of Human Rights, the International Labour Organization’s declarations on fundamental principles and rights at work, the UN Guiding Principles on Business and Human Rights, and the UN Global Compact Principles. We are a founding signatory to the UN Global Compact, and we are a member of the Global Compact’s UK Local Network.

We published our first public Human Rights Statement in 2018.

We have identified priority human rights risks and opportunities related to content, learners, partnerships, technology and employees, and developed a roadmap to address them. We also have policies in place for key elements of human rights including editorial content, health and safety, safeguarding and data privacy. For more, see the section on compliance in Principal Risks on p62.

Our Business Partner Code of Conduct sets out our requirements of third parties and, as part of our global approach to procurement, we include specific obligations relating to human rights compliance in new and renewed supplier agreements and we audit suppliers in high-risk categories.

A priority across the value chain is to ensure our activities are free from slavery, servitude, forced or compulsory labour and human trafficking. A statement on the steps taken by Pearson to combat modern slavery was approved by the Board and can be viewed on the Pearson website (www.pearson.com).

Deliver relevant, appropriate, and inclusive content

In creating our products, we think specifically about the culture, background, and age of the learners that will access our content. We have implemented a common Editorial Policy across Pearson to guide product development teams and individuals involved in the content creation process on ensuring content is aligned to Pearson's values, and prevent inappropriate content from being published. The policy is overseen by a cross-regional and functional steering committee, chaired by a member of our executive team, which provides a space for escalation and issue resolution. A network of 35 policy champions are responsible for implementation and act as a point of escalation for queries in our businesses and markets around the world.

Safeguarding and protecting learners

We continue to view safeguarding as our fundamental obligation to learners and a high priority for Pearson. We have a set of safeguarding principles and we agreed a new safeguarding strategy for 2018-2020, which includes a focus on safeguarding in online and digital environments. In addition, we implemented a new set of safeguarding metrics. We also completed a gap analysis on the safeguarding assurance processes for each business. Safeguarding has been identified as a principal risk under our enterprise risk management system and there is more information on p60.

Key performance indicators: Safeguarding

100%

of targeted identified actions addressed

Respect and progress our employees

Our employees are integral to delivering Pearson's mission. Last year, we adopted four key strategies:

- Provide integrated people solutions that empower the business to drive results, outcomes, growth and employability for learners
- Establish Pearson as an employer of choice for diverse talent across the world
- Cultivate a high-performing global workforce that innovates and delivers dynamic learning experiences
- Promote lifelong learning and digital skills development to create an agile and mobile workforce

Pearson continues to manage considerable amounts of change both within the business and outside it. Our simplification programme is ahead of plan due to an increase and acceleration of savings delivered as a result of the recent implementation of our enterprise resource planning system. The difficult but necessary changes we have been making will allow us to speed up innovation, provide better customer experiences, eliminate duplication, and increase scalability in the long-term. We continue to do all we can to support our colleagues through this transformation, through regular communication and detailed consultation, and providing support for those leaving the company.

We are investing in talent and succession, helping our leaders and their teams define and develop new skills and capabilities, creating a rich and growing pipeline of diverse talent. We work to inform, support and equip colleagues to work collaboratively, and we encourage and reward high performance.

We are also committed to provide a safe and healthy work environment for our employees and the learners we serve (see the Principal Risks section on p63 for more detail).

In 2018, a key focus was innovation and organisational health. We conducted a company-wide organisational health survey to 22,000 permanent global employees in 13 languages plus an accessible version.

We had a 57% completion rate. We are in the process of reviewing the results with Executive Management to produce clear, tangible action plans with specific focus areas and measurements that will help drive us forward.

In October, we hosted an Innovation Jam, which was an online, employee-driven discussion to openly exchange perspectives and ideas to support Pearson's growth, in line with our five year strategy.

Support our culture, mission and values

Our values – to be brave, imaginative, decent and accountable – continue to guide us in implementing our strategy. They are embedded into our performance assessment, which means all employees are evaluated on and rewarded for acting consistently with them.

The Pearson Code of Conduct underpins our values by setting out the global ethical, social and environmental standards of behaviour we expect from employees, and we have a companion code for business partners.

The Code was reviewed and refreshed in 2018 and included an interactive training course combined with the certification of the Code. We make sure everyone in Pearson is aware of the Code and confirms they understand and will comply with it. In 2018, we achieved our target of 100% completion by all employees. The Code is also assigned as part of the on-boarding process for all new Pearson employees.

Many of the areas covered by the Code are supported by detailed policies and procedures, including: anti-bribery and corruption, health and safety, and safeguarding. Learn more about these issues in our section on Principal Risks, p62.

We operate a free, independent, confidential telephone helpline and website available to anyone who wants to raise a concern. We have a clear non-retaliation policy in place to encourage people to share the issues they have and we gauge how comfortable people are in raising concerns in our employee engagement survey.

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Sustainability

Key performance indicators: Gender diversity

Women in Pearson %

At Board level, 30% of our members were female as at the end of 2018. As a founding member of the 30% Club, we have endorsed and committed to work towards the target of a minimum of 33% representation of women on the Board by 2020. Below are key gender representation segments over the past three years:

	2016	2017	2018	
Board of Directors	30%	30%	**30%**	**3**
Senior leadership*	32%	30%	**31%**	**33**
All employees	60%	61%	**62%**	**17,065**

* Two reporting lines from the Chief Executive.

In the UK, the government introduced regulations designed to help address the gender pay gap. Pearson has provided information on its gender pay gap in the UK (see go.pearson.com/GenderPayReport) and has made a commitment to extend our reporting globally by 2020. Our action plan to address the gap is global in scope and focuses on five key areas:

- Supporting, mentoring, and fostering the professional development of high potential women;
- Encouraging the empowerment of women and the formation of networks;
- Improving recruitment and pipeline practices to enhance senior female representation;
- Shaping our policies and culture around returning to work and flexible working; and,
- Ensuring the consistent engagement of executive management and senior leaders in Diversity and Inclusion initiatives.

Key performance indicators: Health and safety

92%

of our H&S standards have been fully implemented around the world.

96%

of open H&S findings from audits prior to 2018 have been fully resolved.

82

H&S Coordinators were trained and successfully certified in Institution of Occupational Heath and Safety (IOSH) Managing Safely course in 2018.

Foster diversity, equality and inclusion

Every person is unique whether that be in terms of age, gender, identity, race, ethnicity, religion, disability, sexual orientation, education, learning style, national origin, personality type as well as across a range of many other factors. At Pearson, we value a diverse workforce and a workplace which reflects our learners – the customers we serve around the world. By celebrating and leveraging diversity, we can better harness our collective skills and talents, our imagination and ideas to design and deliver the best services and solutions for all learners. Our approach is described in our Diversity & Inclusion Statement.

In 2018, we appointed a senior global leader to drive this agenda and conducted a comprehensive review of the diversity and inclusion practice at Pearson, which resulted in a new diversity framework, governance and measurement models, a set of global priorities and a maturity model for evolving our employee resource groups into business resource groups. Highlights include:

- A new Diversity & Inclusion Council led by the CEO to provide strategic oversight and to extend our work into many more markets and countries. The Council includes business leaders, allies and advocates, as well as representatives from our ten employee resource groups.
- A set of seven priorities which will guide our 2019 action plan and major initiatives. These include a focus on improving gender representation at the top two levels of the company as well as improving the racial diversity for manager roles and above initially focusing on the United States.
- A significantly expanded global network of Diversity and Inclusion Advocates who provide support to advance our practice in their businesses and geographic locations.
- A plan to help our employee resource groups at Pearson evolve and mature. The networks are for women, parents, veterans, Latinos, the LGBT community, employees across generations, people with disabilities and employees of black and/or African ancestry. A new group launched this year that focuses on the Black, Asian and Minority Ethnic communities within Pearson.

Our work on diversity and inclusion continued to gain external marketplace recognition. In 2018, Pearson was recognised as follows:

- Named in the 2018 Forbes list of America's best employers for diversity and inclusion;
- Successful in scoring 100% in the 2018 Corporate Equality Index run by the Human Rights Campaign;
- Recognised as having one of the top 50 leading global LGBT Ally Executives by the FT/OutStanding;
- Awarded the Dynamic Mentoring Organisation of the Year for a second year by the 30% Club and Women Ahead for a programme led by our employee resource group on gender.

Improve health and safety

Our people work in diverse locations around the world, including schools, colleges, test centres, offices, data centres, call centres, printing sites, warehouses, as well as remote working. To be a sustainable company and a trusted partner we must ensure the safety and wellbeing of our people no matter where they are working.

At the beginning of 2018, we revised our 2018-2020 Health and Safety strategy. This updated strategy included a significantly revised Global Health and Safety Policy and Standards, to which 21,194 (87%) of our employees have certified their understanding of in our learning management system. A global network of nearly 150 "H&S coordinators" also work to ensure the H&S management system is implemented and maintained in their business. H&S has been identified as a principal risk under our enterprise risk management system and is subject to regular reporting to the Reputation & Responsibility Committee, a Board-level Committee (see p106).

Protect our natural environment

Greenhouse gas (GHG) emissions is one of our material sustainability issues and climate change remains a focus for us as one of the most serious issues facing the planet. Minimising our environmental impact is not just the right thing to do; it helps deliver operational efficiencies. The supply chain cost of our energy use and business travel accounts for around 1% of our spend. This is where we have the most control and where we have focused our efforts to date. Energy cost does not feature as a Principal Risk for the company. We know that our stakeholders expect good environmental stewardship, which is why GHG emissions was identified as a material sustainability issue for the company. Our Environment Policy provides more information on our approach.

We maintained our climate neutral status for our directly controlled operations – a commitment first introduced in 2009.

Our strategy is:

1. Reduction: Through both the rationalisation of our portfolio and energy efficiency, as well as divestments, we reduced our energy consumption vs our 2009 baseline by 60%.

2. Renewables: We maintained our record of purchasing 100% of the electricity we use from renewable sources and generate our own renewable electricity at four of our sites (down from five as one site with renewables was sold in 2018).

3. Offset: Since 2009, we have offset the emissions from our energy and fuel consumption and business travel.

In 2018 we were recertified against the Carbon Trust Standard for our global operations. Pearson was the second ever organisation to secure the standard, which recognises leadership in measuring, managing and reducing year-on-year carbon emissions.

We also continue to be certified against ISO 14001, the environmental management standard in the UK and Australia. This standard incorporates both internal and external audit.

Key performance indicators: Global Greenhouse Gas emissions data

Metric tonnes of CO_2e

Emissions from	2009	2016	2017	2018
Combustion of fuel and operation of facilities (GHG Protocol Scope 1)	44,649	19,093	15,691	**13,057**
Electricity (GHG Protocol Scope 2 – location based)	130,395	77,579	61,047	**49,920**
Electricity (GHG Protocol Scope 2 – market based)				**4,583**
Emissions relating to air and rail travel, electricity transmission, waste and water (GHG Protocol scope 3)	35,262	29,714	27,646	**21,672**
Total – Location based	**210,306**	**126,385**	**104,384**	**84,649**
Total – Market based				**39,312**

Intensity ratios	2009	2016	2017	2018
Sales Revenue (£m)	5,624	4,552	4,513	**4,129**
Scope 1 & 2 (location)	175,044	96,672	76,738	**62,977**
Scope 1 & 2 (market)				**17,640**
Scope 1 & 2/sales revenue (location)	31.12	21.24	17.00	**15.25**
Scope 1 & 2/sales revenue (market)				**4.27**
FTE		32,716	30,339	**24,322**
Scope 1 + 2/FTE		2.95	2.53	**2.59**

Methodology: We have reported on all of the emission sources required under the Companies Act 2006. These sources fall within our consolidated financial statement. We do not have responsibility for any emission sources that are not included in our consolidated statement. The method we have used to calculate GHG emissions is the GHG Protocol Corporate Accounting and Reporting Standard (revised edition), using the location-based scope 2 calculation method, together with the latest emission factors from recognised public sources, including, but not limited to, the UK Department for Business Energy & Industrial Strategy, the International Energy Agency, the US Energy Information Administration, the US Environmental Protection Agency and the Intergovernmental Panel on Climate Change. The data in the table above has been independently verified by Corporate Citizenship.

We have a policy on the sustainable sourcing of paper, which resulted in over 86% of the paper we purchased in 2018 in the UK being certified to an environmental standard such as the Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC). Pearson is a member of industry bodies dedicated to responsible forest management. We hold FSC chain of custody in the UK as does LSC Communication, our outsource partner in North America, allowing books in those markets to carry the FSC label.

Our work is informed by the Task Force on Climate-related Financial Disclosures, and we will use its guidance to improve our environmental disclosures.

In 2018, we also started to more accurately understand the wider carbon emissions from our supply chain. Going forward we will continue to work with our suppliers to better understand the sustainability risks and opportunities associated with the products and services we buy.

Sustainability

Sustainability rankings

MEMBER OF
Dow Jones Sustainability Indices
In Collaboration with RobecoSAM

Inclusion in Global 100 most sustainable corporations (Corporate Knights)

FTSE4Good

2019 Bloomberg Gender-Equality Index

Non-financial information statement

The following table outlines where the key contents requirements of the Non-Financial Statement (as required by sections 414CA and 414CB of the Companies Act 2006) can be found in this document. In addition, our annual sustainability report (www.pearson.com/sustainability) contains more detail on these topics and follows international reporting frameworks including the Global Reporting Initiative, UN Global Compact, and UN Sustainable Development Goals.

Reporting requirement	Pearson policies and procedures	Section of annual report
Environmental matters	Environment Policy Paper Purchasing Policy	Protect our natural environment, p39
Employees	Code of Conduct Human Rights Statement Raising Concerns and Anti-Retaliation Policy Global Health and Safety Policy and Standards Diversity & Inclusion statement	Respect and progress our employees, p37 Support our culture, mission and values, p38
Human rights	Human Rights Statement Editorial Policy Modern Slavery Statement Safeguarding Principles	Respect human rights, p36 Support our culture, mission and values, p37 Respect and progress our employees, p37 Deliver relevant, appropriate, and inclusive content, p37
Social matters	Human Rights Statement	Social contributions, p35
Anti-corruption and bribery	Code of Conduct Pearson Anti-Bribery and Corruption (ABC) Policy Raising Concerns and Anti-Retaliation Policy	Support our culture, mission and values p37 Risk management, p60 Legal and compliance, p74
Policy embedding, due diligence and outcomes		Risk management, p60 Sustainability, p32
Description of principal risks and impact of business activity		Risk management, p60
Description of business model		Strategy, p18
Non-financial key performance indicators		Sustainability, p32

Publicly available policies in the list above can be found at: go.pearson.com/OurPolicies

It's critical that we recognise **the importance of technical and vocational education.**

CINDY RAMPERSAUD
SVP, BTEC & APPRENTICESHIPS

I have been at Pearson for a little over a year and I oversee our BTECs – specialist work-related qualifications, grounded in the real world of work and available in schools, colleges and universities across a range of subjects.

For my own personal journey of learning and discovery – from a student in the mid 80's to a career in the entertainment industry – across retail, film and music, to my current role in education – discovery and technology have played a key role.

The future of jobs

As technology transforms big-player industries like education, we're finding that new jobs and careers are surfacing around every corner. The challenge right now is how you and I prepare ourselves and future generations for the world five, 10 and 20 years out. What is clear to me is that education and a culture of lifelong learning have a crucial role to play in preparing us for that 'yet to be imagined future'.

Alternate pathways to education

Education has been a powerful enabler for change but today is still focused on academics – acquiring knowledge in a traditional way where success is measured by passing exams. 'Skills' – technical and vocational education have often been seen as too alternative a pathway.

Yet, these are the skills – soft and hard skills alike – learners will need for the jobs of tomorrow. It's critical that we recognise the importance of technical and vocational education, and our BTECs and Apprenticeship programmes do just that. They're helping us keep pace with a landscape that now sees technical and vocational education as a key driver for growth, increased productivity – preparing for the yet to be imagined future.

To embrace a future that is constantly changing, we need to create a culture that fosters a love of lifelong learning because it's only through this that we'll be able to face the changes head-on as we prepare for the jobs of tomorrow.

90%
BTEC students who are employed full time after graduation (Source: HESA)

62%
Large UK companies have recruited graduates with a BTEC (Source: CBI Skills Survey 2018)

A high-stakes, computer-based English language test trusted by universities, colleges and governments around the world.

PTE Academic is a high-stakes, computer based English language test that people take to prove their English skills for studying abroad and visa applications.

"PTE Academic was first approved to support Australian visa applications in 2014 and has quickly become the test of choice for Australian student and migration visa applicants."

David Barnett Pearson Managing Director, Asia Pacific

It is accepted at prestigious institutions including Harvard Business School, Yale and the University of Melbourne.

In 2018 the Australian Department of Home Affairs renewed its endorsement of PTE Academic in supporting the Australian visa programme for a further two years.

The Test has seen 30% volume growth in 2018 with further growth expected in 2019. PTE Academic is delivered in hundreds of test centres year round, providing learners with the flexibility they need.

PTE Academic

£77m
Revenues

+30%
Test volume growth

2 Aligned to strategic priority, p23

DIGITAL CAPABILITIES

- Automated speech recognition
- Automated marking and scoring
- Advanced biometrics

Financial review

We expect to make further progress in 2019, with adjusted operating profit between £610m and £660m.[1]

Coram Williams
Chief Financial Officer

Profit and loss statement

In 2018, sales decreased by £384m in headline terms to £4,129m (2017: £4,513m) with portfolio changes reducing sales by £216m and currency movements decreasing revenue by £134m. Stripping out the impact of portfolio changes (including the adoption of new accounting standards) and currency movements, revenue was down 1% in underlying terms. Revenue in North America declined 1%, Core was flat and Growth up 1%.

The 2018 adjusted operating profit of £546m (2017: £576m) reflects a £130m year on year benefit from restructuring, offset by £50m of cost inflation, £22m of other operational factors, £15m negative contribution from trading and a £73m negative impact from currency movements and portfolio changes. Excluding the impact of currency movements and portfolio changes (including accounting changes) underlying adjusted operating profit grew 8%.

Net interest payable was £24m, compared to £79m in 2017. The decrease was primarily due to a reduction in gross debt achieved through the early redemption of bonds in 2017. Charges relating to early redemptions increased finance charges in 2017 but were not as significant in 2018. Additionally, there was a reduction in interest on tax provisions following reassessment of those provisions in 2018.

The effective tax rate on adjusted earnings in 2018 was a credit of 5.2% compared to an effective rate charge of 11.1% in 2017. The decrease in tax rate reflects several one-off benefits in 2018 including provision releases due to the expiry of relevant statutes of limitation and due to the reassessment of historical positions, as well as a one-off benefit from a reassessment of the tax treatment of certain items of income and expenditure.

Adjusted earnings per share of 70.3p (2017: 54.1p) included a c.20p one-off tax benefit and a lower finance charge.

Cash generation

Operating cashflow declined by £156m from £669m in 2017 to £513m in 2018 in headline terms. The decrease reflects lower dividends from Penguin Random House, following our divestment of a 22% stake in the business in 2017, higher incentive payments in 2018 relating to 2017 performance and movements in working capital. The equivalent statutory measure, net cash generated from operations, was £547m in 2018 compared to £462m in 2017. The main reason for the improvement in cash generated from operations was the absence of special pension contributions in 2018 which were £227m in 2017.

Financial summary

Business performance

£ millions	2018	2017	Headline growth	CER growth	Underlying growth
Sales	**4,129**	4,513	(9)%	(6)%	(1)%
Adjusted operating profit	**546**	576	(5)%	(2)%	8%
Operating cash flow	**513**	669			
Adjusted earnings per share	**70.3p**	54.1p			
Dividend per share	**18.5p**	17p			
Net debt	**(143)**	(432)			

Statutory results

£ millions	2018	2017	Headline growth	CER growth	Underlying growth
Sales	**4,129**	4,513	(9)%	(6)%	(1)%
Operating profit	**553**	451			
Profit for the year	**590**	408			
Cash generated from operations	**547**	462			
Basic earnings per share	**75.6p**	49.9p			

a) Growth rates are stated on an underlying basis unless otherwise stated. Underlying growth rates exclude both currency movements, portfolio changes and accounting changes, b) CER refers to Constant Exchange Rates, and c) The 'business performance' measures are non-GAAP measures and reconciliations to the equivalent statutory heading under IFRS are included in the financial key performance indicators section on p222–225.

1 Guidance includes impact of IFRS 16.

Return on invested capital

On a gross basis, ROIC increased from 4.3% in 2017 to 4.7% in 2018 and from 6.2% in 2017 to 6.7% in 2018 on a net basis. The movement largely reflects lower invested capital following disposals and decreased tax payments which were more than enough to offset the effect of lower adjusted operating profits primarily due to the disposal of a 22% stake in Penguin Random House and currency movements.

Statutory results

Our statutory profit was £553m in 2018 compared to a profit of £451m in 2017. The increase in 2018 is largely due to the increase in gains on disposal and reduced intangible charges which more than offset increased restructuring charges, the lost contribution from businesses disposed of and the impact of currency movements.

Capital allocation

Our capital allocation policy remains unchanged: to maintain a strong balance sheet and a solid investment grade rating, to continue to invest in the business, to have a sustainable and progressive dividend policy, and to return surplus cash to our shareholders where appropriate.

Balance sheet

Net debt to EBITDA was 0.2x. Net debt decreased to £143m (2017: £432m) reflecting disposal proceeds and operating cash flow, partially offset by the strengthening of the US Dollar relative to Sterling, dividend payments and the share buyback.

In January 2018, the Group repurchased €250m of its €500m Euro 1.875% notes due May 2021 and €200m of its €500m Euro 1.375% notes due May 2025. Borrowings at 31 December 2018 include drawings on the Group's revolving credit facility (RCF) of £nil (2017: £nil).

Pension plan

In 2018, our UK Pension Plan completed a new triennial valuation as at 1 January 2018 and re-confirmed the Plan as being well funded. The Plan has recently used this funding position to purchase a further insurance buy-in policy with Legal & General, amounting to approximately £500m. Together with the two policies purchased in 2017, around 50% of the Plan's total liabilities are now insured. This has put the Plan in an even stronger position and further reduced Pearson's future pension funding risk, at no additional cost to Pearson.

Dividend

In line with our policy, the Board is proposing a final dividend of 13p (2017: 12p), an increase of 8%, which results in an overall dividend of 18.5p (2017: 17p) subject to shareholder approval.

Share buyback

We launched a £300m share buyback, beginning on 18 October 2017 utilising part of the proceeds from the disposal of a 22% stake in Penguin Random House. We completed the programme on 16 February 2018.

Businesses held for sale

Following the decision to sell our US K12 Courseware business, the assets and liabilities of that business were classified as held for sale on the balance sheet at 31 December 2018. We announced the agreement to sell this business on 18 February 2019.

2019 outlook

2018 has been a year of progress for Pearson, delivering adjusted operating profit within our guidance range and continuing to invest in the digital transformation and simplification of the company. We expect to make further progress in 2019, with adjusted operating profit between £590m and £640m and adjusted earnings per share of 56.5p to 62.0p on a pre-IFRS 16 basis. This reflects our portfolio and exchange rates as at 31 December 2018 and the following factors:

Currency movement and portfolio changes

Adjusting for currency movement improves profit by £26m. We completed the sale of WSE in March 2018. WSE contributed £42m to 2018 revenue and £4m to 2018 adjusted operating profit. US K12 Courseware contributed £364m to 2018 sales and around £20m to 2018 operating profit.

Inflation and other operational factors.

Our 2019 guidance incorporates cost inflation of c.£50m together with other operational factors of £33m due to increased investment in our strategic growth areas and the expectation of a lower contribution from Penguin Random House.

Restructuring benefits

We expect incremental in-year benefits from the 2017-2019 restructuring programme of £130m in 2019. Exceptional restructuring costs of £150m will continue to be excluded from adjusted operating profit.

Interest and tax

We expect a 2019 net interest charge of c.£30m and a tax rate of 21%.

Currency

In 2018, Pearson generated approximately 64% of its sales in the US, 3% in Greater China, 5% in the Eurozone, 3% in Brazil, 3% in Canada, 3% in Australia, 2% in South Africa and 1% in India and our guidance is based on exchange rates at 31 December 2018.

We calculate that a 5c move in the US Dollar exchange rate to Sterling would impact adjusted EPS by around 2p to 2.5p.

IFRS 16

Including IFRS 16, we expect to report adjusted operating profit of between £610m and £660m, a net interest charge of c.£60m and adjusted earnings per share of 55.5p to 61.0p for 2019.

Financial review

Adjusted performance measures

The Group's adjusted performance measures are non-GAAP financial measures and are included as they are key financial measures used by management to evaluate performance and allocate resources to business segments. The measures also enable investors to more easily, and consistently, track the underlying operational performance of the Group and its business segments over time by separating out those items of income and expenditure relating to acquisition and disposal transactions, major restructuring programmes and certain other items that are also not representative of underlying performance.

The Group's definition of adjusted performance measures may not be comparable to other similarly titled measures reported by other companies. A reconciliation of the adjusted measures to their corresponding statutory reported figures is shown in summary below and in more detail on p222–225.

Adjusted operating profit

Adjusted operating profit includes the operating profit from the total business including the results of discontinued operations when relevant. There were no discontinued operations in either 2017 or 2018. A reconciliation of the statutory measure to the adjusted measure is shown below:

£ millions	2018	2017
Operating profit	**553**	451
Add back: Cost of major restructuring	**102**	79
Add back: Other net (gains) and losses	**(230)**	(128)
Add back: Intangible charges	**113**	166
Add back: Impact of GMP equalisation	**8**	–
Add back: Impact of US tax reform on profit from associate	**–**	8
Adjusted operating profit	**546**	576

In May 2017, we announced a restructuring programme, to run between 2017 and 2019, to drive significant cost savings. This programme began in the second half of 2017 and net costs incurred were £79m in 2017 and £102m in 2018 and relate to delivery of cost efficiencies in our enabling functions and US Higher Education Courseware business together with further rationalisation of the property and supplier portfolio. The restructuring costs in 2018 relate predominantly to staff redundancies and the net cost of property rationalisation. Included in the property rationalisation in 2018 is the impact of the consolidation of our property footprint in London which resulted in a charge for onerous leases of £91m partially offset by profit from the sale of property of £81m. The onerous lease provisions are the main driver for the overall increase in provisions on the balance sheet at 31 December 2018.

These major restructuring costs are analysed below:

£ millions	2018	2017
Adjusting the cost base in our Higher Education Courseware business	**21**	23
Further efficiency improvements in enabling functions through back office change programmes in Human Resources, Finance and Technology	**48**	23
Further rationalisation of property and supplier agreements	**21**	33
Associate restructuring	**12**	–
Total	**102**	79

Other net gains and losses that represent profits and losses on the sale of subsidiaries, joint ventures, associates and other financial assets are excluded from adjusted operating profit as it is important to highlight their impact on operating profit, as reported, in the period in which the disposal transaction takes place in order to understand the underlying trend in the performance of the Group. Other net gains (before tax) of £230m in 2018 relate to the sale of the Wall Street English language teaching business (WSE), realising a gain of £207m, the disposal of the equity interest in UTEL, the online University partnership in Mexico, realising a gain of £19m, and various other smaller disposal items for a net gain of £4m. Gains of £128m in 2017 largely relate to the sale of the test preparation business in China which resulted in a profit on sale of £44m and the part sale of the share in PRH which resulted in a profit of £96m.

Charges relating to acquired intangibles and acquisitions are also excluded from adjusted operating profit when relevant as these items reflect past acquisition activity and do not necessarily reflect the current year performance of the Group. In 2018, intangible charges declined from £166m in 2017 to £113m in 2018. This decline reflects the reduction in acquisition activity in recent years.

In 2018, the impact of adjustments arising from clarification of guaranteed minimum pension (GMP) equalisation legislation in the UK have been excluded from adjusted operating profit as outlined below in the section on post-retirement benefits.

As a result of US tax reform at the end of 2017, the reported tax charge in that year on a statutory basis included a benefit from revaluation of deferred tax balances to the reduced federal rate of £5m and a repatriation tax charge of £6m. In addition to the impact on the reported tax charge, the Group's share of profit from associates was adversely impacted by £8m. These adjustments were excluded from adjusted operating profit and the adjusted tax charge as they were considered as transition adjustments that were not expected to recur in the near future.

Underlying growth rates

Sales decreased on a headline basis by £384m or 9% from £4,513m in 2017 to £4,129m in 2018 and adjusted operating profit decreased by £30m or 5% from £576m in 2017 to £546m in 2018.

The headline basis simply compares the reported results for 2018 with the reported results for 2017. The Group also presents sales and profits on an underlying basis which excludes the effects of foreign exchange, the effect of portfolio changes arising from acquisitions and disposals and the impact of adopting new accounting standards that are not retrospectively applied. The portfolio change is calculated by taking account of the contribution from acquisitions and by excluding sales and profits made by businesses disposed in either 2017 or 2018. In 2017, portfolio changes mainly relate to the sale of the test preparation business in China and reduction in the equity interest in PRH. This reduction in equity interest is reflected in the reduction in share of results of joint ventures and associates. In 2018, portfolio changes mainly relate to the sale of our Wall Street English language teaching business. Acquisitions were not significant in either 2017 or 2018.

In 2018, the underlying basis excludes the impact of IFRS 15 'Revenue from Contracts with Customers'. This new standard was adopted on 1 January 2018 but the comparative figures for 2017 have not been restated. On 1 January 2018, the Group also adopted IFRS 9 'Financial Instruments' but this did not have a material impact on profit in 2018. The impact of adopting these standards is discussed further below and in note 1 of the financial statements.

On an underlying basis, sales decreased by 1% in 2018 compared to 2017 and adjusted operating profit increased by 8%. Currency movements decreased sales by £134m and adjusted operating profit by £21m. Portfolio changes decreased sales by £225m and adjusted operating profit by £61m. The impact of adopting IFRS 15 on the results for 2018 was to increase sales by £9m and adjusted operating profit by £9m.

Adjusted earnings per share

Adjusted earnings includes adjusted operating profit and adjusted finance and tax charges. A reconciliation to the statutory profit is shown below:

£ millions	2018	2017
Profit for the year	**590**	408
Non-controlling interest	**(2)**	(2)
Add back: Cost of major restructuring	**102**	79
Add back: Other net (gains) and losses	**(230)**	(128)
Add back: Intangible charges	**113**	166
Add back: Other net finance (income)/costs	**31**	(49)
Add back: Impact of GMP equalisation	**8**	–
Add back: Impact of US tax reform on profit from associate	**–**	8
Tax benefit relating to items added back	**(65)**	(42)
Adjusted earnings	**547**	440
Weighted average number of shares (millions)	**778.1**	813.4
Adjusted earnings per share	**70.3p**	54.1p

Net finance costs classified as other net finance costs or income are excluded in the calculation of adjusted earnings.

Finance income relating to retirement benefits is excluded as management believe the presentation does not reflect the economic substance of the underlying assets and liabilities. Finance costs relating to acquisition transactions are also excluded as these relate to future earn outs or acquisition expenses and are not part of the underlying financing.

Foreign exchange and other gains and losses are also excluded as they represent short-term fluctuations in market value and are subject to significant volatility. Other gains and losses may not be realised in due course as it is normally the intention to hold the related instruments to maturity.

In 2018, the total of these net finance cost items excluded from adjusted earnings was a loss of £31m compared to a gain of £49m in 2017. Finance income relating to retirement benefits increased from £3m in 2017 to £11m in 2018 but this increase was more than offset by foreign exchange losses on unhedged cash and cash equivalents and other financial instruments that generated gains in 2017.

The adjusted income tax charge excludes the tax benefit or charge on items that are excluded from the profit or loss before tax. In addition, the tax benefit from tax deductible goodwill and intangibles is added to the adjusted income tax charge as this benefit more accurately aligns the adjusted tax charge with the expected rate of cash tax payments.

Operating cash flow

Operating cash flow is presented in order to align the cash flows with corresponding adjusted operating profit measures. A reconciliation to operating cash flow from net cash generated from operations, the equivalent statutory measure, is shown below:

£ millions	2018	2017
Net cash generated from operations	**547**	462
Dividends from joint ventures and associates	**67**	146
Capital expenditure on property, plant, equipment and software	**(204)**	(237)
Proceeds from sale of property, plant, equipment and software	**128**	–
Add back: Net (proceeds from) /costs paid on major restructuring projects	**(25)**	71
Add back: Special pension contribution paid	**–**	227
Operating cash flow	**513**	669

Financial review

In addition to the dividends received from associates above there were dividends from PRH in 2018 of £50m and in 2017 of £312m relating to the recapitalisation of PRH following the sale of part of the Group's interest in the venture. This cash flow is not related to the underlying trading of the business and has not been included in the adjusted operating cash measure.

Major restructuring costs paid in 2017 included cash flow from both the 2016 restructuring programme (£44m) and the 2017-2019 programme (£27m). In 2018, restructuring costs paid were offset by proceeds from the sale of property as part of the restructuring programme to give a net cash inflow from restructuring of £25m.

Special pension contributions of £227m in 2017 were made as part of the agreements relating to the PRH merger in 2013 (£202m) and the sale of the FT Group in 2015 (£25m). There were no special pension contributions in 2018.

Return on invested capital (ROIC)

ROIC is a non-GAAP measure and has been disclosed as it is one of Pearson's key business performance measures. ROIC is used to track investment returns and to help inform capital allocation decisions within the business. Average values for total invested capital are calculated as the average monthly balance for the year.

ROIC is presented on a gross and net basis. The net basis is calculated after removing impaired goodwill from the invested capital balance. The net approach assumes that goodwill that has been impaired is treated in a similar fashion to goodwill disposed as it is no longer being used to generate returns.

	2018	2017	2018	2017
£ millions	Gross basis		Net basis	
Adjusted operating profit	**546**	576	**546**	576
Operating cash tax paid	**(43)**	(75)	**(43)**	(75)
Return	**503**	501	**503**	501
Average invested capital	**10,672**	11,568	**7,544**	8,126
ROIC	**4.7%**	4.3%	**6.7%**	6.2%

Other financial information

Net finance costs

£ millions	2018	2017
Net interest payable	**(24)**	(79)
Finance income in respect of retirement benefits	**11**	3
Other net finance (costs)/income	**(42)**	46
Net finance costs	**(55)**	(30)

Net interest payable was £24m, compared to £79m in 2017. The decrease was primarily due to a reduction of gross debt achieved through the early redemption of bonds in 2017. Charges relating to early redemptions increased finance charges in 2017 but were not as significant in 2018. Additionally there was a reduction in interest on tax provisions following reassessment of those provisions in 2018. In February 2018, the Group bought back an aggregate nominal amount of €450,000,000 of 2021 and 2025 notes. There was a charge in respect of these early redemptions however there were partial year savings as a result which have flowed through the income statement in the period since redemption.

In 2018, the total of other items excluded from adjusted earnings was a loss of £31m compared to a gain of £49m in 2017. Finance income relating to retirement benefits increased from £3m in 2017 to £11m in 2018 reflecting the comparative funding position of the plans at the beginning of each year. This increase was more than offset by foreign exchange losses on unhedged cash and cash equivalents and other financial instruments that generated gains in 2017.

Capital risk

The Group's objectives when managing capital are:

- To maintain a strong balance sheet and a solid investment grade rating;
- To continue to invest in the business;
- To have a sustainable and progressive dividend policy, and;
- To return surplus cash to our shareholders where appropriate.

The Group is currently rated BBB (negative outlook) with Standard and Poor's and Baa2 (stable outlook) with Moody's.

Net debt

The net debt position of the Group is set out below.

£ millions	2018	2017
Cash and cash equivalents	**568**	645
Marketable securities	**–**	8
Derivative financial instruments	**9**	–
Bank loans and overdrafts	**(43)**	(15)
Bonds	**(672)**	(1,062)
Finance lease liabilities	**(5)**	(8)
Net debt	**(143)**	(432)

Net debt was reduced during the year following the sale of property, repayment of loans to PRH and proceeds from disposals.

Bond debt was reduced to £672m from £1.1bn through a combination of debt repayments. The Group holds a portion of its debt in US dollars as a natural hedge of the Group's largest earnings generating region, North America.

Despite the low year end balance sheet net debt, the Group has significant operating lease liabilities which are not currently included as balance sheet liabilities but are included by the credit rating agencies and will be included during 2019 as the group adopts IFRS16, increasing net debt by c£0.7bn. The Group's cash flow is also seasonal and so we would typically see higher net debt at the half-year results than at a year-end.

Liquidity and funding

The Group had a strong liquidity position at 31 December 2018, with over £500m of cash and an undrawn Revolving Credit Facility due in 2021 of $1.75bn (at 31 December 2017, the Group had cash of over £600m and an undrawn Revolving Credit Facility due in 2021 of $1.75bn). In March 2019, the Group announced the refinancing of the Revolving Credit Facility with a new Facility of $1.19bn due in 2024.

Taxation

The effective tax rate on adjusted earnings in 2018 was a credit of 5.2% compared to an effective rate charge of 11.1% in 2017. The decrease in tax rate reflects several one-off benefits in 2018 including provision releases due to the expiry of relevant statutes of limitation and due to the reassessment of historical positions (£86m), as well as a one-off benefit from a reassessment of the tax treatment of certain items of income and expenditure (£25m).

The reported tax credit on a statutory basis in 2018 was £92m (18.5%) compared to a charge of £13m (3.1%) in 2017. The statutory tax credit in 2018 was primarily due to the items above, provision releases and credits related to previous business disposals (£31m) and tax credits on restructuring charges.

Operating tax paid in 2018 was £43m compared to £75m paid in 2017 mainly due to refunds received in the US. Tax provision releases were the primary reason for the reduction in current tax liabilities on the balance sheet whilst net deferred tax remained consistent year on year.

Other comprehensive income

Included in other comprehensive income are the net exchange differences on translation of foreign operations. The gain on translation of £90m in 2018 compares to a loss in 2017 of £262m. The gain in 2018 mainly arises from the strength of the US dollar. A significant proportion of the Group's operations are based in the US and the US dollar strengthened in 2018 from an opening rate of £1:$1.35 to a closing rate at the end of 2018 of £1:$1.27. At the end of 2017, the US dollar had weakened from an opening rate of £1:$1.23 to a closing rate of £1:$1.35 and this movement was the main reason for the loss in 2017.

Also included in other comprehensive income in 2018 is an actuarial gain of £25m in relation to the retirement benefit obligations of the Group and our share of the retirement benefit obligations of PRH. The gain arises from the favourable impact of changes in the assumptions used to value the net assets in the plans and in particular movements in the discount rate. The gain in 2018 compares to an actuarial gain in 2017 of £182m.

Post-retirement benefits

Pearson operates a variety of pension and post-retirement plans. Our UK Group pension plan has by far the largest defined benefit section. We have some smaller defined benefit sections in the US and Canada but, outside the UK, most of our companies operate defined contribution plans.

The charge to profit in respect of worldwide pensions and retirement benefits amounted to £56m in 2018 (2017: £72m) of which a charge of £67m (2017: £75m) was reported in statutory operating profit and income of £11m (2017: £3m) was reported against other net finance costs. The decrease in the operating charge in 2018 is partly explained by a past service credit of £11m relating to changes made to the US post-retirement medical plan in the year and reduced administration costs. This credit was partially offset by a past service charge of £8m relating to guaranteed minimum pension (GMP) equalisation in the UK.

The GMP equalisation charge arises from the ruling in the Lloyds Bank High Court case in October 2018 that provided clarity on how pension plans should equalise GMP between males and females. The case ruling results in an income statement charge, an additional liability and the potential requirement to make back-payments to pensioners who may have been retired for some years. This charge has been excluded from our adjusted earnings as this relates to historical circumstances. The charge is an estimate based on available data and revisions to these estimates in future years will be treated as assumption changes and recorded in other comprehensive income rather than the income statement.

The overall surplus on UK pension plans of £545m at the end of 2017 has increased to a surplus of £571m at the end of 2018. The increase has arisen principally due to favourable movements in assumptions used to value the liabilities offsetting some decline in asset values.

In total, our worldwide net position in respect of pensions and other post-retirement benefits increased from a net asset of £441m at the end of 2017 to a net asset of £471m at the end of 2018.

Adoption of new accounting standards in 2018

The adoption of IFRS 15 and IFRS 9 has impacted both the income statement as described on p47 and has had an impact on certain lines in the balance sheet. Although the impact of IFRS 9 was not significant, the restatements in relation to IFRS 15 are the main reason for increases in 2018 in balances for inventories, trade and other receivables, trade and other liabilities and held for sale assets and liabilities. The full impact of the adoption of both standards is outlined in note 1 of the financial statements.

Dividends

The dividend accounted for in the 2018 financial statements totalling £136m represents the final dividend in respect of 2017 (12.0p) and the interim dividend for 2018 (5.5p). The Board are proposing a final dividend for 2018 of 13.0p bringing the total paid and payable in respect of 2018 to 18.5p. This final 2018 dividend which was approved by the Board in February 2019, is subject to approval at the forthcoming AGM and will be charged against 2019 profits. For 2018, the dividend is covered 3.8 times by adjusted earnings. After excluding the one-off tax benefit in adjusted earnings of c.20p the dividend is covered 2.7 times.

Financial review

Share buyback

The share buyback programme announced in October 2017 was completed on 16 February 2018. In 2017, our brokers purchased 21m shares and in 2018 purchased a further 22m shares. Cash payments for these purchases and related costs were £149m in 2017 and £153m in 2018. The shares bought back were cancelled and the nominal value of these shares was transferred to a capital redemption reserve. The nominal value of shares cancelled under the programme was £11m. A liability for the share buy-back payments due in 2018 was recorded in trade and other liabilities on the 2017 balance sheet.

Businesses held for sale

Following the decision in 2017 to sell both our Wall Street English language teaching business and the US K12 Courseware business, the assets and liabilities of those businesses were classified as held for sale on the balance sheet at 31 December 2017. During 2018, the Wall Street business was sold and the US K12 Courseware business remains on the balance sheet as a held for sale asset prior to the disposal announced in February 2019.

Goodwill and intangible assets

Amortisation and impairment charges relating to acquired intangible assets in 2018 were £113m compared to a charge of £166m in 2017. There were no impairments to goodwill and intangibles in 2018 or 2017 following impairment charges in preceding years.

Acquisitions and disposals

There were no significant acquisitions in 2018 or 2017. In 2018, the Group disposed of the Wall Street English language teaching business (WSE), realising a gain of £207m, and the equity interest in UTEL, the online University partnership in Mexico, realising a gain of £19m. Various other smaller disposal items resulted in a net gain of £4m in 2018. In 2017, disposals included the sale of the test preparation business in China (GEDU) which resulted in a profit on sale of £44m and the sale of a portion of the stake in PRH to the venture partner, Bertelsmann, resulting in a reduction in the Group's interest from 47% to 25% and a profit on sale of £96m.

Related party transactions

Transactions with related parties are shown in note 36 of the financial statements.

Post-balance sheet events

On 18 February 2019, the Group announced the sale of the US K12 Courseware business to Nexus Capital Management LP for headline consideration of $250m comprising an initial cash payment of $25m and an unconditional vendor note for $225m expected to be repaid in three to seven years. Following the repayment of the vendor note, the Group is entitled to 20% of all future cash flows to equity holders and 20% of net proceeds if the business is sold. The transaction is expected to complete in the first half of 2019.

Also in February 2019, the UK Group pension plan purchased a further pensioner buy-in policy valued at approximately £500m with Legal & General. As a result of this latest transaction, 95% of the UK Group plan's pensioner liabilities are now matched with buy-in policies which significantly reduces longevity risk of the Group. The buy-in will be accounted for in 2019 and is expected to reduce the retirement benefit asset on the balance sheet but is not expected to have a material impact on the income statement.

On 6 March 2019, the Group announced a tender offer for up to €75m of its €500m 1.875% notes due 2021 of which €250m were outstanding at 31 December 2018. In addition, the Group also announced the refinancing of its bank facility with a new $1.19bn Revolving Credit Facility due to mature in February 2024.

Coram Williams
Chief Financial Officer

We know we already have the best people working in our restaurants – they just need the opportunity to build the right skills to move up.

ROBERT VALENCIA
ACCELERATED PATHWAYS STUDENT

Accelerated Pathways is a corporate education benefit, where Pearson partners with companies to strategically align their educational assistance spending to the talent objectives of the organisation, helping to build a workforce that's more skilled, more engaged and, most importantly, more prepared for the future of work. In 2018, Pearson announced a partnership with Brinker International, Inc., owner of Chili's® Grill & Bar and Maggiano's Little Italy®, to launch Best You EDU™, a Brinker education benefit programme that allows all eligible Team Members to earn Foundational, GED, and associate degrees with full tuition coverage.

For Robert Valencia, a 27-year old cook who's worked at Chili's for two years, it helped him earn his GED credential and completely altered the path of his career. One of the first applicants in Best You EDU™, Robert applied only a few days after the programme was launched, and received his GED a month later.

Three days after he earned his GED, he applied for the Associate Degree Programme. In December, he completed his third semester of college, studying business. In 2018, Robert received the GED Testing Service GEDWorks™ National Award, recognising his drive to overcome educational barriers and to pursue a better path for himself.

"We know we already have the best people working in our restaurants – they just need the opportunity to build the right skills to move up," says Rick Badgley, Chief Administrative Officer. Accelerated Pathways leverages resources, such as online and mobile-optimised education tools, technology and course materials to support the unique challenges of adult learners, while addressing barriers to education – such as cost, time and access.

Accelerated Pathways

500,000+

The number of corporate client employees who have access to educational benefits through Accelerated Pathways

Overview
Our strategy in action
Our performance
Governance
Financial statements

I'm not just learning for me.

It's for me and my daughter... she is the main motivation. I want to show her she can achieve whatever she wants.

FEVEN ZERAY
BTEC – 2018 ADULT LEARNER OF THE YEAR

Feven Zeray's ultimate goal is to be an aeronautical engineer. She recently received top marks in her BTEC Level 3 Extended Diploma in Electrical Engineering and is on track and racing full throttle towards a career with the Mercedes Formula 1 team.

From the start of her course, she faced resistance from those who thought it was too difficult and that a woman couldn't succeed in engineering. That did not stop Feven from finding a way to pursue her dream.

BTECs are career-focused qualifications, taught in number of subjects in colleges, schools and universities throughout the world. Through BTEC learners acquire the knowledge and skills they need for career success. Throughout their course, BTEC learners work on a series of tasks set in real-life scenarios to which they apply the knowledge and skills they have learned during their course. BTECs enable successful progression towards a chosen career path, whether that's through further or higher education, an apprenticeship or directly into employment.

For Feven, not only did BTEC teach her the skills she needed for a career in engineering, but she also learned valuable employability skills including communication and flexibility, which she has found useful in single handedly raising her daughter while funding herself to get her dream job.

Alex Fau Goodwin, Assistant Principal at Trafford College says that success like Feven's 'really does emphasise the importance of adult education in colleges'. Feven is making the most of her education – her latest accolade is winning the coveted Mercedes AMG High Performance Powertrains (HPP) Student of the Year Award, guaranteeing her an interview for the prestigious Apprenticeship scheme run by HPP who design, develop and manufacture the Mercedes-Benz Formula 1 racing engines and hybrid systems.

Feven is widely regarded as a role model at Trafford College and continues to prove to her daughter that learning makes anything possible.

BTEC

1m+
BTEC programmes starting each year

41%
of students using BTEC to enter higher education come from lower economic groups

1 Aligned to strategic priority, p21

Operating performance

North America

Market summary

Our largest market includes all 50 US states and Canada.

Contribution to Group revenues

67%

Sales

£2,784m

Adjusted operating profit

£362m

Sustainability

200+

institutions use the GED College Ready score level, including community colleges, to help students bypass placement tests and developmental education courses

Revenue declined 1% in underlying terms, primarily due to North American Higher Education Courseware declining 5%, School Courseware which was down mid-single digit %, impacted by weak Open Territory sales in the second half of the year, the continued decline in Learning Studio as we move towards the retirement of the product in 2019 and Student Assessment which declined moderately. Offsetting that, we saw good growth in Virtual Schools, Online Program Management (OPM) and Professional Certification revenue.

Adjusted operating profit rose 1% in underlying terms, as restructuring savings offset the impact of lower sales, inflation and other operating factors.

Courseware

School

In School Courseware, revenue declined mid-single digit percent primarily due to declines in Open Territory states. This was partially offset by growth in Adoption state revenue on strong performance in Science in Florida, South Carolina and Tennessee, Elementary Math in Oklahoma and Elementary Social Studies in California and South Carolina.

Our new adoption participation rate rose to 80% from 61% in 2017. We won an estimated 33% share of adoptions competed for (38% in 2017) and 26% of total new adoption expenditure of $509m (29% of $365m in 2017).

Higher Education

In Higher Education Courseware, total US college enrolments, as reported by the National Student Clearinghouse, fell 1.4%, with combined two-year public and four-year for-profit enrolments declining 4.8%. Enrolment weakness was particularly focused on part-time students where enrolment declined 2.9% compared to full time enrolment which declined 1.1%.

Net revenue in our US Higher Education Courseware business declined 5% during the year. We estimate around 2% of this decline was driven by lower enrolment; around 1.5% from the adoption of Open Educational Resources (OER); around 2.5% from the combined impact of shifts in the secondary market, more cautious buying by the channel and lower returns; offset by c.1% benefit from the shift to digital.

In 2018, Pearson's US Higher Education Courseware market share, as reported by MPI, was within the c.40-41.5% range seen over the last five years.

Digital revenue grew 2% benefiting from continued growth in direct sales and favourable mix. Global digital registrations of MyLab and related products were flat. In North America, digital registrations fell 3% with good growth in Science, Business & Economics and Revel offset by lower overall enrolment and continued softness in Developmental Mathematics. Revel registrations grew more than 40%. Including stand-alone eBook registrations, total North American digital registrations rose 1% and global registrations rose 3%.

The actions announced in early 2017 to promote access over ownership met with continued success. Stand-alone eBook volumes grew 34% in the US with revenue up 25% and our partner print rental programme has had a successful start with 130 titles in the programme in 2018. We plan to increase the number of titles in the programme to around 400 by fall 2019.

We continue to make good progress with our Inclusive Access (Direct Digital Access) solutions signing 192 new institutions in 2018, taking the total of not-for-profit and public institutions served to 617. Including 80 longer-standing contracts with for-profit colleges, we now have direct courseware relationships with nearly 700 institutions.

Inclusive Access ensures that students have affordable access to the courseware that they need on day one of the course, whilst further shifting our business model in this segment away from ownership and towards subscription. During the year, we delivered over 1.4m course enrolments with inclusive access revenues from non-profit and public institutions rising to c.8% of our higher education courseware revenue as more colleges and faculties see the benefit of this model.

Assessment

Student Assessment

In Student Assessment, revenue declined moderately in 2018 due to the faster than expected contraction in revenue associated with our PARCC and ACT-Aspire multi-state volume-based contracts and our disciplined competitive approach. These factors will extend into 2019, where we expect a modest decline in revenue in this segment. Beyond 2019, we expect the business to benefit from continued good momentum in subcontractor contract wins leveraging our digital leadership and a strong pipeline of opportunities in key states.

Growth rates are stated on an underlying basis unless otherwise stated. Underlying growth rates exclude currency movements, portfolio changes and accounting changes. Underlying measures are reconciled to the equivalent statutory measures on p222–225.

During 2018, Pearson successfully renewed contracts in Arizona and Kentucky through competitive procurements and secured business with the District of Columbia, New Jersey, New Mexico, and Maryland under new contracts with these PARCC states. We also won new contracts for Utah's High School Assessments and with the University of Iowa for the delivery of Iowa's new assessment system.

We delivered 24m standardised online tests to K12 students, down 5% from 2017. TestNav 8, Pearson's next-generation online test platform, supported a peak load of 825,000 tests in a single day and provided 99.99% up time. Our AI scoring systems scored 36m responses to open-ended test items, around 33% of the total. Paper based standardised test volumes fell 9% to 18.5m.

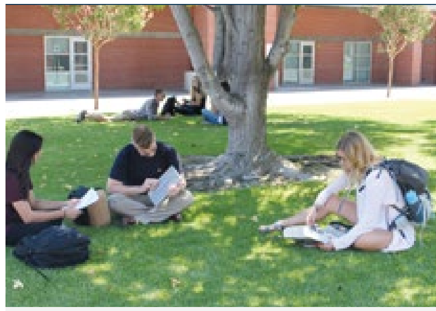
Professional Certification

In Professional Certification, VUE global test volume rose 4% to over 15m. Revenue in North America was up mid-single digit %, due to growth in medical college admissions testing and certification for professional bodies, offset by continued declines in volumes in the GED High School Equivalency Test and higher-level IT certifications in an environment of low unemployment.

We signed over 70 new contracts in 2018 and our renewal rate on existing contracts continues to be over 95%. During the year we renewed over 80 contracts including the National Council of State Boards of Nursing (NCLEX exam), Microsoft and Adobe.

Clinical Assessment

Clinical Assessment sales declined slightly on an absence of new major product introductions impacting 2018. Late in Q4 we launched a refresh of the Peabody Picture Vocabulary Test and Expressive Vocabulary Test (PPVT/EVT). Q-interactive, Pearson's digital solution for Clinical Assessment administration, saw continued strong growth in license sales with sub-test administrations up more than 37% over the same period last year.



Partnering with institutions to help students become career ready

Product: Career Success Program

"As a recent college graduate and applying for full time jobs for the first time in my life… I am finding it difficult to show potential employers my "soft skills", my traits outside of my resume. It means one thing to say I am a team player, but I want to show the employers how I earned that trait. Thankfully, Pearson Career Success allows me to demonstrate my skills outside of my resume and earn badges such as critical thinking and teamwork from an accredited and respected source."

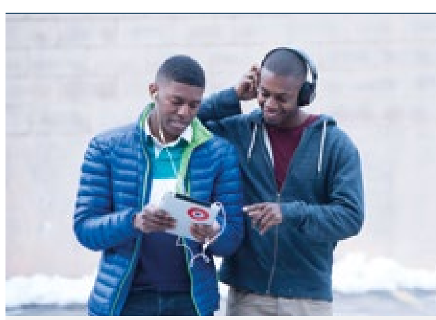
Jessica Albright, recent Marketing Bachelor's graduate (Spring 2017) and MBA graduate (December 2018) at Missouri State University in Springfield, MO

The Career Success Program is an integrated solution designed to help learners discover, develop, and demonstrate the occupational and personal and social capabilities that are vital for successful 21st century employment and lifelong success.

Pearson works with institutions at a variety of different levels to provide resources and services to students from the time they enroll at a university to the time they graduate, all with the goal of preparing them for the career they want. Over the next four years, over 80,000 students will go through this program.

80,000 students

currently enrolled in the Career Success Program



Pearson makes learning personal

Product: Mastering

"Mastering gives students feedback as they do the work… they have more confidence tackling problems, because they've had experience, and with more experience comes more confidence."

Evelyn Landers, Chemistry Lecturer at Waterford Institute of Technology has used Mastering Chemistry since 2010. Landers says it has made her teaching more efficient and personalised because students have access to personalised learning resources that empower them to learn at their own pace.

Mastering is one of the world's leading collections of online homework, tutorial, and assessment products. It is designed to improve the results of all higher education students, one student at a time.

Pearson partners with 3,700 institutions annually to provide Mastering to students all over the world, primarily in North America but also in South America, Europe, Asia, Australia and Africa.

DIGITAL CAPABILITIES

Real-time data analytics

Pearson partners with

3,700 institutions

annually to provide Mastering to students all over the world

Growth rates are stated on an underlying basis unless otherwise stated. Underlying growth rates exclude currency movements, portfolio changes and accounting changes. Underlying measures are reconciled to the equivalent statutory measures on p222–225.

Operating performance

Services

Connections Academy

Connections Academy, our K12 online school business grew revenue 8%. Connections Academy served 73,000 Full Time Equivalent (FTE) students through 37 continuing full time virtual partner schools in 28 states, up 11% on last year. Total FTE virtual school students declined 3% to 75,400 as expected due to contract exits at Commonwealth Charter Academy in Pennsylvania and Florida Virtual School.

Three new full time online, state-wide partner schools opened in the 2018-19 school year in Florida, Michigan, and Ohio. We anticipate the opening of between two and five new partner schools in the 2019-20 school year.

The 2018 Connections Academy Parent Satisfaction Survey continues to show solid endorsement for the schools with 93% of families with enrolled students stating they would recommend our virtual schools to others and 95% agreeing that the curriculum is of high quality.

Pearson Online Services

In Pearson Online Services, revenue grew 3%, primarily due to growth in OPM, partially offset by a decline in Learning Studio revenue as we retire the product and as we restructured smaller non-OPM contracts.

Online Program Management

In OPM, we grew revenue 9% as course registration grew strongly, up 14% to more than 388,000 on strong growth in programs at key partners including Arizona State University Online, Maryville University, Regis College, Bradley University, Ohio University and the University of Southern California.

Our overall active program count grew by 33 to 325. The launch of 46 new programs were offset by 13 discontinued programs. During 2018 we signed 27 multi-year programs, including programs at new partners the University of North Dakota and Rider University. We closed nine out of 15 renewal opportunities and as part of broader efforts around portfolio optimisation agreed with our partners to terminate 23 programs that were not mutually viable.

2019 outlook

US Higher Education Courseware

In US Higher Education Courseware, we expect revenue to be flat to down 5% on the continuation of the pressures we saw on end demand in 2018 with ongoing declines in enrolment and modest growth in OER adoptions. For print revenue in this segment, we see scope for further declines in gross sales and improvements in returns. Print continues to be impacted by the ongoing rise of secondary channels, such as rental, but channel inventory has now returned to more normalised levels following the 2016 inventory correction and its after effects. The channel is now optimising the stock it holds, both through reducing purchases and returns, and we expect that to continue in 2019. Growth in digital and direct sales provides some offset to the continuing pressures on print.

Assessment

In Assessment, we expect good growth in Professional Certification and stable revenue in our Clinical Assessment business in the US. We expect a modest decline in revenue in North America Student Assessment on continued contraction in revenue associated with our PARCC and ACT Aspire contracts.

Connections Academy and Online Program Management

We expect good growth in revenue and enrolment at Connections Academy and in North America Online Program Management.

Core

Market summary

Our international business in established and mature education markets.

Contribution to Group revenues

20%

Sales

£806m

Adjusted operating profit

£57m

Sustainability

40%

Students from the lowest four socio-economic groups (as defined by the UK ONS) on average progress to HE in a subject related to their BTEC.

Revenue was flat in underlying terms with growth in Pearson Test of English Academic, OPM in the UK and Australia and Professional Certification offset by declines in Higher Education and Student Assessment and Qualifications.

Adjusted operating profit increased 10% in underlying terms, due to restructuring savings partially offset by inflation.

Courseware

School and Higher Education

Courseware revenue declined moderately. Slight growth in School Courseware was offset by declines in Higher Education Courseware. In Higher Education Courseware, revenue was down due to market declines in Europe and Asia, partially offset by growth in digital sales to institutional partners in the UK and Australia.

Growth rates are stated on an underlying basis unless otherwise stated. Underlying growth rates exclude currency movements, portfolio changes and accounting changes. Underlying measures are reconciled to the equivalent statutory measures on p222–225.

Assessment

Student Assessment and Qualifications

In Student Assessment and Qualifications, revenue fell as modest growth in BTEC Firsts and GCE A-Level was more than offset by declines in AS levels, international GCSEs in the UK and UK Apprenticeships due to policy changes in the schools qualifications and the apprenticeships market. We successfully delivered the National Curriculum Test (NCT) for 2018, marking 3.6m scripts, up slightly from 2017. We will deliver the NCT again in 2019 before the test transitions to another provider in 2020.

Clinical Assessment

Clinical Assessment sales declined primarily in Australia due to an absence of new major product introductions. Q-Interactive, Pearson's digital solution for Clinical Assessment administration, saw continued strong growth.

Pearson Test of English Academic

Pearson Test of English Academic saw continued strong growth in test volumes and we successfully extended our agreement with Department of Home Affairs in Australia for another two years.

Professional Certification

In Professional Certification, revenue was up modestly due to the launch of additional computer-based exams for an existing customer in the UK and the MOI, the French Driving Test.

Services

Higher Education Services

In Higher Education Services, revenue grew strongly. Our OPM revenue was up 34%. In Australia, we saw good growth due to our successful partnership with Monash University, and continued success of the Graduate Diploma in Psychology. We have a total of c.10,200 course registrations across the seven programs in Australia up from c.9,300 in 2017. In the UK, we launched 11 new programs and course registrations grew, reaching c.3,000 compared to c.1,400 in 2017. During the year, we also announced new partnerships with the University of Northumbria in the UK, and ESSEC Business School in France.

2019 outlook

We expect stable revenue across Core, including student qualifications and assessment, with further revenue growth in OPM and PTEA, offset by continued declines in our Courseware businesses.

CBI

Partnering with the voice of British industry

CBI & Pearson's Annual Skills Report

Pearson partners with CBI, the UK's premier business organisation, every year to deliver an annual skills report. In 2018, we found:

- Employers expect to recruit more workers but worry there are not enough skilled people to fill vacancies
- 4/5 businesses aim to spend more on training, but the Apprenticeship Levy has driven a sharp drop in apprenticeship programmes
- The number of businesses actively engaged with schools or colleges is down by c.10%

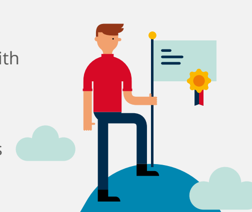
By helping to gather these insights, Pearson is connecting the dots between students and employers, ensuring learners have the skills they need to excel in their career and employers have the people they need for a rapidly changing workplace.

Providing world-class qualifications in the UK

Product: Pearson Edexcel

#1

Overall market leader with number two position in GCSE and A-Level and number one position in vocational qualifications



In the UK, Pearson is the largest awarding organisation to offer academic and vocational qualifications, including A levels, GCSEs and vocational qualifications such as BTECs.

Aswin Nasiketh Vivekanandan (pictured) is a 19 year old student at Tanglin Trust School, Singapore. In 2018 she received the Pearson Edexcel Award for the highest mark in Asia for A-level Chemistry and Physics.

Commenting on her award she said: "I am thrilled to be able to pursue my career aspirations thanks to my Pearson qualifications.

"I have always had a keen interest in science and passing these two subjects was a requirement for me to get a place on the course. And it worked, as I am now studying my chosen option at Imperial College London.

"On graduation, I am looking to explore ways to help tackle some of the many problems we face in the world today, like global warming and climate change."

Many congratulations Aswin – we think you will go on to achieve great things!

Growth rates are stated on an underlying basis unless otherwise stated. Underlying growth rates exclude currency movements, portfolio changes and accounting changes. Underlying measures are reconciled to the equivalent statutory measures on p222–225.

Operating performance

Growth

Market summary

Emerging and developing economies with investment priorities in Brazil, India, South Africa, Hispano-America, Hong Kong & China and the Middle East.

Contribution to Group revenues

13%

Sales

£539m

Adjusted operating profit

£59m

Sustainability

28,000

New users downloaded our Space Hero app designed in collaboration with refugee children in Jordan as part of our Save the Children partnership.

Revenue grew 1% in underlying terms due to strong growth in China and modest growth in Brazil and Hispano America partially offset by declines in South Africa.

Adjusted operating profit increased 97%, £30m, in underlying terms, reflecting higher revenue in China and Brazil, together with the benefits of restructuring, partially offset by lower revenue in South Africa.

Courseware

Courseware revenue grew slightly, with strong growth in English Language Courseware in China, partially offset by declines in School Courseware in South Africa following a large one-off order in 2017.

Assessment

Professional Certification and Pearson Test of English Academic

Professional Certification grew well due to a new ICT infrastructure certification contract. Pearson Test of English Academic saw strong growth in revenue with over 10% growth in the volume of tests taken in India, China and Middle East and moderate price increases.

Services

English Services

In English Services, revenue grew slightly in our English language school franchise, Wizard, due to new product launches.

School Services

In School Services, revenue was flat, with declines in student enrolment in our public sistemas business in Brazil offset by price increases, improved products and better student retention across our private sistemas. In India, Pearson MyPedia, an inside service 'sistema' solution for schools, expanded to over 700 schools with over 200,000 learners.

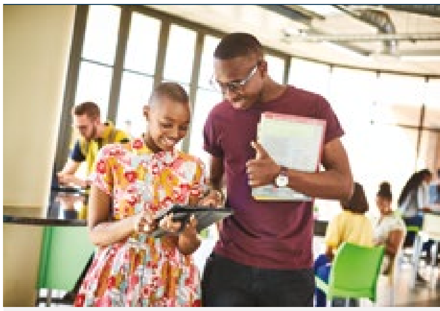
Higher Education Services

In Higher Education services revenue declined slightly due to business exits in India and slight revenue decline at Pearson Institute of Higher Education (formerly CTI), our university in South Africa, due to a change in mix with total enrolment broadly flat and new student enrolment up 18%.

2019 outlook

In our Growth segment, we expect revenue to continue to increase in 2019 benefiting from new products and services across all divisions.

Growth rates are stated on an underlying basis unless otherwise stated. Underlying growth rates exclude currency movements, portfolio changes and accounting changes. Underlying measures are reconciled to the equivalent statutory measures on p222–225.



Pearson Institute embeds career outcomes into curricula

Service: Pearson Institute of Higher Education

7000+

Students enrolled at Pearson Institute of Higher Education

Pearson Institute of Higher Education In South Africa offers a range of different degrees, higher certificate, foundation and academic support programmes in South Africa, with a focus on preparing learners for the world of work.

Career outcomes are embedded into the curriculum of each programme and students are provided with the knowledge, skills and mindset to help them positively change the world.

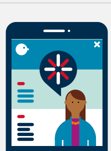
"I gained invaluable skills at PIHE, which I implement in my everyday life. These include time management, planning, communication skills and self-care, which is fundamental in maintaining a balance in life," says Xia Coetzer, a PIHE graduate who is now a registered counsellor at ICAS Southern Africa.

App delivers personalised English language learning

Product: Longman English+

35,000+

Students use Longman English+ to learn the English language skills they need to thrive in school and beyond



Pearson takes the best of our 'Longman Welcome to English' curriculum and adds Microsoft's AI capabilities to create an app that personalises English language learning at its highest possible level. Delivered through WeChat, which has nearly a billion monthly users, this app is giving users the opportunity to learn on their own terms, when and where they want. It is easy to use, it is specifically tailored for Chinese users as it 'listens' to the spoken practice exercises, and it is precisely tasked to correct common pronunciation errors. Learners receive immediate feedback and so they are able to keep track of their progress and remain interested.

"Longman English+ provides extensive English resources for students and enables them to practice in various methods. They are able to learn the content and knowledge in the text book, as well as improve their speaking skills. I believe it will provide solid ground for our students' future English learning," says Leo Liu, a teacher at Zhoushan Greentown Yuhua International School.

Over 35,000 students use Longman English+ to learn the English language skills they need to thrive in school and beyond. Ultimately, Longman English+ is meeting learners where they already are, making it easy for them to practice English and prepare for their future.

DIGITAL CAPABILITIES

- Automated speech recognition
- Automated marking and scoring

Penguin Random House

Pearson owns 25% of Penguin Random House, the first truly global consumer book publishing company.

Penguin Random House performed well with underlying revenue growth on increased audio sales and stable print sales, whilst the business benefitted from international bestseller "Becoming" by Michelle Obama, the year's top-selling U.S. title, and bestsellers from Bill Clinton & James Patterson, Jordan Peterson, Jamie Oliver, Dr. Seuss, John Grisham, and Lee Child.

2019 outlook

In Penguin Random House, we anticipate a normalised publishing performance and expect an annual after-tax contribution of around £60-65m to our adjusted operating profit.

Growth rates are stated on an underlying basis unless otherwise stated. Underlying growth rates exclude currency movements, portfolio changes and accounting changes. Underlying measures are reconciled to the equivalent statutory measures on p222–225.

Enterprise risk management

Ensuring effective identification and management of risk.

Our approach to risk management is summarised in the framework below. Our goal is to support Pearson in meeting its strategic and operational objectives, as described earlier in the Annual Report.

Our enterprise risk management (ERM) framework aligns to international standards (e.g. COSO and ISO 31000) and aids our continued compliance with the Financial Reporting Council's (FRC) UK Corporate Governance Code guidance on risk management, as well as enabling us to adapt to any required or desired changes in approach.

Foundations

All the elements that make up this framework come together to provide the foundations for successful ERM, and risk management more broadly, across Pearson.

Governance and oversight

The Audit Committee assists the Board in overseeing our ERM framework. They validate target risk appetite, risk status and mitigation plans, as well as verifying the viability statement process.

Roles and responsibilities

The ERM framework covers the day-to-day work on principal and business-level risks. For a list of responsibilities of key risk stakeholders, see p104 in 'Governance'.

Policy, framework, processes and tools

Our policy, framework and supporting guidance set out why risk management is important and the minimum standards. These can be tailored by a business area as long as they align with the policy. The process is assessed during the annual effectiveness review, covered in more detail on p104 in 'Governance'.

Appetite and tolerance

Pearson's leadership team sets the target risk appetite for each risk they own (validated by the Audit Committee and Board). Clarity on the degree of risk the Board is willing to accept determines the most appropriate risk treatment to manage an individual risk. For example, a legal or compliance risk has a low target risk appetite. We try to eliminate the risk as much as we can. Customer experience represents a strategic opportunity and is therefore likely to have a higher risk appetite, thus we would take well-informed and well-managed risks to achieve our goals in some areas.

Working with third parties

The use of third parties, such as suppliers or partnerships, can create risk. For example, an interruption to our business operations as a result of the actions of an external provider may prevent us from meeting our strategic goals or could impact our reputation. In 2018, we built on the third party risk management policy and activities initiated in previous years with continued roll-out of procurement processes that help us flag third parties requiring further due diligence. We also increased our due diligence on third parties in certain areas (see data privacy and compliance risks on p72 and p74 respectively for more on this).

Managing risk

Our approach to managing risk has remained consistent with prior years.

Context

Risk context sets the criteria against which risks are identified and assessed, defining the external and internal parameters to be taken into account.

The risk management policy, framework and supporting guidance set out how to manage risks, such as how to determine probability and impact as well as instructions on how to translate these into an overall risk rating. Adaptations of these matrices, tailored for a specific business area, are in use and align with the policy.

Assessment

At least annually, we facilitate a risk assessment process through discussions with leadership, senior management and key stakeholders from each business area. For each risk identified, the probability of it materialising and its potential impact is rated. The adequacy of action plans to address any remaining control gaps is then assessed.

We do this for both new risks identified as well as those already being monitored. Horizon scanning also takes place throughout the year to aid in the identification of new risks.

Continuous improvement

At the end of 2014, we reviewed our risk management maturity against the risk framework, setting out and monitoring maturity targets. At the start of 2018, we expanded this into a three year ERM vision, strategy and goals to further improve risk management across Pearson.

Progress and challenges in 2018

As we began to implement our strategy, our reliance on manual processes quickly became a key challenge we needed to overcome. We began to design and test an online risk tool in 2018 in order to overcome this challenge. In the interim, we made use of existing internal collaboration tools to streamline processes.

One area where we have made good progress in 2018 is implementing a more robust analysis of emerging or new risks, undertaking a documented gap analysis of Pearson's risks against our strategy as well as external risk data and reports plus competitor analysis.

Priorities for 2019

In 2019, we will continue to implement our three-year risk plan, including:

- Embedding emerging risk processes in line with the FRC's 2018 revisions to the UK Corporate Governance Code guidance that comes into effect for 2019 reporting
- Deploying a risk tool which will support not just our risk monitoring across the business, but also improve our ability to undertake more thorough risk analysis such as risk trends over time. We have built into the tool's design the criteria we need to further develop our integrated assurance approach, by bringing together different sources of assurance information into one place for the first time.

Treatment

Once assessed, the most appropriate course of action for each risk is decided, taking into account the size of the gap between its current risk status against its risk appetite target. This can include 'avoid' (i.e., not doing something); implementing mitigation or contingency plans to change the probability or reduce the impact of a risk; accepting increased risk in order to pursue an opportunity, or sharing the risk with another party or parties.

Monitoring and review

The Board and Audit Committee review ERM risk update reports twice per year at a minimum. This gives them the opportunity to review, challenge and validate the ERM process and key risks. The reports cover current risk status as well as an update on risk mitigation initiatives and their effectiveness. Discussions focus on where there is either a) the greatest change in rating or b) the biggest gap between current rating and the target risk appetite, with the emphasis on the strength of mitigation plans in place. Risk maps for each business area are also included in these reports.

Risk deep dives also take place at the Audit Committee throughout the year. In 2018, some of the areas covered include business transformation, anti-bribery and corruption (including third party due diligence) and data privacy (including GDPR readiness). You can read the details in the Chair of the Audit Committee's letter on p97-98.

Culture

The ERM framework is also used to promote a risk aware culture across the organisation, with the aim of integrating risk management into day-to-day decision making.

Communication, training, education and awareness

Our Code of Conduct certification was revised and implemented in 2018, supporting our commitment to ethical behaviours across the organisation. We are committed to raising awareness among employees on the importance of better managing day-to-day risks. In 2018, we regularly attended leadership and team meetings to highlight best practice and conducted specific risk workshops, including targeted efforts on the risks involving programme interdependencies.

Embedding risk in decision making

All Pearson business functions continued to maintain their own risk map, with the spotlight in 2018 on the further improvement of mitigation plans. Business functions follow the same framework for identifying, assessing, treating and monitoring risk. Each identified risk is also assigned a risk appetite target.

Principal risks and uncertainties

The Board of Directors confirms that throughout 2018 they undertook a robust assessment of the principal risks facing Pearson, in accordance with provision C.2.1 of the 2016 UK Corporate Governance Code.

Our principal risks
(as of 31 December 2018)

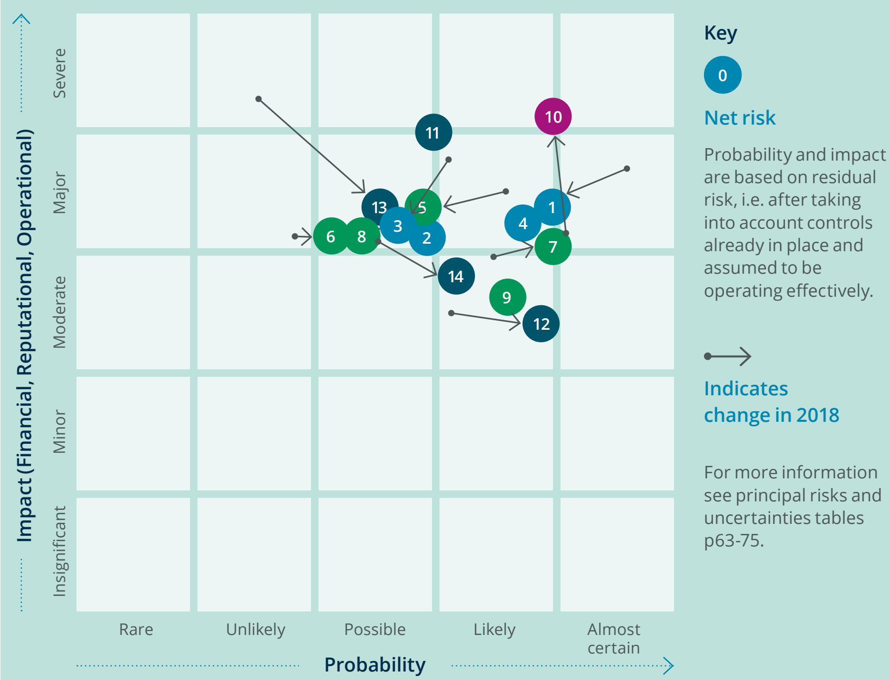
Listed in the table and shown on the adjacent risk map are the most significant risks that may affect Pearson's future. A longer list of business area and company-wide risks is monitored and reviewed internally throughout the year. The most material risks are those which have a higher probability and significant impact on strategy, reputation or operations, or a financial impact greater than £50m, and are classed as our principal risks.

Due to internal mitigation efforts, treasury risk reduced in 2018 to the extent that it now falls below our threshold to be included as a principal risk.

At the time of publication, the UK remains due to leave the EU on 29 March 2019. Given the scheduled exit date and significant risk of no deal, we have advanced mitigation plans underway. These do not involve material cost and we will be able to unwind those plans without significant disruption or cost if it later becomes appropriate. Work continued throughout 2018 (led by a Steering Committee chaired by the CFO) to identify and mitigate any potential impact on our principal risks below, such as supply chain and operations (covered in the customer experience risk), tax and data privacy, as well as other areas such as treasury and workforce mobility, particularly in the event of a 'no deal' scenario. By virtue of that analysis and mitigation planning, we continue to believe that Brexit will not have a material adverse impact on Pearson as a whole; in particular we believe we have plans in place that will largely mitigate against the impact of a 'no deal' scenario.

The following principal risks also relate to the material issues considered in the 2018 Sustainability Report: products and services, testing failure, political and regulatory, information security and data privacy, customer experience, and safety and security. You can read more in the Sustainability section on p32–40.

Principal risks: status and 2018 change



Risks are categorised into four main areas:

Area		Risk	Executive responsibility
Strategy and change Relating to the goals that are aligned with and support our strategy. This category is the most likely to contain 'opportunity' risks which are likely to have a higher risk appetite	1	**Business transformation and change**	Chief Executive Officer
	2	**Products and services**	President, Global Product
	3	**Talent**	Chief Human Resources Officer
	4	**Political and regulatory risk**	Chief Corporate Affairs Officer
Operational Involving people, systems and processes	5	**Testing failure**	President, Assessments; President, UK and Core Markets
	6	**Safety and security**	Chief Human Resources Officer
	7	**Customer experience**	President, Global Product; Chief Technology and Operations Officer
	8	**Business resilience**	Chief Financial Officer
	9	**Data**	President, Global Product; Chief Technology and Operations Officer
Financial Involving financial planning, investments, budgeting, potential losses of and exposures to Pearson's assets	10	**Tax**	Chief Financial Officer
Legal and compliance Relating to the adherence to applicable laws and regulations. Risks in this category typically have a very low risk appetite.	11	**Information security and data privacy**	Chief Technology and Operations Officer; General Counsel
	12	**Intellectual property**	General Counsel
	13	**Compliance**	General Counsel
	14	**Competition law**	General Counsel

Strategy and change

1 Business transformation and change

The accelerated pace and scope of our transformation initiatives increase our risk to execution timelines and to business adoption of change. The risk is that benefits may not be fully realised, costs may increase, or that our business as usual activities are adversely impacted.

Decrease in impact and probability

Strategic priorities:

1 Grow market share through digital transformation

3 Become a simpler, more efficient and more sustainable business

Reason for risk rating

This risk has reduced due to the ongoing implementation of The Enabling Programme (TEP) in North America in the first half of 2018. This has reduced our financial risk impact.

However, the scale, volume and accelerated pace of change, combined with the execution interdependencies, keep this as a high risk going into 2019.

The 2017-2019 simplification programme is performing ahead of plan and now expects to deliver increased annualised cost savings in excess of £330m by the end of 2019, ahead of our original plan of £300m.

Existing controls

- Change and Transformation office
- The Global Learning Platform (GLP) and The Enabling Programme (TEP) are standing Audit Committee agenda items
- Independent assurance regularly undertaken on the key programmes.

Outcome of 2018 activities

In 2018, we continued to invest in the digital transformation and simplification of the company:

- We continued to develop the GLP – described in more detail under risk 2 – 'Products and Services'
- We implemented the next phase of TEP – primarily in North America – to progress the simplification of our business.

The 2017-2019 simplification programme moved into its implementation phase in 2018, with many initiatives now complete.

2019 outlook and plans

Business transformation and change initiatives will continue to support our strategic goals to accelerate our digital transition in higher education, to manage the print decline, and to reshape our portfolio, as outlined by our Chief Executive on p10-12 and covered in more detail under our strategy in action on p18-32.

In 2019, we will continue to roll out TEP to other geographies worldwide. All key programmes will continue to be closely monitored by the Audit Committee at each meeting (you can read more about their oversight of TEP and the GLP on p97-98).

We will continue to use our change and transformation office to drive plans to completion in 2019. Change management expertise and dedicated support have been put in place across North America, Finance and Human Resources teams.

Principal risks and uncertainties

Strategy and change

2 Products and services

Failure to successfully invest in, develop and deliver (to time and quality) innovative, market leading global products and services that will have the biggest impact on learners and drive growth, ensuring Pearson:

- Responds to market needs, as well as threats from both traditional competitors as well as disruptive innovation
- Offers products to market in line with our strategy, at the right price and with a deal structure that remains competitive.

This risk was revised and expanded in 2018 following a risk review against the strategic priorities, as well as a thorough analysis of underlying risk drivers. The definition has been changed as a result.

No overall change

Strategic priorities:

1 Grow market share through digital transformation

2 Investing in structural growth opportunities

Reason for risk rating

We have made significant progress in managing risks around our competition and the product and investment portfolio in 2018 due to the ongoing progress we have made in improving our processes and strategic investment recommendations.

However, due to the importance of product innovation (such as the ongoing development of the Global Learning Platform (GLP) and our investment in AI research) to achieving Pearson's strategic priority of digital transformation, the impact if this risk materialises remains high.

Competition

We have made significant progress understanding the competitive and structural threats, especially to our US Higher Education Courseware business, and made progress mitigating these.

We operate in competitive markets with many competitors across these markets. As the consumption of educational products and services shifts to digital and subscription models, this has the potential to lead to changes in the competitive structure of the markets in which we operate.

Existing controls

- Global product lifecycle process
- Portfolio governance and management
- Audit Committee oversight of the GLP.

Outcome of 2018 activities

Product Innovation

Further investment was made in 2018 in development of the GLP – our single, cloud-based platform to support our learners and enable us to innovate faster in the future.

The first of our pilots – Rio – went live in September 2018: Pearson used the software to run a number of focus groups and targeted interactions with different schools and instructors during the latter half of 2018.

In addition, we are investing in other innovations, such as Artificial Intelligence (AI), to ensure that our products provide leading personalised learning experiences and better outcomes. In 2018, we appointed an industry expert to lead on the development of our AI products and solutions strategy.

Product and investment portfolio

Progress was made during 2018 in consolidating our key product portfolios. Portfolio investment allocation decisions were made using an agreed data-driven framework and the investment governance criteria and process were revised, spanning partnerships, portfolio strategy and geographies.

Competition

In 2018, we scaled the rental access model initiative from c.50–c.150 titles in total by the end of the year.

We also continued initiatives (e.g. pricing, format, policies, marketing, channel) to incentivise customers to move from print to digital products to help mitigate risks arising from the secondhand market and achieve our digital business transformation goals.

2018 saw the launch of additional anti-piracy initiatives (see risk 12, Intellectual Property, which includes piracy, for more on this risk).

2019 outlook and plans

Turning this risk into an opportunity – successfully accelerating our shift to digital as well as investing in and delivering the right products and services – is as critical to successful business performance in 2019 as we have flagged in previous years. As our Chief Executive highlights on p10, over time our aim is to transition to a digital first model for our learners, with print resources available as an 'add on' service.

Product Innovation

We will continue to invest in our development of the GLP (focusing on an enhanced Revel platform) and expect to launch in the second half of the year. The GLP will also enable us to better deploy AI and machine learning to drive advances in educational technology.

Investment in the development of AI will also continue, such as using it to build on existing automated scoring capabilities using natural language processing.

Product and investment portfolio

2019 priorities include improving decision making effectiveness, for example by implementing a decision playbook to support how we make decisions for our products plus identify gaps in the decision making process and how to close them.

Competition

Our aims in 2019 are to significantly increase the number of US Higher Education Courseware products in the 'access first' or Subscription business model, as well as continuing our pricing simplification efforts in order to clarify and simplify our pricing structure for both sales representatives and customers.

Strategy and change

3 Talent

Failure to maximise our talent – Risk that we are unable to attract the talent we need and to create the conditions in which our people can perform to the best of their ability.

Decrease in impact and probability

Strategic priorities:

1 Grow market share through digital transformation

2 Investing in structural growth opportunities

3 Become a simpler, more efficient and more sustainable business

Reason for risk rating

This risk has reduced due to:

- Impact of improved financials: Stabilising financial performance has driven an improving outlook for employee incentivisation helping raise morale; also positive sentiment of strategy approved by the Board
- Compensation toolkit enabling managers to address specific retention risks as needed (with Executive approval); primary retention managed through total reward
- Better data enabling improved decision making
- Leadership development programmes.

Existing controls

- Detailed monthly reporting of HR data and insights to proactively identify and manage risks, including turnover (voluntary and involuntary) data as well as gender diversity at all career grades, with regular Executive review to identify areas for improvement
- Consistent performance, talent and succession management processes
- Employee policies including the Code of Conduct
- Employee engagement forums and action plans
- Exit interviews conducted and monitored globally to identify any trends and concerns
- 'Pearson U' learning platform
- External careers website and talent acquisition approach to improve attraction of digital skills
- Wide range of employee benefits.

Outcome of 2018 activities

To support our digital transformation, acquisition of digital talent is a high priority. Challenges continue with digital hiring but we are seeing some improvement, driven by clarity of skillset needed and a targeted compensation guide enabling Pearson to be more competitive. As a result, year over year percentage of digital hires is up by 37%. We also:

- Focused Leadership development programmes for senior leaders with specific mentoring programmes for high potential employee (HiPO) women in these roles
- Continued targeted learning throughout the organisation with 'Pearson U' learning platform enhancements, career development workshops, manager fundamentals training and emphasis on all employees having development goals
- Launched the Alumni programme
- Put greater focus on diversity and inclusion (D&I): we designed our future state diversity framework, governance and measurement model. We received awards for our localised D&I efforts and increased marketplace recognition. You can read more about our diversity, equality and inclusion activities under Sustainability on p38
- Released the organisational health index survey for all Pearson employees, the results of which will influence the priority order of the 2019 action planning.

2019 outlook and plans

HR will continue to work with Pearson leaders to increase engagement and organisational health, acting on the findings from the organisational health survey taken in late 2018. Our aims in 2019 are to:

- Develop sustainable total reward programmes aligned to the business strategy
- Develop awards and recognition for the workforce and marketplace
- Deliver organisational design and change management to support business deliverables
- Upskill the workforce on digital customer channels B2B, while continuing to acquire new digital talent and expertise
- Drive sales performance through embedding best practice sales incentive design
- Empower managers with greater flexibility to make reward decisions for their teams, underpinned by greater transparency of our pay practices to our employees
- Refresh leadership skills, competencies and behaviours and continue leadership development programmes
- Refresh approach to performance management, adapting more contemporary practices to drive high performance
- Utilise new approach to talent review, assessing all VPs against required capabilities and culture needed
- Drive internal mobility through increased visibility to talent and cross-business development opportunities
- Promote enterprise-wide talent management mindset, owned by leadership across all areas. Develop a mindset for analytical, digital and innovation skills
- Deliver refreshed global diversity and inclusion approach, operational plan and measurement model; increase gender diversity, especially in senior leadership roles.

Principal risks and uncertainties

Strategy and change

4 Political and regulatory risk

Changes in policy and/or regulations have the potential to impact business models and/or decisions across all markets.

No overall change

Reason for risk rating

Despite a slight reduction in our risk exposure in the US from an educational standpoint, this risk remains high at the time of publication due to the potential for political instability in the UK arising from the potential for Brexit 'no deal' plus wider uncertainty and instability in the rest of the world.

Existing controls

- Board and Executive oversight
- Government relationship teams
- Steering Committee monitoring the UK's departure from the EU.

Outcome of 2018 activities

In 2018, we continued to build global political and regulatory relationships in the US and the UK, as well as an international political profile in order to understand future international risks and proactively mitigate them.

In the US, we worked hard to highlight Pearson's credentials as an innovator in education and workforce readiness, specifically referencing Accelerated Pathways, Inclusive Access and workforce credentialing; we maintained fair market access through national and state partnerships and direct lobbying; and we worked with the National Governors Association Chair to shape his Initiative on developing workforce skills.

In the UK, we continued to monitor actions associated with the UK's departure from the EU, working with government to mitigate business risk associated with regulatory changes. We also implemented our own internal mitigation and contingency plans in the event of a 'no deal'.

We also:

- Responded to the government's post-18 funding review, creating a commission to oversee research into vocational education and lifelong learning
- Continued executing thought leadership work to establish the role of BTECs in supporting learners into work and higher education as an alternative pathway
- Submitted responses to enquiries and consultations regarding technical/vocational education and related issues
- Continued to position Pearson in the UK as a leader, expert and innovator in T Levels. We were awarded the contract to develop, deliver and award two of the first three T Levels.

Internationally, we continued our ongoing efforts to position Pearson for PTE Academic accreditation in China, Canada and the UK, well as pursuing BTEC opportunities in Southeast Asia.

2019 outlook and plans

Pearson will continue to position itself as a leader in the education space, an innovator in higher education and establish the company as a key engine in workforce development and economic growth. We are also driving opportunities to engage directly with other businesses.

In the US, we are likely to see a push to increase higher education funding from new Democratic Governors and State Legislators, as well as a focus on connecting education to jobs. Pearson will continue to work with Governors and educate officials at the Federal and State level on Pearson's expertise in education and workforce.

Brexit may cause political instability in the UK arising from the potential for 'no deal' plus wider uncertainty and instability in the rest of the world. Pearson will continue to implement its mitigation and contingency plans in case of a 'no deal' (See 'customer experience' risk for supply chain specific Brexit mitigation actions).

Internally, trade tensions and political uncertainty with rising populism and nationalism could lead to further protectionist measures. We will continue to position Pearson with government officials and influencers in key markets for PTE Academic accreditation and BTEC opportunities, as well as widening participation in international forums and with national government contacts to mitigate regulatory risks.

We will continue to monitor legislation around the world for major shifts in education policy.

Operational

5 Testing failure

Failure to deliver tests and assessments and other related contractual requirements because of operational or technology issues, resulting in negative publicity impacting our brand and reputation.

Decrease in impact and probability

Strategic priorities:

3 Become a simpler, more efficient and more sustainable business

Reason for risk rating

As Pearson is an educational content, assessment and related services company, successfully managing this risk remains a priority.

This risk decreased in 2018 due to the continued migration of all student testing in North America to a secure cloud computing environment – Amazon Web Services (AWS). This has resulted in improved availability and stability.

We successfully delivered exams and testing in 2018 to a high standard of quality. We experienced minimal disruption of the ePEN (online marking system). However, the impact should we experience issues in our testing platforms or processes keeps this as a risk.

Existing controls

We seek to minimise the risk of a breakdown in our student marking systems with the use of:

- Robust quality assurance procedures and controls
- Oversight of contract performance
- Investment in technology, project management and skills development of our people, including software security controls, system monitoring, pre-deployment testing, change controls and the use of root cause analysis procedures to learn from incidents and prevent recurrence
- Use of AWS in Clinical and Schools
- IBM counter-fraud tool (Pearson VUE).

Outcome of 2018 activities

In North America, SchoolNet plus all Clinical products have now been successfully migrated to AWS. The next iteration of ePEN (UK and Australia) is also now AWS hosted. Pearson VUE also began the process of moving systems to more stable platforms.

Our Functional Skills qualifications were the first to go live on the new version of ePEN in the UK (in July) followed by General Qualifications in November. PTE Academic was also upgraded to stabilise the system.

In June 2018, a GCE A Level Maths C4 paper (taken by 50,000 pupils in England) was offered for sale online the night before the exam. This was the same paper that was leaked the year before. A police investigation was opened, however, the incident was far more limited in scope than it was the prior year, due to the additional security measures put in place as a result of the previous incident. Ultimately, the paper-based nature of examinations and the scale of the system means that security is heavily reliant on schools to maintain the security of the material. The investigation was able to make good progress in identifying the source of the leak.

The IBM security tool implemented by Pearson VUE started to yield benefits in terms of client adoption and positive feedback of the web monitoring. Alongside this, a new third party governance and assurance process was developed which will continue to be rolled out in 2019.

2019 outlook and plans

The drive to continue improvements to availability and stability of testing systems, migrating and retiring legacy systems will continue in 2019, for example, migrating PTE Academic to AWS and further automating test publishing processes to reduce the risk of human manual error.

In UK qualifications, the potential impact should this risk materialise is potentially higher due to the fact that:

1) 2019 will see the main implementation of the ePEN upgrade. We will take into account the complexity of our systems, as well as external marking contract requirements

2) We still have a number of reformed qualifications being delivered in 2019 which includes GCE Maths.

Given the high stakes nature of the UK testing business, the risk of security breaches remains, either malicious in nature or as a result of error. We are launching a malpractice review as part of the Joint Council for Qualifications. This will include question paper breaches but also cheating allegations more broadly.

Principal risks and uncertainties

Operational

6 Safety and security

Risk to the safety and security of our people and learners arising from either the risk of injury and illness; our failure to adequately protect children and learners; or due to increasing local and global threats.

This risk has been expanded to incorporate all risks that could impact the safety and security of our people and learners into one risk. As a result, it now includes:

- *Corporate security*
- *Travel safety*
- *Safeguarding and protection.*

↑ Increase in probability

Reason for risk rating

Corporate security risk probability increased, reflecting an increase in incidents in 2018 compared to 2017. The variety and global range of risks/threats we face are undiminished. The impact of an event occurring (and not just externally) could be significant.

There has been no change in terms of the overall risk status for both Health & Safety and Safeguarding. Serious safeguarding incidents may not be frequent but their impact remains high, both to the individual affected as well as to Pearson's reputation (there continues to be a focus on these issues worldwide, both in the government and in the media).

Existing controls

- Global policies and minimum standards in place for Health & Safety, Security and Safeguarding
- Global audit and assurance programme
- Training and communication (e.g. global animation, new internal Health & Safety intranet site, IOSH Managing Safety Course)
- Staff Code of Conduct
- Third party risk management policy
- Local Safeguarding coordinators
- Everbridge mass notification system
- External travel management and intelligence.
- Key Performance Indicators in place (see p37-38 in Sustainability).

Outcome of 2018 activities

Safeguarding

We continue to view Safeguarding as a fundamental obligation to our learners and a high priority for Pearson and as such it also forms part of our sustainability strategy (see p37 in Sustainability). We agreed a new Safeguarding strategy for 2018-2020, which includes a focus on Safeguarding in online and digital environments.

In addition, we implemented a new set of Safeguarding metrics, which enable a better analysis of how robust each business' Safeguarding is; and we completed a gap analysis on the Safeguarding assurance processes for each business. This identified eight areas where we will strengthen and deepen our assurance processes.

In April 2018, we co-hosted a seminar with the Lucy Faithfull Foundation: Creating 'child safe, child friendly organisations.' It explored the use of Situational Prevention in addressing abuse in schools. It was well attended with 97% saying they would apply the theory to their current role.

Corporate security and travel safety

Travel security continues to grow in support of new areas, not limited solely to higher risk locations.

Our Everbridge tool is now live in 21 countries and we released mandatory training and awareness for people travelling to high risk locations.

The corporate security team led reviews in 16 countries in 2018, identifying areas for improvement or further adoption of security policy/standards.

Health & Safety (H&S)

Due to ongoing implementation of H&S risk mitigation actions, we have seen a slight reduction in risk in 2018. Completed activities include:

- A significant revision of our Global H&S policy and standards with animation
- A global round of International IOSH 'Managing Safely' course
- The implementation of a business focused and risk-based health and safety assurance programme: in our 48 priority locations, implementation of the global H&S Standards continues to improve.

2019 outlook and plans

In 2019, we will continue to promote the message of prevention as well as reaction.

Safeguarding

We will continue to develop our practice and policy in regards to online Safeguarding: we have appointed an external consultant, who is a recognised expert in online Safeguarding, to assist us with our plans. Our plans include:

- Hosting a seminar which looks at best practice in online Safeguarding for internal staff and external partners
- Ongoing work on the Safeguarding action plan for the Pearson Institute of Higher Education in South Africa
- Publication and implementation of a sexual harassment policy in Pearson College London
- Ensure that our Safeguarding practice fully reflects the company's commitment to diversity.

Corporate security and travel safety

In 2019, we are forming a combined security and resilience governance group which will oversee management of this risk. Physical and travel security reviews of higher risk locations will be ongoing and we will continue to refine data specific to our Everbridge notification system.

Health & Safety

Our aims in 2019 are to:

- Deliver a real-time, global solution to report, escalate, investigate and action H&S Incidents
- Continue our robust business-focused and risk-based global assurance programme for 2019, which includes third party vendors where Pearson has outsourced risk activities
- Further develop the analysis of Occupational Health data in partnership with HR to ensure proactive and reactive intervention strategies are aligned.

Operational

7 Customer experience

Failure of either our current operations, supply chain or customer support to deliver an acceptable service level at any point in the end-to-end journey; or to accelerate Pearson's lifelong learner strategy and transformation.

Previously 'customer digital experience,' this risk has been redefined and expanded following a review of the global strategy implications, as well as a thorough analysis of the underlying risk drivers undertaken as part of the H2 2018 risk update process. As a result, we have expanded the customer experience and learner experience component of the risk and added operations (including supply chain) to better reflect the risks to delivering an optimal end-to-end customer journey.

↑ Slight increase in impact

↑ Increase in probability

Strategic priorities:

1 Grow market share through digital transformation

3 Become a simpler, more efficient and more sustainable business

Reason for risk rating

This risk is crucial to Pearson a) delivering a good service to our customers and b) enabling our digital transformation. As a result, we expanded and redefined the risk to include the end-to-end customer journey, whether for print or digital products and services (or a blend of the two).

This redefined risk remains rated high due to our ongoing transformation efforts which have the potential to impact on the customer experience.

We continued to make further improvements to our product platform stability and execution in 2018 and had good stability throughout both North America Back to School periods. This was our best year to date in terms of up time.

In the UK, we began the implementation of mitigation and contingency plans to manage a potential 'no deal' scenario regarding the UK's exit from the EU, given the possibility of a 'no deal' at the time of publication.

Existing controls

- Real-time monitoring of systems (for service disruptions) and reporting of operational performance used to identify issues
- Release readiness reviews for our major product platforms
- Programme governance and hypercare
- Board oversight of Brexit risk
- In the UK, the Audit and Quality team have a secure supplier annual audit programme for suppliers dealing with Pearson confidential material (e.g. exam papers)
- New structure put in place to prevent fraud and incorrect orders to be placed by customers.

Outcome of 2018 activities

Operations and supply chain

Our efforts in 2018 were focused primarily on the UK and North America. The Enabling Programme (TEP) went live for the first time in North America in May 2018, with ongoing hypercare put in place as a contingency plan to support supply chain stabilisation during implementation.

In the UK, as well as a TEP retrofit deployment, we also completed our move from the UK warehouse previously shared with Penguin. This was phased from the end of 2017 and completed in spring 2018. In parallel, we also undertook an in depth analysis into the impact on our supply chain and operations in the event of a 'no deal' Brexit, commencing work on implementing our mitigation and contingency plans to address these.

Customer experience

The customer experience is recognised as a key enabler and 'license to operate' in terms of Pearson's future strategy. In 2018, we realigned our priorities and plans across the business, in readiness to refocus on the learner experience in 2019.

Customer services

Customer services have made a lot of progress in terms of reducing this risk in 2018 and managing the challenges of the TEP deployments in North America and the UK.

Operational stability

We continued to focus in 2018 on performance and stability across all of our product platforms with roadmaps underway for stability, the user experience (UX) and competitive features across all product platforms.

2019 outlook and plans

Operations and supply chain

In the US, our primary focus is to ensure that we are prepared for the Back to School periods, the first of which is in the spring of 2019.

In the UK, a team has been established that is taking end to end responsibility for our Learning Services operational delivery. We will continue to implement our mitigation and contingency plans to prepare for the possibility of a 'no deal' Brexit whilst we monitor the outcome.

Customer experience

In 2019, we will focus on learners and modernising our customer experience for clinical assessments, expanding our efforts to instructors and educators in 2020 and beyond.

Customer services

The focus in North America is preparing for and supporting further TEP implementations in order to minimise customer impacts as we move to new business processes and adopt new technology.

Operational stability

Our 2019 roadmap for North America Higher Education continues to be increasingly focused on security and performance of non functional requirements as well as well as third party interoperability.

Principal risks and uncertainties

Operational

8 Business resilience

Failure to plan for, recover, test or prevent incidents at any of our businesses or locations.

Incident management and technology disaster recovery (DR) plans may not be comprehensive across the enterprise.

Risk definition has been changed to focus on resilience, DR and incident management. Corporate security and travel safety now forms part of the expanded 'Safety and security' risk.

No overall change

Reason for risk rating

The business resilience programme continues to mature, although Pearson's global footprint means there remains a possibility of single events with major impact.

Work to improve incident management continues to see positive improvements.

Existing controls

- Policy in place
- Incident management process, including global notification and incident reporting tools
- Resilience Governance Board meetings
- Incident management and recovery teams
- ISO 22301 independent accreditation.

Outcome of 2018 activities

A new Pearson wide resilience policy and incident management framework was delivered in 2018 and work continued to improve business resilience and incident management capability across the organisation, including:

- Annual reviews and further refinement of the 'Top 40' and other locations involved in planning, testing and response to actual incidents
- Pearson Qualification Services recertified to ISO 22301, Business Continuity Management
- Developing the approach to digital resilience, including for the GLP and future digital product.
- Worked with Health & Safety, Facilities Management and Global Property towards embedding improvements across North America, although delivery is primarily in 2019
- High Impact Event (HIE) awareness and education took place across 13 Pearson locations in the second half of the year. This was well received and more are planned for 2019.

2019 outlook and plans

In 2019, we will continue to focus on prevention rather than reaction and refine our resilience approach to be responsive to both current and emerging risks.

A combined Security and Resilience Governance Group will form in 2019.

Specific focus areas will be to:

- Better understand and mitigate risks to supply chain and vendor management
- Continue support to the GLP and TEP programmes
- Continue to refine DR planning for legacy systems
- Continue to support Data Centre resilience.

9 Harnessing the power of our data

New risk: Failure to:
1) Maximise our use of data to enhance the quality and scope of current products and services in order to improve learning outcomes while managing associated risks.
2) Maintain data quality, accuracy and integrity to enable informed decision-making and reduce the risk of non-compliance with legal and regulatory requirements.

We have previously included the second component under risk 1, business transformation and change.

Strategic priorities:

1 Grow market share through digital transformation

3 Become a simpler, more efficient and more sustainable business

Reason for risk rating

This is a new principal risk for 2018 and reflects the importance of data analytics in education (as outlined by our Chair on p8) such as driving improvements in learning, improving classroom productivity and making learning more affordable and more accessible.

We continue to evolve our business model so we are able to use our data in ways in which we can better service the needs of our customers.

Existing controls

- TEP with Master Data Management (MDM) now live in both the UK and North America
- Data governance in place.

Outcome of 2018 activities

One of the outcomes of the work undertaken across Pearson in 2018 is that the concept and approach to data governance across customer and product is maturing. Our MDM footprint was expanded as part of TEP going live in North America in May 2018 – this consolidated North American customer and product data from three existing ERPs with what was already live in the UK. The product data footprint was also expanded in 2018 to meet the needs of our new rights and royalties system.

Work is continuing on customer data harmonisation, definitions and data representation which will also help support the ongoing promotion of data governance.

We began user capability work in the second half of 2018 which will allow us to begin to retire legacy systems.

Data privacy guidelines (concerning GDPR) were issued and are being taken into account in our data activities (see risk 11 which covers our data privacy risk and GDPR readiness in more detail).

2019 outlook and plans

We will start work to expand MDM and ERP user capabilities to enable decommissioning of legacy product data systems (target retirements to start Q4 2019). This is expected to highlight issues in data harmonisation that will need to be resolved.

Expanded customer data harmonisation and quality activities are also being planned for early 2019.

We will continue to develop the concept of data governance through defining ownership, policies, and funding for transactional and reference data governance.

Future mitigation plans for this risk will focus on how we collect data, how we use it and the structures we have in place to manage associated risks, both regulatory and reputational.

Financial

10 Tax

Legislative change caused by the OECD Base Erosion and Profit Shifting (BEPS) initiative, the UK exit from the EU, or other domestic government initiatives, including in response to the European Commission State Aid investigation into the UK CFC exemption, results in a significant change to the effective tax rate, cash tax payments, double taxation and/or negative reputational impact.

↑ Increase in impact

↓ Decrease in probability

Reason for risk rating

The risk impact increased in 2018 due to the ongoing potential financial (cash) impact of the announcement in November 2017 of the European Commission opening decision on the UK Controlled Foreign Companies exemption (see note 34, contingent liabilities, on p206). We continue to await a final decision from the investigation.

We have recorded a significant one off tax benefit in 2018 (please see our CFO's commentary on p44 for more on this), however we do not anticipate a significant change in the ongoing effective tax rate of 21%.

Existing controls

Our tax strategy reflects our business strategy and the locations and financing needs of our operations. In common with many companies, we seek to manage our tax affairs to protect value for our shareholders, in line with our broader fiduciary duties. We do not seek to avoid tax by the use of 'tax havens' or by transactions that we would not fully disclose to a tax authority. We are guided by our taxation principles, which include complying with all relevant laws, including claiming available tax incentives and exemptions that are available to all market participants.

The CFO is responsible for the tax strategy; the conduct of our tax affairs and the management of tax risk are delegated to a global team of tax professionals. The Audit Committee oversees the tax strategy and receives a report, including a risk deep dive, on this topic at least once a year (see p97).

Our published tax report provides our position on tax.

Outcome of 2018 activities

In 2018, the Audit Committee reviewed our updated tax strategy and approved our second tax report which was published in the second half of the year.

During 2018 we worked through the implications of the State Aid opening decision, with the support of external advisors.

We took appropriate action in response to US tax reform at the end of 2017.

2019 outlook and plans

Our focus in 2019 will be the monitoring of (and to react accordingly to):

- EU State Aid decisions
- The implications of the UK's exit from the EU. The ongoing uncertainty does not allow us to confirm the tax implications, although we continue to expect that there should not be material incremental taxes payable (in either a 'deal' or 'no deal' scenario).

We will continue to assess US tax legislation changes, including guidance issued in December 2018, as well as monitoring potential tax law changes globally, and implement mitigation plans if required. In addition, we will monitor the most recent initiatives in the BEPS Project.

Media and public scrutiny on tax issues will continue to be actively monitored by both the Tax and Corporate Affairs teams.

Principal risks and uncertainties

Legal and compliance

11 Information security and data privacy

Risk of a data privacy incident or other failure to comply with data privacy regulations and standards, and/or a weakness in information security, including a failure to prevent or detect a malicious attack on our systems, could result in a major data privacy or confidentiality breach causing damage to the customer experience and our reputational damage, a breach of regulations and financial loss.

No overall change

Reason for risk rating

Risks concerning cyber-security and data privacy remain high due to complex external factors.

Data privacy risk has reduced slightly due to the work undertaken to remediate risks under the EU's General Data Protection Regulation (GDPR). However, this mitigation is offset by risks associated with the proliferation of data privacy laws outside of the EU and North America.

Existing controls

- Information Security and Data Privacy Offices
- ISO 27001 controls including strong encryption, patching, monitoring, and access controls
- Privacy impact assessment process
- Regular audits
- Automated tools
- Published policies, processes and guidelines, global training and awareness including annual awareness week
- Risk management framework
- Vendor oversight
- Audit Committee risk 'deep dive'. See p98.

Outcome of 2018 activities

GDPR regulations came into force across the EU on 25 May 2018. This introduced more onerous privacy obligations and more stringent penalties for non-compliance. As Pearson operates across several EU Member States, Pearson will still need to comply with GDPR even when the UK leaves the EU. A key focus of our data privacy efforts in 2018 has been putting plans in place to ensure that we were appropriately prepared for GDPR.

In addition to the work undertaken to prepare for GDPR, we continued to work to improve the security of our critical products, implementing a joint privacy and security process for new vendors.

The information security team worked proactively to identify and remediate security threats to Pearson. The improvement programme continued, ensuring that infrastructure, core platform and product deliveries across Technology (including Cloud and network transformation, the GLP, Enterprise Core platforms) include security controls and protection as fundamental components.

The programme to review our top vendor contracts from an information security standpoint was implemented in 2018, gaining good traction with different business areas.

2019 outlook and plans

With an evolving regulatory landscape, in addition to ongoing GDPR compliance, the Data Privacy Office will assess new laws and regulations coming into force in a number of jurisdictions and prepare for their implementation.

The information security team will continue to drive security maturity with the expansion of Vendor Risk Assessments, Multi-Factor Authentication, and pervasive data encryption (and also thus security compliance to regulatory requirements such as GDPR, PCI, HIPAA and FERPA).

Legal and compliance

12 Intellectual property (including piracy)

Failure to adequately manage, procure, register or protect intellectual property rights (including trademarks, patents, trade secrets and copyright) in our brands, content and technology, may (1) prevent us from enforcing our rights, and (2) enable bad actors to illegally access and duplicate our content (print and digital counterfeit, digital piracy), which will reduce our sales and/or erode our revenues.

Rights, permissions and royalties have been removed from this risk as it has reduced to the extent it no longer meets our threshold for a principal risk and we expect this to remain the case going forward.

↑ Increase in probability

Reason for risk rating

The probability of digital piracy risk has increased as online copying and security circumvention have become increasingly sophisticated and resistant to available countermeasures.

Notably, 2018 introduced more sophisticated-appearing 'digital counterfeit' websites now selling unprotected PDF files of certain Pearson's titles, using modern and sophisticated ecommerce methods. This is a nascent challenge that we are now addressing and 'flat PDFs' are a small portion of our portfolio and revenues.

From an IP perspective, increasing our digital business exposes us to more trademark, copyright and patent infringement risks.

Existing controls

- Robust set of policies, copyright clearance standards, procedures and systems in place
- Global trademark monitoring platform
- Cooperation with trade associations and other educational publishers
- Monitoring of technology and legal advances
- Patent programme in place
- IP protection programme in place
- Legal department provides ongoing monitoring and enforcement of print counterfeit and digital piracy
- Employee awareness and training, including a site to improve best practice around patents
- Single rights management system in place for UK, US and Canada.
- Close cooperation with US higher education channel partners (e.g. Amazon, Barnes & Noble, Follett) to prevent print counterfeit.

Outcome of 2018 activities

A very active patent filing took place to ensure protection of our rapidly evolving next gen technology for the GLP (this is expected to continue).

We also recorded key Pearson trademarks with U.S. Customs and Border Protection (CBP) to enable CBP's seizure of suspected counterfeit textbooks. This recordation has already resulted in several seizures by CBP.

Piracy

We increased our focus and awareness around digital and print counterfeit, and digital piracy, across Pearson's ecosystem, via policies, best practices, and channel partner reviews – effectively coordinated via Pearson's IP Protection Programme.

Print counterfeit via authorised partners was greatly reduced in 2018 following successful enforcement against overseas distributors.

2019 outlook and plans

We will continue to streamline our portfolios; procure and register expanded rights in our high value IP globally, including expanding our patent portfolio; monitor activities and regulations; and proactively enforce our rights, taking necessary legal action.

We are in the process of drafting the broader IP policy for launch in 2019. This will be accompanied by additional IP training modules.

In 2019, we will continue to:

- Undertake ongoing monthly test buys
- Closely monitor and enforce against marketplace piracy and digital counterfeit sites
- Explore watermarking to detect sources of digital piracy
- Investigate use of vendors to gain better visibility and enforcement tools against marketplace piracy (both print and digital)
- Review product requirements to make Pearson products and infrastructure more resistant to piracy.

Principal risks and uncertainties

Legal and compliance

13 Compliance including anti-bribery and corruption (ABC) and sanctions

Failure to effectively manage risks associated with compliance (global and local legislation), including failure to vet third parties, resulting in reputational harm, ABC liability, or sanctions violations.

↑ Increase in probability

↓ Decrease in impact

Reason for risk rating

As a result of the due diligence programme we are currently undertaking, it is likely we will uncover more risks.

Conversely, as a result of the more robust due diligence, training and awareness currently being undertaken, we are less likely to see future risks with a 'severe' impact and, where risks appear, we are more likely to see effective mitigation strategies and follow up that reduce potential exposure.

Existing controls

- Internal policies, procedures and controls including employee ABC policy certification
- Employee and business partner codes of conduct (see also 'Respect for human rights" under Sustainability on p36)
- Local Compliance Officers (LCOs) in place
- Corporate Compliance and Ethics awareness week
- Audit Committee risk 'deep dive'. See p98.

Outcome of 2018 activities

Internal procedures, controls and training continue to mature, which are designed to prevent corruption. Pearson's Code of Conduct was 100% completed in 2018. The Code of Conduct includes references to ABC policy and requirements. Pearson's ABC policy establishes a consistent set of expectations and requirements regarding ABC for all our personnel and business partners to adhere to.

In 2018, we took lessons learned from our pilot project in 2017 and revamped a global approach to our third party ABC due diligence process. We improved contractual provisions, outlined a flow chart as to when certain terms should be used, and implemented the due diligence process in all of Growth and most of Core markets. We conducted due diligence on over 2,800 third party suppliers last year, and have conducted due diligence on thousands of third party test centres.

In addition to the two key areas of activity above, we also:

- Conducted fieldwork for ABC assessments as well as revising the risk assessment process itself to make it more efficient and in line with FCPA and UKBA specifications
- Undertook gifts and hospitality and travel and expenses training for North America Higher Education Sales, other key North America businesses, plus face-to-face training on ABC in all our geographies
- Rolled out a gifts and hospitality monitoring tool in all of our Growth geographies in 2018
- Remediated all items in riskiest markets from 2017 risk assessments.

Ethics whistleblowing hotline reports using a third party platform have remained steady, with overall numbers in line with the reports of previous years. Our time to close cases has remained consistent with 2017 numbers. In addition, we have increased collaborative reporting with other investigations teams within Pearson.

We also rolled out revised policies for the following in 2018:

- Sanctions
- Global Conflicts of Interest
- ABC policy and training course, including due diligence, that is mandatory for high-risk populations
- Raising concerns and anti-retaliation policy, plus launched Speak Up campaign.

2019 outlook and plans

In 2019, we will continue to expand our third party due diligence programme, implementing the process for all new third parties across the UK, USA, Western Europe and Canada.

The Code of Conduct is being revised for 2019 with updates and revisions due to be launched in the spring.

2019 will also see further promotion of the Conflict of Interest policy; additional checks around sanctions; additional ABC risk assessments; further consideration of pan-Pearson fraud issues plus strengthened investigations processes and reporting with other teams.

Additionally, we will continue work started in 2018 rolling out our gifts and hospitality tool as well as exploring the possibility of an automated tool appropriate for the US market.

Legal and compliance

14 Competition law

Failure to comply with antitrust and competition legislation could result in costly legal proceedings and/or adversely impact our reputation.

↑ Increase in probability

↓ Decrease in impact

Reason for risk rating

The likelihood increased from 2017 due to recent increased activity by regulators looking into historical issues e.g. two recent investigations into Industry Association practices commenced in South Africa, following the similar investigation in Spain. Investigations in South Africa are still ongoing and the authority has yet to evidence that Pearson has committed significant wrongdoing. A final decision in Spain is still pending.

However, the impact of the risk has generally gone down. Risks uncovered to date do not carry exposure that is material for Pearson at a group/worldwide level. While the risk of material issues remains, we believe we have mitigated this risk as a result of our better controls and initiatives.

Existing controls

- Global policy in place
- Training and guidance, including live and video training
- Regular internal communications
- Lawyer network
- Additional individual training to employees representing Pearson in Industry Association meetings.

Outcome of 2018 activities

In 2018, we significantly increased our employee training to include videos, with the target of getting every relevant employee certified. The lawyer network supported this with one to one communications with every employee attending Industry Association meetings to ensure that they were risk aware.

- Development of e-learning modules and gamified learning continued
- Plans were developed to track engagement, for example in terms of the number of employees trained, those undertaking e-learning tests, etc.

2019 outlook and plans

In 2019, we will continue to conduct ongoing training and release e-learning modules.

Pearson's lawyer network actively reviews our engagement with trade associations and other organisations, to ensure that it remains appropriate.

Principal risks and uncertainties

Risk assessment of prospects and viability

This section should be read together with the full viability statement on p127.

Pearson's principal risks and our ability to manage them as outlined above are linked to our viability as a company. These risks have therefore been taken into account when preparing the viability statement.

The Board assessed the prospects of the company over a three-year period, longer than the minimum 12 months of the annual going concern review. The three-year period corresponds with Pearson's strategic planning process and represents the time over which the company can reasonably predict market dynamics and the likely impact of additions to the product portfolio.

The Board discusses the company's strategic plan on an annual basis taking account of a range of factors including market conditions, the principal risks to the group above, product and capital investment levels as well as available funding. Pearson's strategy and business model are discussed in more detail on p15-42.

The key assumptions which underpin our three year strategic plan to December 2021 are as follows:

- Implementation of our 2017-2019 cost efficiency programme reducing our annualised cost base exiting 2019 by c.£330m
- Increased investment in the product technology platform to accelerate the shift to digital and enhance courseware service capabilities
- Further declines in enrolments and other downwards pressures in the US Higher Education Courseware market
- US Higher Education Courseware returns rates continue to improve as sales become more direct to consumer
- Online Program Management grows, driven by global enrolment in undergraduate and postgraduate online courses
- US Assessment revenues stabilise
- Other strategic priorities, including Virtual Schools and Professional Certification show good growth

In assessing the company's viability for the three years to December 2021, the Board analysed a variety of downside scenarios including a scenario where the company is impacted by all principal risks. The primary modelling overlaid a 'severe but plausible' downside scenario onto the base case strategic plan for Pearson, focusing on the impact of the following assumptions and key risks:

- Failure to materialise anticipated benefits of our 2017-2019 cost efficiency programme
- Further declines in enrolments and further channel disruption in US Higher Education Courseware
- Failure to accelerate our shift to digital while successfully investing and delivering market leading global products and services
- Online Program Management fails to generate expected revenue growth
- US Assessment revenues fail to stabilise
- Other strategic priorities, including Virtual Schools and Professional Certification do not achieve modest growth amid global economic uncertainty and local market pressures
- A negative ruling by the European Commission on the controlled foreign company group financing partial exemption tax legislation

At the time of publication, the UK remains due to leave the EU on 29 March 2019. Given the scheduled exit date and significant risk of no deal, we have advanced mitigation plans underway. These do not involve material cost and we will be able to unwind those plans without significant disruption or cost if it later becomes appropriate. As stated in the principal risks section above on p62-75, we continue to believe that Brexit will not have a material impact on Pearson as a whole and is not a principal risk, therefore the Board did not specifically factor it into viability statement considerations.

The Board also stress-tested the impact on our liquidity of all the principal risks occurring together. Although this is not regarded as a plausible scenario, the test showed that the company would still have liquid resources subject to a limited number of management actions.

The Board's confirmation of Pearson's viability for the three years to 2021, based on this assessment, is included alongside the going concern statement on p127.