ACCA | Think Ahead

DEVELOPING THE SKILLS OF THE SUSTAINABLE BUSINESS AND FINANCE PROFESSIONAL

About ACCA

ACCA (the Association of Chartered Certified Accountants) is the global professional body for professional accountants.

We're a thriving global community of **233,000 members** and **536,000 future** members based in **178** countries and regions, who work across a wide range of sectors and industries. We uphold the highest professional and ethical values.

We offer everyone everywhere the opportunity to experience a rewarding career in accountancy, finance and management. Our qualifications and learning opportunities develop strategic business leaders, forward-thinking professionals with the financial, business and digital expertise essential for the creation of sustainable organisations and flourishing societies.

Since 1904, being a force for public good has been embedded in **our purpose**. In December 2020, we made commitments to the **UN Sustainable Development Goals** which we are measuring and will report on in our annual integrated report.

We believe that accountancy is a cornerstone profession of society and is vital helping economies, organisations and individuals to grow and prosper. It does this by creating robust trusted financial and business management, combating corruption, ensuring organisations are managed ethically, driving sustainability, and providing rewarding career opportunities.

And through our cutting-edge research, we lead the profession by answering today's questions and preparing for the future. We're a not-for-profit organisation.

Find out more at accaglobal.com

About this report:

In 2021 ACCA published our globally relevant research [Professional Accountants at the Heart of Sustainable Organisations](). The research examined and linked the drivers of change shaping sustainable organisations to the next decade of work for professional accountants. Further, the research identified the core capabilities of these professionals, whom business and society expect to be sustainable business and finance professionals.

In this research report, we explore why and how learning and development (L&D) programmes should:

■ develop the capabilities required of these sustainable business and finance professionals

■ accommodate the diverse set of learner characteristics

■ respond to the trends that are changing L&D design and delivery; and

■ incorporate the many factors impacting the L&D business model.

The outcome from this work is the six dimensions (features and qualities) of good L&D that learners should seek in their L&D programmes and educators should apply in developing, implementing and monitoring their strategies.

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Foreword

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The learner population is growing, becoming more diverse and, with this, requesting tailored learning and development interventions that many of the latest educational innovations support. To capture this opportunity, educators must proactively take ownership of their destiny: if not, learners will look elsewhere.

The total market for professional education is expected to grow at a compound annual growth rate of 4.4% from the 2021 base of £5 trillion to £7 trillion by 2030 (Pearson 2020). In part, this is due to expectations of longer working lives and rapidly evolving business landscapes that dynamically modify the capabilities required of our sustainable business and finance professionals, and introduce new ones. This is where educators play an important role in developing these capabilities in professionals who, to remain relevant, must be lifelong learners.

To be effective, many educators will need to transform their business models to accommodate a wider range of learning pedagogies, ones capable of catering for the diverse set of learner characteristics of the growing population of lifelong learners.

For some educators, innovations embedding relevant learning and development (L&D) trends may also be required. These will include collecting and embedding rich data across education processes and within learning interventions, or combining personalisation and community learning in ways that may at first sight seem nonsensical.

Further, environmental and social responsibility together with economic concerns are just as relevant to the education industry as they are to other industries. Additionally, education and the accountancy profession are the focus for many policymakers and regulators, therefore educators must also appreciate evolving policy and regulation.

To help educators, learners and employers, our research evaluates the drivers for change, including why and how L&D must evolve and identifies the dimensions (features and qualities) common to good L&D. Given that all good L&D involves reflection to drive continual improvement, we suggest you reflect on the following questions, which ACCA has also asked itself, to inform your next L&D steps as an educator, learner or employer.

■ How does your experience of current L&D respond to the drivers and measure against the dimensions explored in this report?

■ What can be done to improve L&D offerings?

Finally, specifically for educators, what you do next can make a valuable contribution to the achievement of UN SDG 4, Quality Education, to which many of you, and we at ACCA, are committed (ACCA 2020).

Contents

Throughout this report there is hyperlinked text, highlighted in **bold blue**, which will take you to each section or figure that is mentioned (if it is on a different page). Each page that includes hyperlinked text is flagged, top right, with the link symbol.

Executive **summary**

Our research identifies the six dimensions common to good learning and development (L&D) – features and qualities comprising all that is important when developing 'fit for the future' sustainable business and finance professionals. These dimensions take account of the drivers for L&D evolution, including the:

- **capabilities required of professional accountants**
- **characteristics of the learner**
- **learning trends and**
- **factors impacting the education business model.**

For some educators and learners, L&D has undergone rapid transformation, predominantly owing to trends associated with data analysis and the digitalisation of the education process, including the content, assessment and recording of learning achievement. Data is being used to give a better understanding of the learner and their progress, and hence to create personalised learning experiences. Equally, data is used to continually improve the L&D programme and quality of tutor interventions. Digitalisation has made it possible for L&D to reach learners who otherwise would not have access to education, which is valuable as long as the risks of technology poverty and competence are mitigated.

FIGURE E1: The professional education ecosystem – the dimensions of good L&D programmes

The learning and development trends

The capabilities required of professional accountants	Relevance	Motivation	Digital and Data	The learner's characteristics
	The dimensions of good learning and development programmes			
	Reliability	Person and People	Sustainability	

The factors impacting the educator's business model
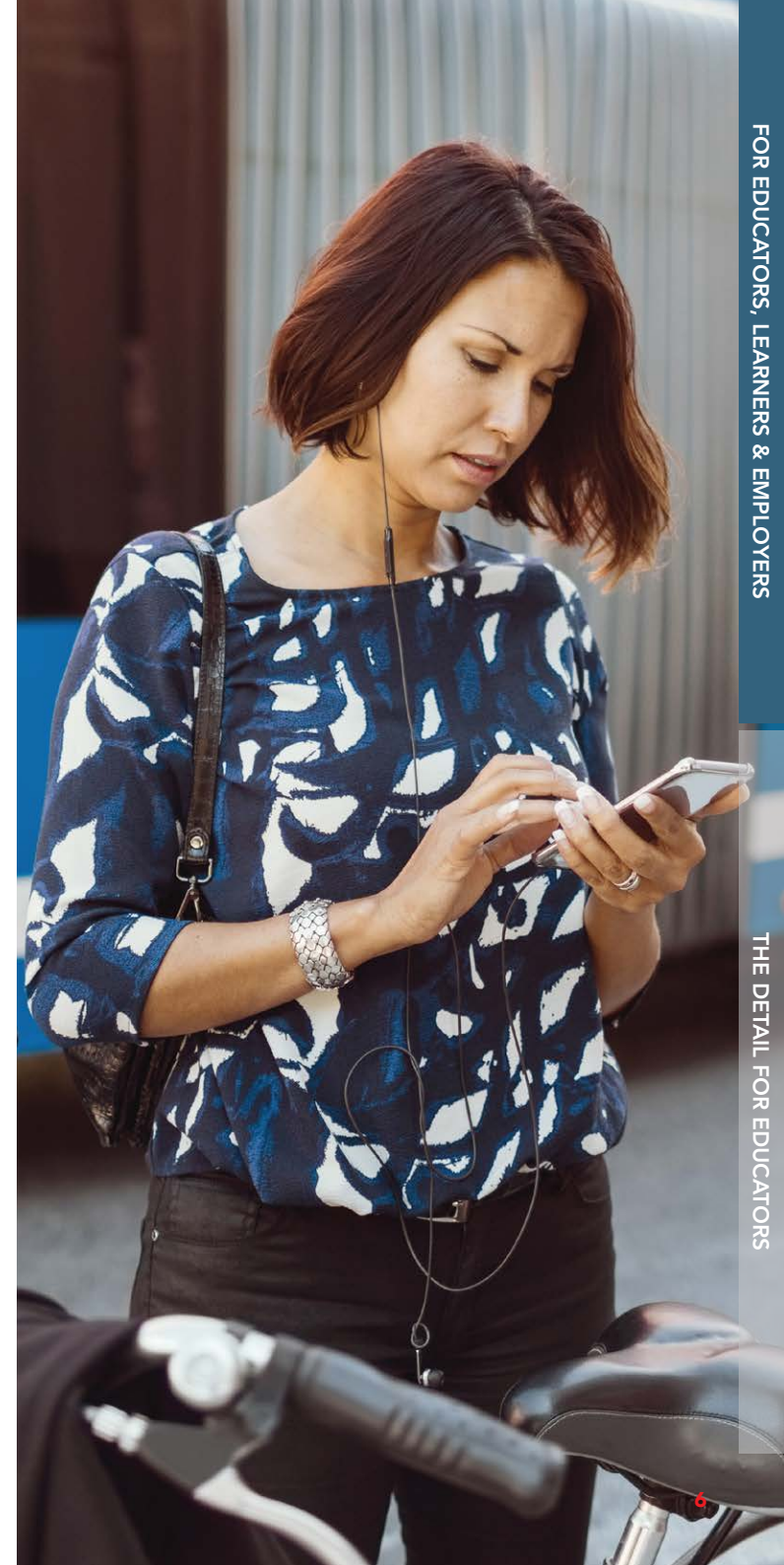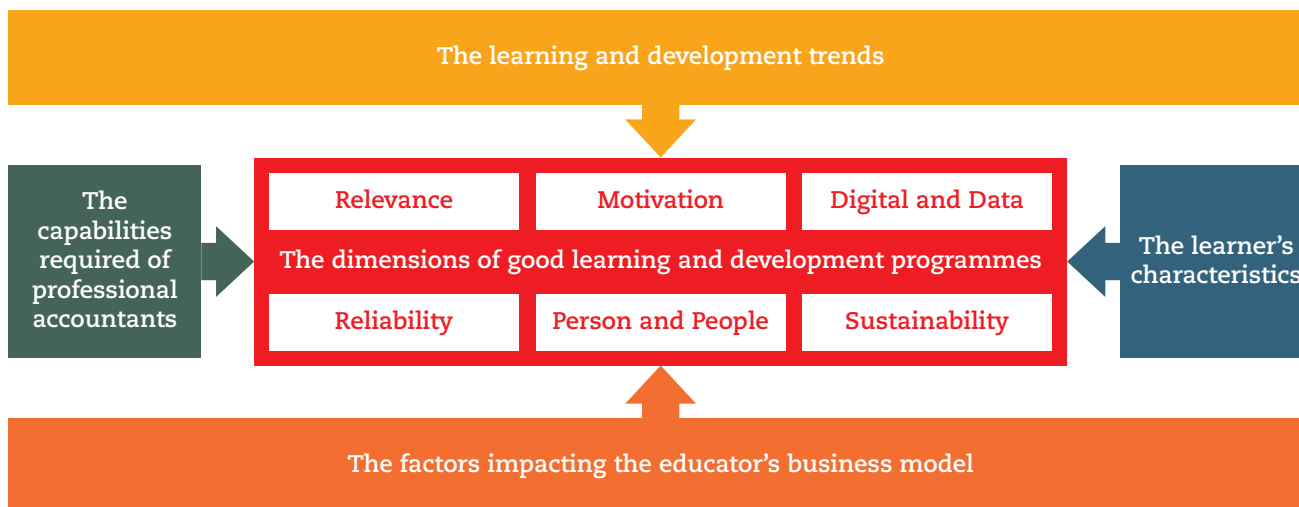
Yet for others, whether the educator or learner, L&D resembles a chalk and blackboard experience, itself revolutionary in its first attested use in 1801 (Avenia 2021)). Technology is an enabler, not the utopia of the future for L&D and should not replace our valuable and respected tutors. However, technology makes scalable some L&D innovations, for instance peer learning and gamification, that today are mostly being manually delivered.

Learners and employers are calling out for innovation, and some educators are making great strides. Some of our innovative educators are creating immersive individual and team experiences that simulate business-world scenarios so that learners can be evaluated in the context of their professional development. These educators are using gamification within their simulations, incorporating competition and informal learning to better motivate learners or enable them to experience extreme scenarios that hopefully many professionals may never encounter in the workplace but need to know how to handle.

These business simulations enable learners to practise a wide range of interconnected capabilities, especially those related to motivating oneself and others, collaborating and creating insight, before having to do it in reality in exams and at work.

Educators are having to respond to learning needs stemming from capabilities that are becoming more varied: as roles that professionals perform broaden then so too will the capabilities required. Compounding this are expectations of longer working lives, increasing the size and diversity of the learning population, and in turn introducing differing learner characteristics and needs. Therefore, while the business opportunity for educators is great, there is no single L&D solution. Learning ecosystems present a way forward to host and deliver a variety of L&D interventions, creating flexibility for learners on when, how and what kind of L&D happens. Well-designed and managed systems that can be added to over time better cater for evolving learner needs, capabilities, and L&D innovations.

Finally, there are numerous business model factors for educators to consider. Ones associated with regulation and responding to lessons learnt from the pandemic may pose challenges, for instance through introducing new processes. Nonetheless, there are also opportunities, policies driving the need for skills development and hence new business, or creating scope to contribute to a better world.

Our research identifies the six dimensions that, when embedded into L&D design and delivery, will help educators respond to these drivers. In turn, this will enable educators, learners and their stakeholders to engage positively with the following dimension defining questions, shown in Figure E2, below.

Throughout this report we make many recommendations based on what education experts around the globe do and their suggestions in response to the drivers and the dimensions, we hope you find these useful.

FIGURE E2: The dimensions of good learning and development programmes – defining questions:

Relevance	Reliability	Motivation	Person and people	Digital and data	Sustainability
Does the programme meet learner and stakeholder needs?	Can learning outcomes be trusted irrespective of the different learning approaches needed to cater for the different capabilities and characteristics of diverse learners?	Does the programme seek to understand and drive the achievement of the learning purpose and support life-long learning?	Are learners and their tutors at the heart of learning and the learning approach, at an individual and community level?	How well are digital technology and data analysis enabling the achievement of learning across content, production, delivery and monitoring?	How well are environment, social and financial sustainability issues integrated within the programme operations?

Introduction

The educator's problem that we should all care about

In a diverse global professional community, it might seem that there aren't many things we all have in common. But even if the reasons for seeking learning and development (L&D) differ, we've all experienced L&D, especially when we consider its many forms (Figure I1). Therefore, we should each have a view on the outcomes from learning because they can have an impact for generations to come. Figure I2 shows some of the good outcomes we expect from learning at its best.

Whether we form our view of desirable learning outcomes as an educator, a learner or another stakeholder, it's important to consider the big 'change driver' questions facing educators. These questions correspond to the 'ingredients' and 'recipe' of L&D, where the 'ingredients' are the capabilities acquired (ie what is learnt) and learner (the learning object), and 'recipe' is the teaching approach (ie pedagogy), which is influenced by the L&D environment.

FIGURE I1: The different forms of learning

FIGURE I2: Good outcomes learning

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS

The key questions facing our educators include:

CAPABILITIES: how to develop the sustainable business and finance professional's capabilities?

a. **Capabilities for the roles that are yet to be defined:** according to Adecco Group, the human resources (HR) specialists, 85% of the jobs we will do in the 2030s have not been invented yet (Dehaze 2021). Further, 40% of the core skills currently used by workers are expected to change in the next five years (Andrew Jack 2021).

b. **Capabilities that are required in differing combinations for the many roles these professionals perform:** eg as set out in ACCA's Career Navigator (Figure I3), different sustainability and collaboration capabilities may be needed in developing the insights required for business transformation than for corporate reporter roles.

LEARNERS: How to cater best for a diverse learner population?

The dynamically evolving business environment is changing the skills required of professionals, and together with expectations of longer working lives is increasing the lifelong learner population and the diversity of learning needs.
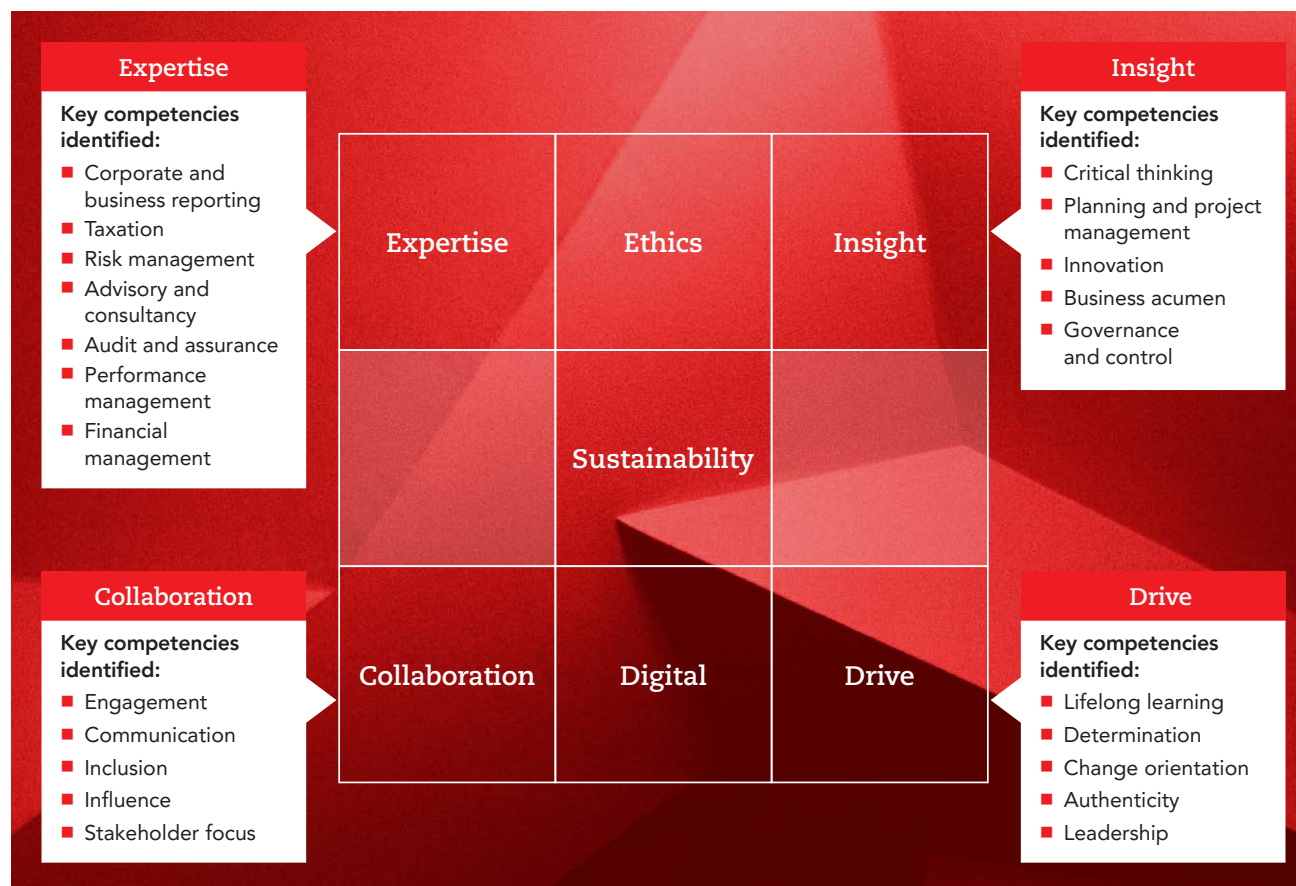
LEARNING APPROACH: What is the role of technology and other education innovations?

There's no doubt that technology has a role, but there are many views on what that role should be. Is it implementing insights derived from the enforced use of technology to accommodate Covid-19 social distancing measures? Many educational experts think technology should have a bigger role, one where data is central to successful operation and management of the education process, with artificial intelligence (AI), machine learning and gamification used to drive efficiency and effectiveness, and to enhance engagement.

In summary, how should educators respond to these questions while also **realising opportunities and mitigating risks that stem from the economic, social and environmental factors that educators face today?**

FIGURE I3: ACCA Career Navigator

The ACCA Career Navigator sets out the seven core capabilities required by professional accountants, including the differing capability weightings and proficiency levels required across a career. Each of the capabilities are mapped to qualification and continual professional development (CPD) opportunities that help learners develop these capabilities.

Expertise

Key competencies identified:
- Corporate and business reporting
- Taxation
- Risk management
- Advisory and consultancy
- Audit and assurance
- Performance management
- Financial management

Insight

Key competencies identified:
- Critical thinking
- Planning and project management
- Innovation
- Business acumen
- Governance and control

Collaboration

Key competencies identified:
- Engagement
- Communication
- Inclusion
- Influence
- Stakeholder focus

Drive

Key competencies identified:
- Lifelong learning
- Determination
- Change orientation
- Authenticity
- Leadership
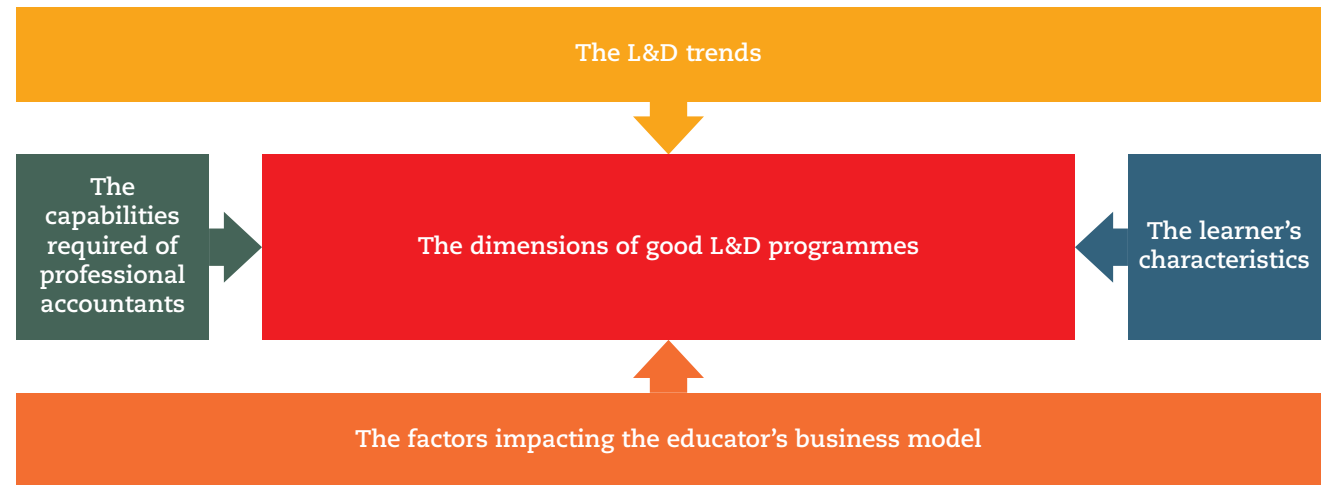
Source: ACCA n.d.a and ACCA 2021a

Our research

Our research answers these big 'change driver' (Figure I4) questions by considering why and how L&D programmes should best accommodate:

- the capabilities required of professionals
- the learner's characteristics
- the trends that are changing L&D design and delivery; and
- the factors impacting the L&D business model.

The outcome from this work are the six dimensions (features and qualities) of good L&D programmes that educators should apply in developing, implementing and monitoring their strategies, therefore, improving the learner experience.

FIGURE I4: The professional education ecosystem

The L&D trends

The capabilities required of professional accountants → The dimensions of good L&D programmes ← The learner's characteristics

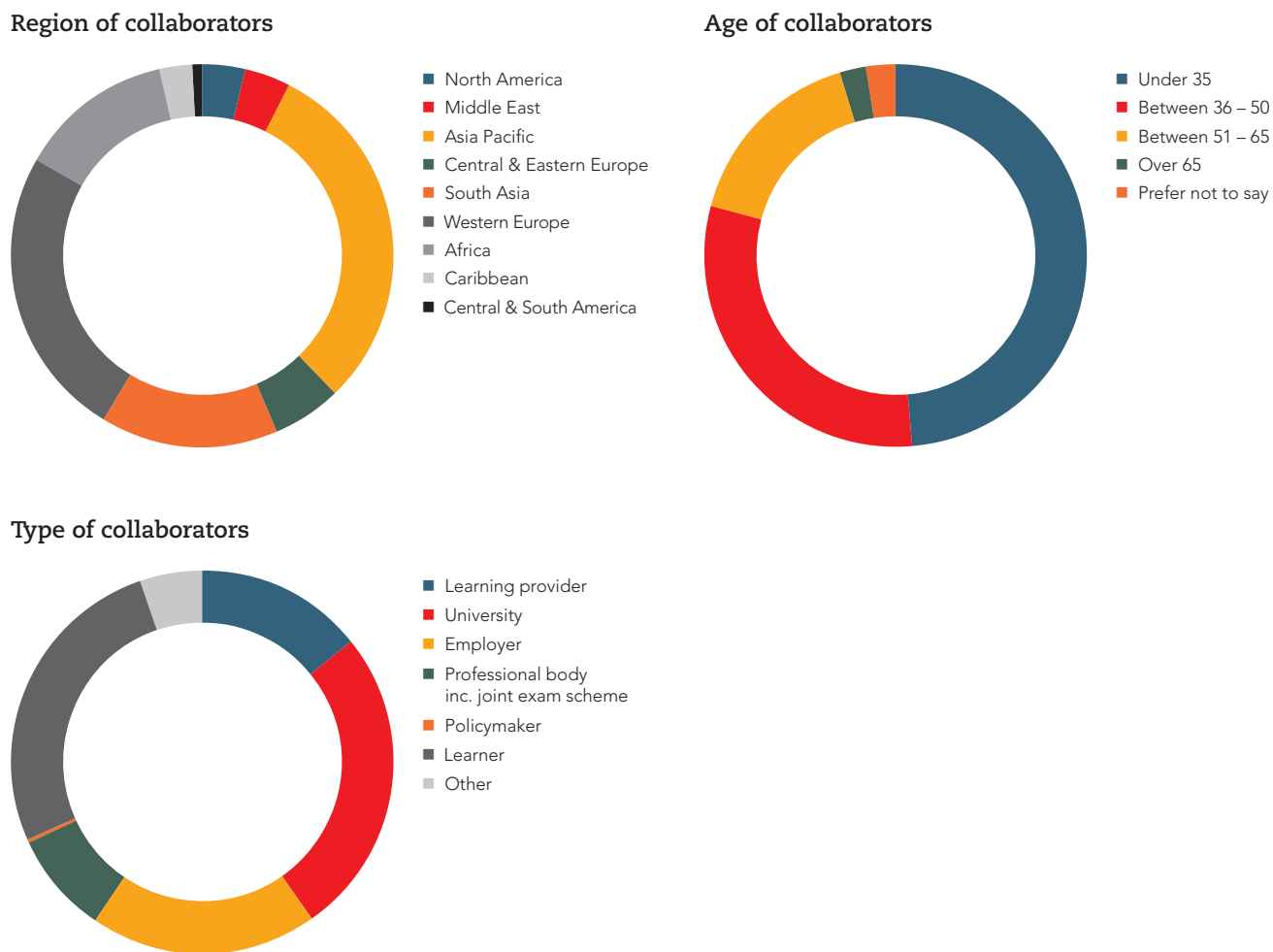The factors impacting the educator's business model

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THE DETAIL FOR EDUCATORS

Our methodology

Just as L&D tends to be a collaborative exercise, so was our research methodology. Our rich insight is drawn from desk-based research, analysis provided by Datamaran[1], and engagement with over 800 learners, employers and educators from around the globe via a quantitative survey and roundtables. The roundtables evaluated the survey results and 'change drivers' and were attended by over 160 of ACCA's L&D experts from employer L&D functions, universities, learning providers and internally at ACCA (Figure I5). We thank all who took part.

FIGURE I5: Geographical spread, type and age range of the collaborators

Region of collaborators

- North America
- Middle East
- Asia Pacific
- Central & Eastern Europe
- South Asia
- Western Europe
- Africa
- Caribbean
- Central & South America

Age of collaborators

- Under 35
- Between 36 – 50
- Between 51 – 65
- Over 65
- Prefer not to say

Type of collaborators

- Learning provider
- University
- Employer
- Professional body inc. joint exam scheme
- Policymaker
- Learner
- Other

1   Datamaran, the external risk monitoring company, provide a fully automated solution to identify and monitor over 400 external risk factors, including ESG, on an ongoing basis – by scanning the regulatory, media and corporate disclosure environments. This helps corporate leaders with the needed integration of these accelerating risks and opportunities into core business processes: risk management, annual reporting and Board oversight

1. The **report in brief** for **educators, learners** and **employers**

Chapter 1 comprises three components of relevance to educators, learners and employers.

- **Report overview:** outline of the change drivers and the dimensions of good L&D.

- **The interconnected dimensions and their drivers:** explanation of the dimensions as connected to their drivers.

- **The toolkit to embed the dimensions:** key steps on how to incorporate the dimensions and their drivers within L&D.
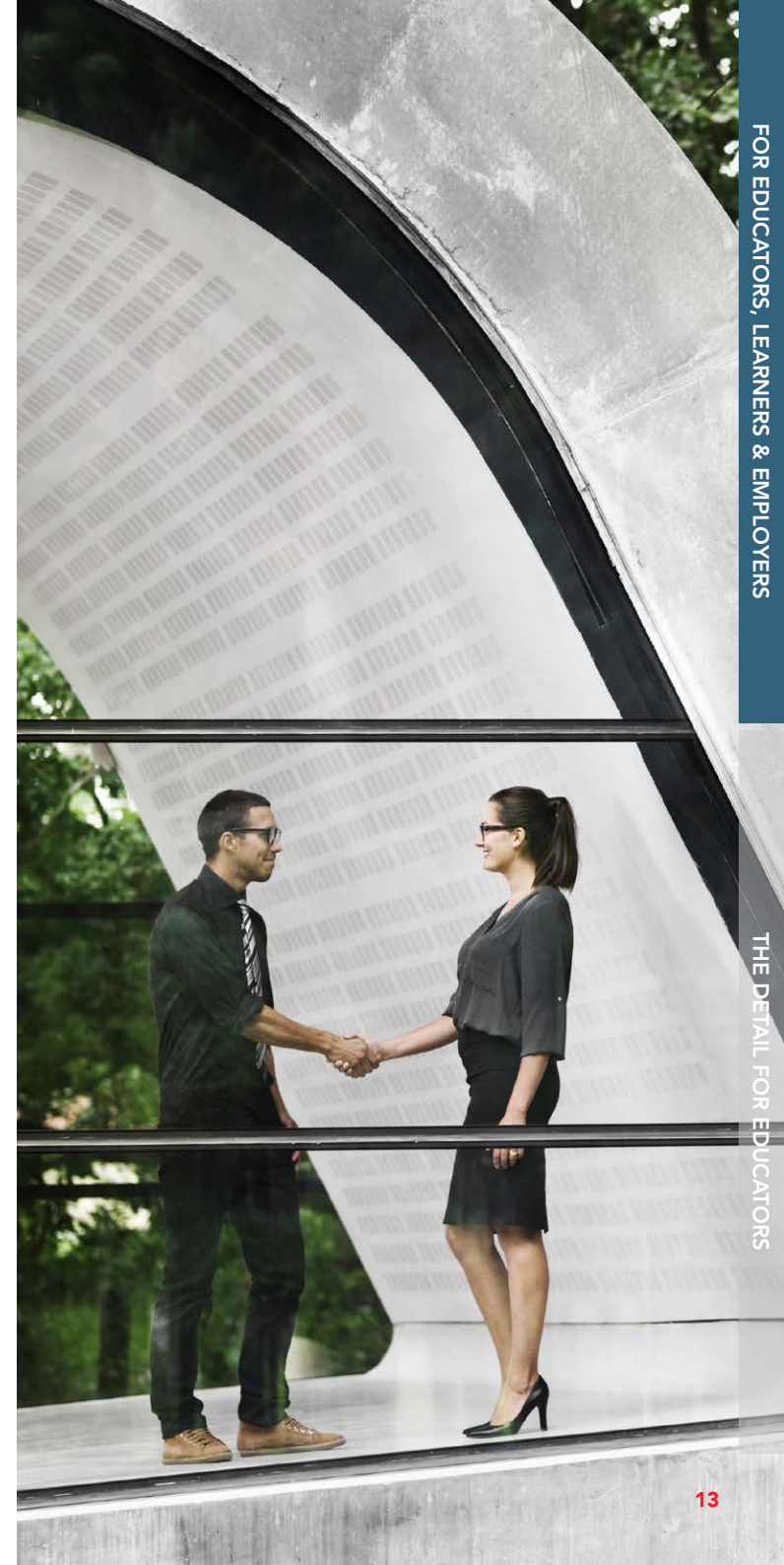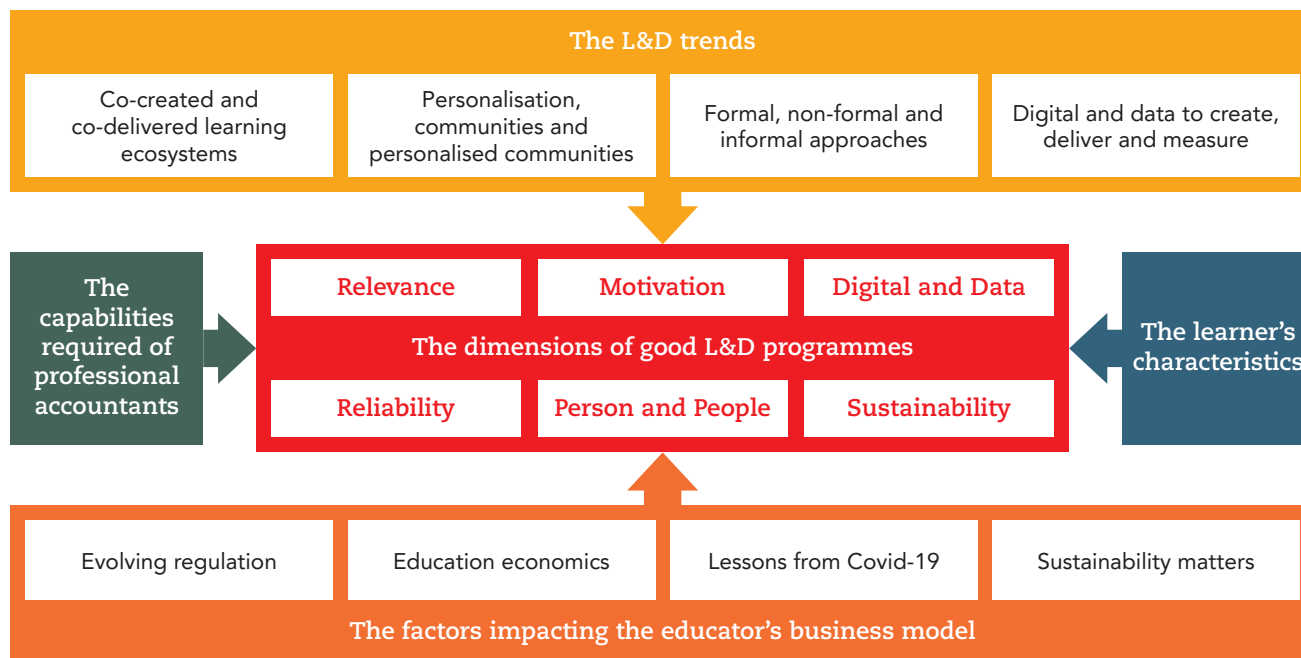
Chapter 2 explores the dimensions and drivers.
Chapter 3 provides greater detail for educators.

1.1 Report overview

At the heart of Figure 1.1 are the six interconnected dimensions that our research identifies as being common to all good L&D programmes. These dimensions when correctly applied to L&D will help:
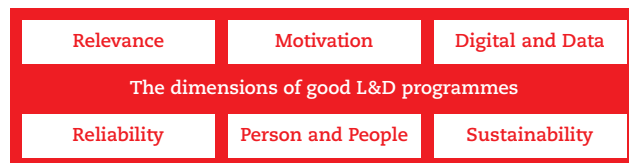
- learners develop the professional's capabilities
- educators accommodate the learner's characteristics, and therefore their needs, and
- educators respond to the trends and factors changing the industry.

FIGURE 1.1: The learning and development ecosystem – the dimensions of good L&D programmes

The L&D trends

| Co-created and co-delivered learning ecosystems | Personalisation, communities and personalised communities | Formal, non-formal and informal approaches | Digital and data to create, deliver and measure |

The capabilities required of professional accountants

The dimensions of good L&D programmes

Relevance Motivation Digital and Data

Reliability Person and People Sustainability

The learner's characteristics

| Evolving regulation | Education economics | Lessons from Covid-19 | Sustainability matters |

The factors impacting the educator's business model

1.1.1 The interconnected dimensions of good L&D programmes

Relevance	Motivation	Digital and Data
The dimensions of good L&D programmes		
Reliability	Person and People	Sustainability

- **Relevance:** meeting learner and stakeholder needs
- **Reliability:** delivering learning outcomes that are trusted irrespective of different learning approaches for a given capability or learner
- **Motivation:** driving the achievement of the learning purpose and supporting lifelong learning
- **Person and people:** placing learners and their tutors at the heart of learning and its approach, at an individual, cohort and community level
- **Digital and data:** supporting the development of L&D strategy and its implementation across content, production, delivery and monitoring
- **Sustainability:** business models employ an integrated approach to environmental, social and financial matters.

The capabilities required of professional accountants

1.1.2 The capabilities required of professionals
The fundamental skills and behaviours required of all professional accountants in differing weightings and levels of proficiency across the variety of roles they can perform (Figure I3).

The learner's characteristics
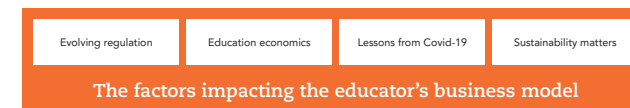
1.1.3 The learner's characteristics
The features of the learner that determine the capabilities required and L&D pedagogy, such as the learning purpose and learning approach preferences.

1.1.4 The L&D trends

The L&D trends			
Co-created and co-delivered learning ecosystems	Personalisation, communities and personalised communities	Formal, non-formal and informal approaches	Digital and data to create, deliver and measure

- **Co-created and co-delivered learning ecosystems**, enabling:
  - learning content to be combined in different ways, offered in multiple formats and at different times
  - learners to engage with each other
  - recognition and recording of learning.

- **Personalisation, communities and personalised communities:** personalised learning for specific learner characteristics and development needs, and community-based learning enabling collaboration. When the personalised and community-based learning are combined, personalised learning communities are produced.

- **Formal, non-formal and informal learning approaches:** interventions that range from structured learning, such as courses, to unstructured or unexpected learning, eg when playing a game or taking part in a discussion where learning is not the original intention.

- **Digital and data to create, deliver and measure:** supporting the setting, implementation and monitoring of L&D strategies, from managing the process, producing and delivering content to gamification that immerses learners in virtual workplace environments, including ones supported by AI to adapt the game or focus the learner on continual improvement.

1.1.5 The factors impacting the business model

Evolving regulation	Education economics	Lessons from Covid-19	Sustainability matters
The factors impacting the educator's business model			

- **Evolving regulation:** shaping the education operating model and/or L&D content directly or via changes to the accountancy profession.

- **Sustainability issues:** environmental, social and financial issues as interrelated and inter-connected matters.

- **Lessons from Covid-19:** lessons learnt as the education industry recovers from the impacts of Covid-19, including better contingency business leadership, stakeholder engagement and revisions to technology.

- **Education economics:** expected growth of the total industry, especially within corporate and lifelong learning.

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS

1.2 The interconnected dimensions and their drivers

Creating the professionals required by business and society, and the related change drivers, calls for educators to provide L&D programmes that are more than instructional; and this must apply to the whole end-to-end education business and L&D experience. Our research insights point to the aforementioned six interconnected dimensions (see Figure 1.2), and here we bring to life some of these interconnections in the context of their drivers.

1.2.1 Developing relevant capabilities and education economics

Our research, corroborated by similar work by others, suggests that for professionals to be effective they require specific capabilities: the crucial human capabilities of collaboration, drive, critical thinking, idea generation, and up-to-date technical competence in handling sustainability, digital and ethical issues (see Box 1.1).

FIGURE 1.2: The six dimensions

Relevance	Motivation	Digital and Data
Meeting learner and stakeholder needs	Driving the achievement of the learning purpose and supporting lifelong learning	Supporting the development of L&D strategy and its implementation across content, production, delivery and monitoring

The dimensions of good L&D programmes

Reliability	Person and People	Sustainability
Delivering learning outcomes that are trusted irrespective of different learning approaches for a given capability or learner	Placing learners and their tutors at the heart of learning and its approach, at an individual, cohort and community level	Business models employ an integrated approach to environmental, social and financial matters

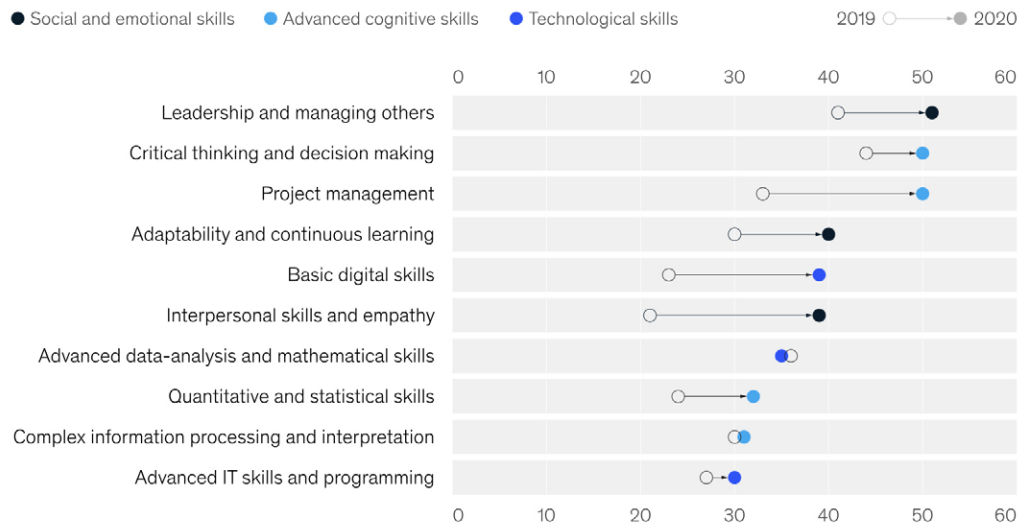## Box 1.1: What others are saying about the important capabilities

The joint work of CarringtonCrisp and LinkedIn, and McKinsey highlight the skills requiring development, many of which are capabilities required by sustainable business, finance and accountancy professionals.

Organisations have identified five skills that are not widely available:

Resilience	Global mindset	Ethics & ethical behaviour	Able to manage across cultures	Accommodates new ways of working

Most of the skills that companies are increasingly focused on developing are social, emotional and advanced cognitive.

Skills that companies have prioritised to address through reskilling,[1] % of respondents

● Social and emotional skills   ● Advanced cognitive skills   ● Technological skills   2019 ○──────● 2020

Leadership and managing others
Critical thinking and decision making
Project management
Adaptability and continuous learning
Basic digital skills
Interpersonal skills and empathy
Advanced data-analysis and mathematical skills
Quantitative and statistical skills
Complex information processing and interpretation
Advanced IT skills and programming

[1] Out of 25 skills that were offered as answer choices; n = 700.

Source: McKinsey 2021

In addition, learners expressed a need for the following skills:

- Ability to engage in digital transformation
- Strategic thinking
- Marketing
- Innovating
- Entrepreneurship
- Business development
- Creativity and design thinking
- Data analytics
- High productivity
- Risk management
- Social impact
- Decision making in complex and uncertain times
- Responsible management

Source: CarringtonCrisp 2022

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS

Further, many of these capabilities will continue to evolve alongside the business landscape, representing a major opportunity for educators today and for the foreseeable future. This is evidenced by the expectation that the education market will reach £7 trillion in value by 2030, of which 25% will come from lifelong and corporate learning (Pearson 2020). Some educators, such as Till Leopold, are already seizing this opportunity. He commented:

> 'The uptake of online courses and the number of organisations offering credentials has gone through the roof over the past 12 months and is expected to continue for some time to come'. **Till Leopold, head of action initiatives and impact coordination at the World Economic Forum's Centre for the New Economy and Society**

Source: Andrew Jack 2021

1.2.2 Person-centric engagement to understand purpose and motivate learners

A person-centric approach, such as engagement to understand the individual learner's learning purpose, goals, and preferred learning approaches, is central to driving learning motivation. Equipped with this knowledge, educators are better placed to shape learning interventions. In practice, relevance and motivation are only truly realised through strong stakeholder engagement that ensures all parties understand the purpose of the learning and appreciate what capabilities are being developed and why.

1.2.3 Personalisation, informal learning and communities for relevance and motivation

Often capability development happens in group situations, unsurprisingly, as humans often want to work and learn together. There are L&D approaches that bring together dimensions of person and people centricity, eg in the form of 'personalised communities'. These are environments where learners with complementary traits are grouped into cohorts and a mix of learning interventions are used, including unstructured informal discussions where challenge questions are introduced by community facilitators for learners to debate. The more advanced personalised communities evaluate current performance and use it to inform the next cohort grouping, thereby delivering potential benefits of more efficient and effective achievement of the learning purpose (relevance), and driving motivation.

1.2.4 Data and digital underpinning relevant and reliable learning ecosystems

Person and people centric L&D approaches are becoming more difficult to implement because the range of capabilities required across longer working lives are both expanding the learning population and making their learning needs more diverse. Learning ecosystems provide an appropriate solution to this problem: they support the trends we are seeing for non-linear and multiple ways of combining and delivering capability development, ranging from short to long bursts, formal to informal, and just-when-needed to just-in-case learning. In these systems, digital technology and data analysis are key enabling features.

- Data is central to personalisation, cohort and community interventions. Effective data collection and evaluation, including of both personality and assessment psychometric[2] data, support the appreciation of metacognition, in other words an understanding of what is learnt, how and why. Metacognition enables the identification of learning interventions that might have most impact, eg adaptive learning, in which future L&D interventions are based on performance evaluation to date, resulting in benefits of higher levels of engagement and programme effectiveness.

- Digital technology is often a feature of scalable learning ecosystems whether as:

  - a host for a variety of learning interventions and a place where learners can interact in learning communities, developing and recording their learning, or for

  - gamification and simulation applications that respectively place learners into extreme or more commonplace virtual workplace environments. This is especially valuable for learners who cannot easily access work experience.

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2   Psychometrics is a field of study within psychology concerned with the theory and technique of objective measurement that in the context of this report is related to talent and education, whether designing tests, measuring performance, or other related activities. Psychometrics aims to bring objective measurement of qualities that often cannot be easily and reliably observed, such as intelligence, personality, educational achievement and capacity to develop. (Adapted from Wikipedia (n.d.) and – Psychometrics Society (n.d.))

1.2.5 Reliable capability development required for employability

Employability is likely to be a key purpose of L&D, meaning that the reliable development of the desired capabilities is important for many learners and their employers. It is this that underpins trust. How reliability is achieved may be perceived differently by learners and their stakeholders, and may depend on the capability being developed. For instance, trust in what a specific learner has learnt will be dependent on the approach best aligned to the learner's learning purpose and pedagogical preference, which for one learner might be in an examination and another in practical experience or project/coursework. By contrast, trust in collaboration capabilities may be best achieved through repeated demonstrations with multi-stakeholder validation. Alternatively, expertise capabilities may necessitate understanding of the programme's approach to developing the desired capability, rather than or as well as assessment of the learner's competence.

1.2.6 A sustainable education business model accommodates evolving sustainability issues and regulation

As with all business, being sustainable is vital for the education business, therefore satisfying not just financial and regulatory criteria, but also environmental and social criteria of importance to the education business model. The suppliers and clients of educators are starting to take sustainability issues seriously, and many of them are making formal commitments to the UN Sustainable Development Goals (UN SDGs). Further, the accountancy profession and education are subject to considerable regulation and policies that affect business opportunity and risks. In response, some educators are conducting many of the activities that are becoming standard for all other businesses. These activities start with horizon scanning for regulatory changes and evaluating the impacts and dependencies of their education business model across the supply and value chain. From here integrated environmental, social, regulatory and brand value-generating sustainable business plans can be enacted, all of which draw on good practice for business governance and processes.

1.3 The toolkit to embed the dimensions

Embedding the dimensions and responding to the drivers place a significant demand on educators but have the potential for rewards that justify the effort. In meeting this demand, the most effective educators take the following steps.

- **They co-create and co-deliver** with employers, HR specialists, learners, technologists, trade associations and professional bodies, for instance sharing data, developing a marketplace-style gap analysis to understand the skills required (demand) and the skills available among learners (supply), then defining and delivering the required interventions.

- **They develop the learning ecosystem** to hold and manage the learning process and content; often starting small and building from there.

- **They continually reskill and build confidence in their tutors**, so they are conversant with current business issues, the capabilities required of professionals, the available learning technology tools and the characteristics of their learners and are comfortable evolving their teaching to cater for these changes.

- **They proactively, openly and regularly review and learn lessons**, which at the time of writing, for a significant minority of educators means responding to the approach they had to take, often with haste, to respond to the impact of Covid-19.

- **They embed sustainability and integrated thinking** as an integral part of the business model, from governance and strategy through to all downstream activities.

- **They bring stakeholders on the education journey** with them, thereby overcoming risks associated with false understanding of an issue (face validity), this is particularly important when seeking investment or selling programmes linked to L&D innovation.

This toolkit, while important to educators, is useful for learners to understand and, where relevant, they should contribute to its application.
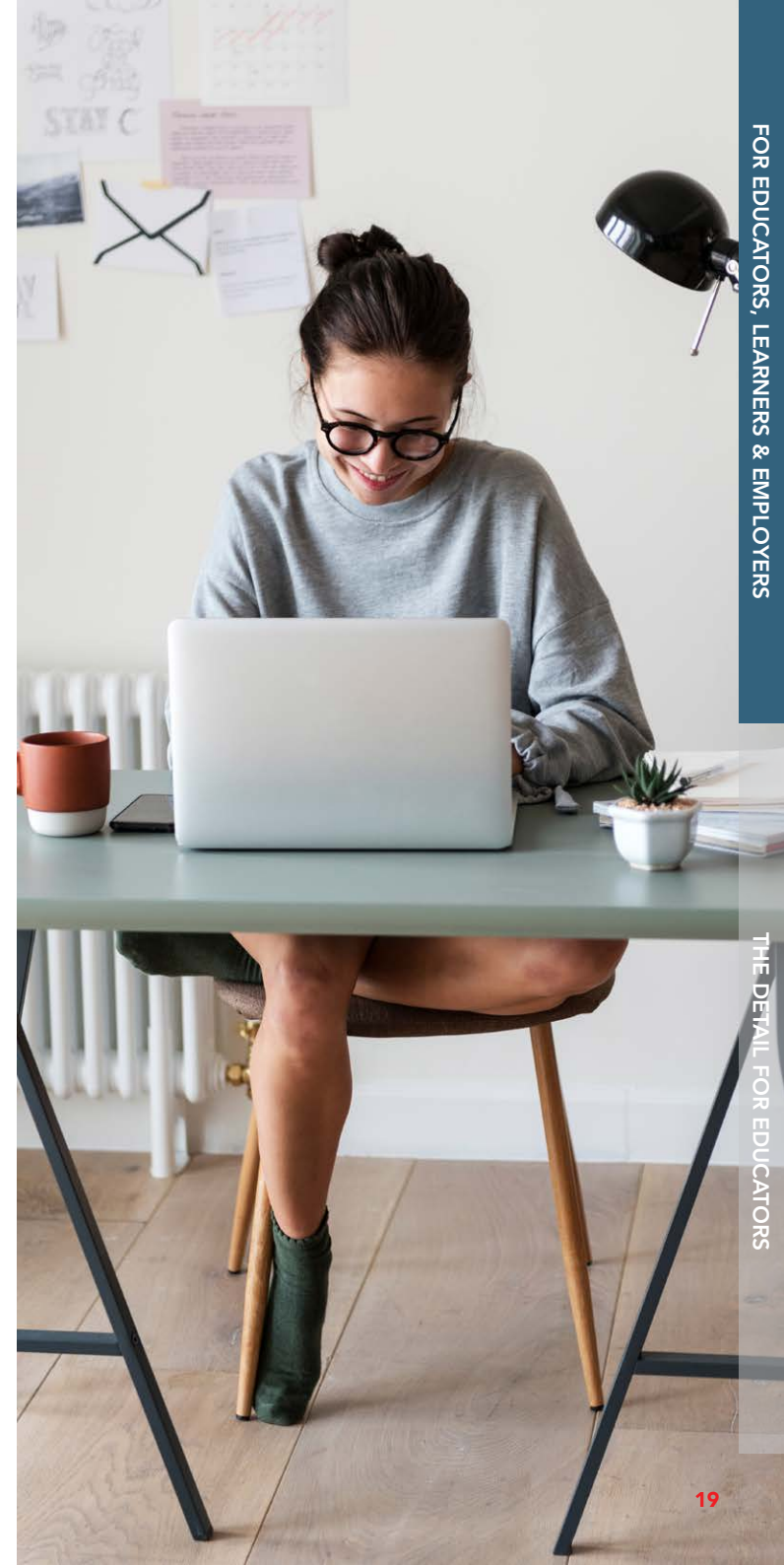
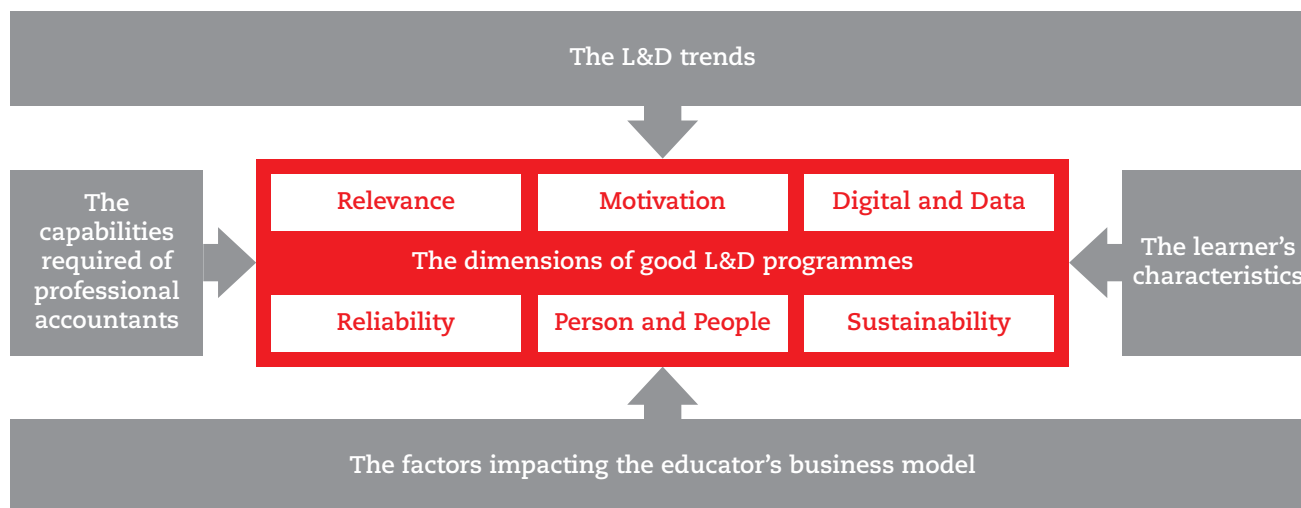# 2. **The dimensions:** their **importance** and an **action plan**

Our research has identified that highly effective L&D programmes consistently exhibit six interconnected qualities or features that we've termed 'dimensions'.

These dimensions (see Figure 2.1) include learner characteristics, and will leave educators well-placed to manage risks, realise opportunities, and thrive in a fast-changing environment. While educators should embed the dimensions across their end-to-end business, learners should consider how well their L&D programme demonstrates them (see Box 2.1).

Our development of the dimensions drew upon our survey of learners and educators, who were asked to identify features of good L&D, and the principles of quality assessment set by the International Federation of Accountants (IFAC) (IEASB 2012) (see Box 2.2).

FIGURE 2.1: The professional education ecosystem – the dimensions of good L&D programmes

The L&D trends

The capabilities required of professional accountants

Relevance	Motivation	Digital and Data
The dimensions of good L&D programmes		
Reliability	Person and People	Sustainability

The learner's characteristics

The factors impacting the educator's business model

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS
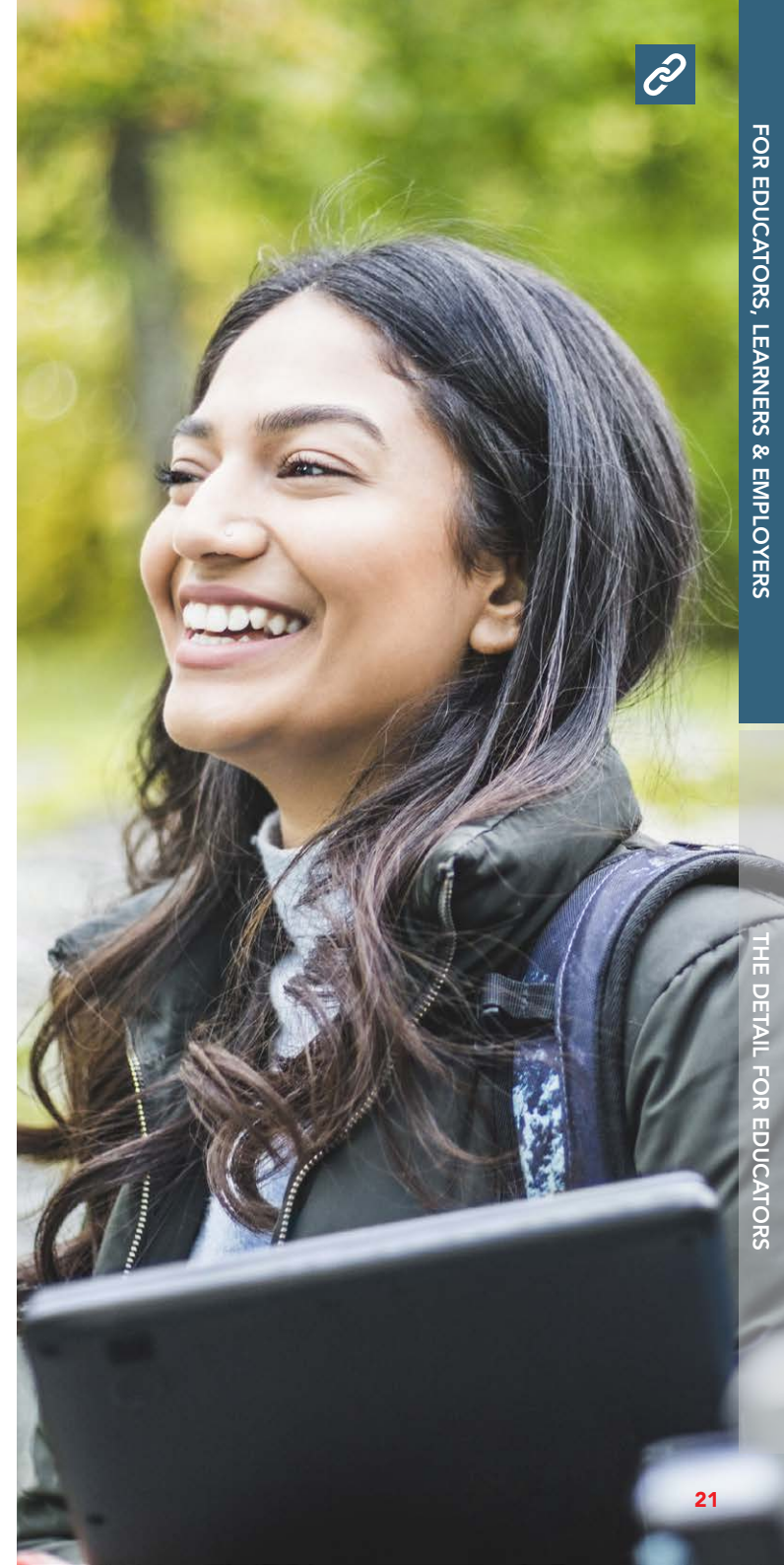
Box 2.1: The six dimensions

DIMENSION	IMPORTANCE	IMPLEMENTATION GUIDANCE FOR EDUCATORS
RELEVANCE: meeting learner and stakeholder needs	When the purpose of learning for the learner and their stakeholders is met, then this should lead to greater learner programme satisfaction and effective capability development. What constitutes 'relevance' is likely to differ between learners, for instance in pedagogy, timing, combination of capabilities required, and method of learning.	Engage with learners and their stakeholders to understand their purpose and learning preferences, from which to plan and set expectation. Supported by metadata for ease of management employ multiple learning approaches that fulfil the learning requirements of: ■ timeliness ■ actionable according to purpose ■ flexibility ■ modularity ■ ability to integrate different capabilities (See section 3.3.1).
RELIABILITY: achieving learning outcomes that are trusted irrespective of different learning approaches for a given capability or learner	When learning is deemed reliable, trust in the learner's capability and the programme is more likely. Reliability is reduced by: ■ the controllability of learner characteristics, eg L&D programmes can probably accommodate differing prior education experiences that affect L&D entry competence, whereas it's more difficult to adapt for different learner attitudes ■ the nature of the capabilities and their evolution. New capabilities can create uncertainty for programmes and the more subjective ones are harder to validate.	Develop and regularly update your learning outcomes framework. It should define the capability together with the success criteria used to monitor progress, irrespective of the learning approach. Progress monitoring should be continuous and explain: ■ how validation (proof of progress) is done, including any associated inherent subjectivity and uncertainties to help manage expectations of confidence in the learning and its outcomes ■ date stamping (indicating when competence for a learning outcome was achieved) to help provide a sense of currency, which is of particular importance for those professional expertise capabilities that are subject to rapid change, eg tax ■ how quality is measured through graded achievement (see Box 2.2). Manage expectations, especially limitations, through clear communication.

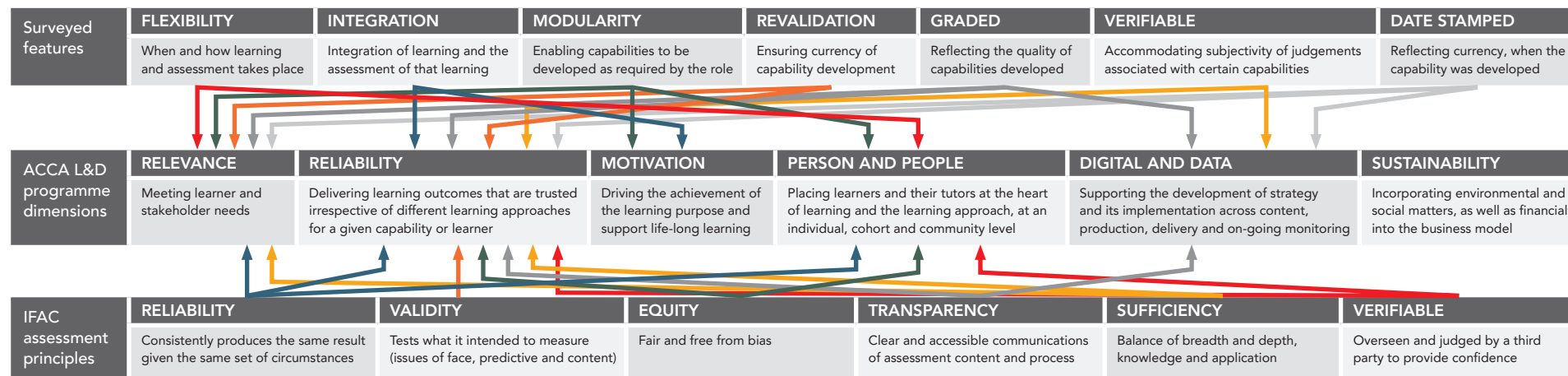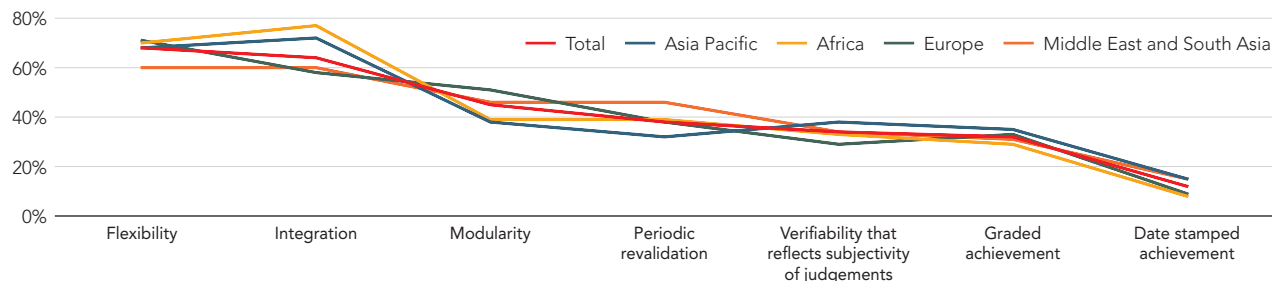## Box 2.1: The six dimensions (cont.)

DIMENSION	IMPORTANCE	IMPLEMENTATION GUIDANCE FOR EDUCATORS
MOTIVATION: driving the achievement of the learning purpose and supporting lifelong learning	To remain relevant, learners will need to be strongly driven to achieve the capabilities required for continual development (see Figure 13).	For identified capabilities, especially drive and collaboration, develop a S.M.A.R.T. plan (specific, measurable, actionable, relevant and timely) with continual formative and summative assessment together with feedback for learners to assess and continually improve their progress. Aim for learning that is engaging; often this includes personalisation (see subsection in section 3.3.2 on personalisation).
PERSON AND PEOPLE: placing learners and their tutors at the heart of learning and the learning approach, at an individual, cohort and community level	Learning is all about developing people, so must have the individual learner at the heart but should also recognise that we operate in collaboration with others, so the broader learning community and cohorts must be considered too. Those facilitating learning are equally important, eg tutors are crucial to the successful implementation of innovation or other changes, such as developing new capabilities.	Create opportunities for teamwork activities, where learners can develop through interaction with their peers, and reflect on their own strengths and weaknesses across the capabilities (see subsection in section 3.3.2 on personalised communities). Innovation and other change-related activity should position learners and their tutors as the designers, and employ a balanced combination of co-creation, collaboration and communication methodologies.
DIGITAL AND DATA: technology and analysis supporting the development of strategy and its implementation across content, production, delivery and monitoring	Use of digital and data will enable the development of programmes that can efficiently, effectively and with scalability meet the diverse needs of learners and capabilities.	Simplify existing data and digital L&D before introducing new elements. Focus solutions on the most effective interventions, eg learning ecosystems that enable learner engagement with the L&D content and with other learners, collect and analyse learner and programme data (see section 3.3.1 and section 3.3.4).
SUSTAINABILITY: the education business model employs an integrated approach to environmental, social and financial issues	Sustainability issues are likely to affect educators, either directly via accounting, governance and reporting requirements or because the educator is part of a larger value and supply chain. Further, sustainability, as regards both the content and the operating model, is of interest to many learners (see section 3.2), so is likely to be a factor when learners select their educator, as well as their employer.	Understand the value chain extending to suppliers and customers, from which to identify potential commitment areas to UN SDGs, environmental and social goals, plus intangible value risks and opportunities (see section 3.4.4).

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS

Box 2.2: The surveyed features of learning and assessment mapped to the dimensions

Legend: ■ Educator ■ Learner

Feature	Educator	Learner
Flexibility in when and how learning and assessment takes place	68%	68%
Integration of learning and the assessment of that learning	63%	67%
Modularity to enable capabilities to be developed as required by the role	46%	43%
Periodic revalidation requirement to ensure currency of capability development	38%	37%
Graded achievement, to reflect the quality of capabilities developed	34%	30%
Verifiability that reflects subjectivity of judgements associated with certain capabilities	32%	35%
Date stamped achievement, to reflect when the capability was developed	12%	12%
Don't know	2%	3%

The survey results indicate that both providers and learners are aligned on the important programme features, and there is broad alignment across different regions.

As part of our own validation of the dimensions, they have been mapped against the above survey results and IFAC's principles for quality assessment, with which professional accountancy bodies wishing to be IFAC-recognised must comply.

Line chart legend: Total, Asia Pacific, Africa, Europe, Middle East and South Asia. Categories: Flexibility, Integration, Modularity, Periodic revalidation, Verifiability that reflects subjectivity of judgements, Graded achievement, Date stamped achievement

Surveyed features	FLEXIBILITY	INTEGRATION	MODULARITY	REVALIDATION	GRADED	VERIFIABLE	DATE STAMPED
	When and how learning and assessment takes place	Integration of learning and the assessment of that learning	Enabling capabilities to be developed as required by the role	Ensuring currency of capability development	Reflecting the quality of capabilities developed	Accommodating subjectivity of judgements associated with certain capabilities	Reflecting currency, when the capability was developed

ACCA L&D programme dimensions	RELEVANCE	RELIABILITY	MOTIVATION	PERSON AND PEOPLE	DIGITAL AND DATA	SUSTAINABILITY
	Meeting learner and stakeholder needs	Delivering learning outcomes that are trusted irrespective of different learning approaches for a given capability or learner	Driving the achievement of the learning purpose and support life-long learning	Placing learners and their tutors at the heart of learning and the learning approach, at an individual, cohort and community level	Supporting the development of strategy and its implementation across content, production, delivery and on-going monitoring	Incorporating environmental and social matters, as well as financial into the business model

IFAC assessment principles	RELIABILITY	VALIDITY	EQUITY	TRANSPARENCY	SUFFICIENCY	VERIFIABLE
	Consistently produces the same result given the same set of circumstances	Tests what it intended to measure (issues of face, predictive and content)	Fair and free from bias	Clear and accessible communications of assessment content and process	Balance of breadth and depth, knowledge and application	Overseen and judged by a third party to provide confidence

Source: ACCA survey of learners and educators, and IFAC assessment principles from IAESB 2012.

3. The detail for educators: what the drivers mean for learning and development

Learners should be confident that their educators are competent with the ingredients and recipe of L&D for a good outcome, and the educators most committed to L&D do have this competence.

Our education experts agree that success is largely dependent on how well combined are the ingredients of subject domain and learner characteristics, together with the recipe of learning pedagogy.

1. **Subject domain:** the knowledge and skills that need to be acquired, and for professional accountants these are the capabilities they required to be successful in the roles they perform (see Figure I3: ACCA Career Navigator).

2. **The learner's characteristics:** including the learner's prior educational successes and attitude to learning, which affect how, when and where new learning happens.

3. **Learning pedagogy:** this requires an approach to L&D that accommodates the subject domain and the learner's characteristics, as well as the L&D trends, and the economic, social and environmental factors affecting the educator's business model and strategy.

In this section, we inform educators on the ingredients and recipe, their change drivers and make recommendations that support good L&D outcomes.

FIGURE 3.1: The professional education ecosystem

The L&D trends

| Co-created and co-delivered learning ecosystems | Personalisation, communities and personalised communities | Formal, non-formal and informal approaches | Digital and data to create, deliver and measure |

| The capabilities required of professional accountants | The dimensions of good L&D programmes | The learner's characteristics |

| Evolving regulation | Education economics | Lessons from Covid-19 | Sustainability matters |

The factors impacting the educator's business model

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS

26

3.1 The capabilities required of professionals

ACCA's research (ACCA 2021a) suggests that in the dynamic world of business, with its multiple stakeholders, professionals need proficiency across seven core capabilities, which include some uniquely and distinctively human capabilities of behaviour and mindset (see Box 3.1).

It is mostly in these distinct and unique human capabilities that our survey findings suggest educators should focus L&D efforts. Our survey asked educators and learners to identify up to five capabilities where most development was required in learners to achieve the proficiency expected of a qualified professional relatively early in their career[3]. Survey participants were then asked whether they believed the capability was incorporated within L&D programmes, whether experienced as a learner or delivered as an educator (see Box 3.2).

FIGURE 3.2: The professional education ecosystem: the capabilities required of professionals

The L&D trends

| Co-created and co-delivered learning ecosystems | Personalisation, communities and personalised communities | Formal, non-formal and informal approaches | Digital and data to create, deliver and measure |

The capabilities required of professional accountants → The dimensions of good L&D programmes ← The learner's characteristics

| Evolving regulation | Education economics | Lessons from Covid-19 | Sustainability matters |

The factors impacting the educator's business model

3   ACCA defines 'proficient' as professionally qualified with a minimum of three years' experience gained during the journey to qualification, and with some post-qualification experience where insight, drive and collaborative capabilities were further developed.

Box 3.1: ACCA's seven core capabilities defined

In 2021, ACCA's research (ACCA 2021a) provided the basis for identifying the seven capabilities required of professionals. The ACCA Career Navigator (ACCA n.d.a) defines the capabilities and explains where they are addressed within ACCA's lifelong learning programme of qualification and continued professional development. The *italicised* content below highlights the essential human capabilities of the professional.

THE CAPABILITIES	WHAT DEMONSTRATING THE CAPABILITY MEANS
COLLABORATION	*Engaging effectively with internal and external stakeholders, communicating clearly, being inclusive and influencing with impact.*
DIGITAL	Proficiently and *ethically* using existing and emerging data technologies, capabilities, practices and strategies.
DRIVE	Being *determined, motivating and developing oneself and others* to achieve stretching goals, being *curious* and open to new approaches, and *acting with integrity.*
ETHICS	Acting in accordance with fundamental principles of *professional and personal ethical behaviour*; ensuring the use of appropriate ethical frameworks and compliance with laws and regulations.
EXPERTISE	Drawing upon knowledge and *experience*, applying technical expertise.
INSIGHT	*How one thinks and operates at an individual level* in the organisational context: accurately analysing information, generating new ideas, making clear decisions, organising work, focusing on key priorities and achieving timely results.
SUSTAINABILITY	Applying *integrated thinking* and action to create, protect and communicate long-term value for the organisation, environment and society.

Source: ACCA n.d.a

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS

Educators and learners were asked to identify the capabilities where most development was required in learners to be a proficient professional and whether they were incorporated within L&D programmes.

Box 3.2: Capabilities requiring most development among learners and capability inclusion in programmes survey results

The views of educators

Within the top 10 there are six capabilities that arguably are uniquely human. Defined by the ACCA's Career Navigator (ACCA n.d.a; see Figure 13) two relate to collaboration, one to sustainability and ethics when combined with critical thinking, and three to drive.
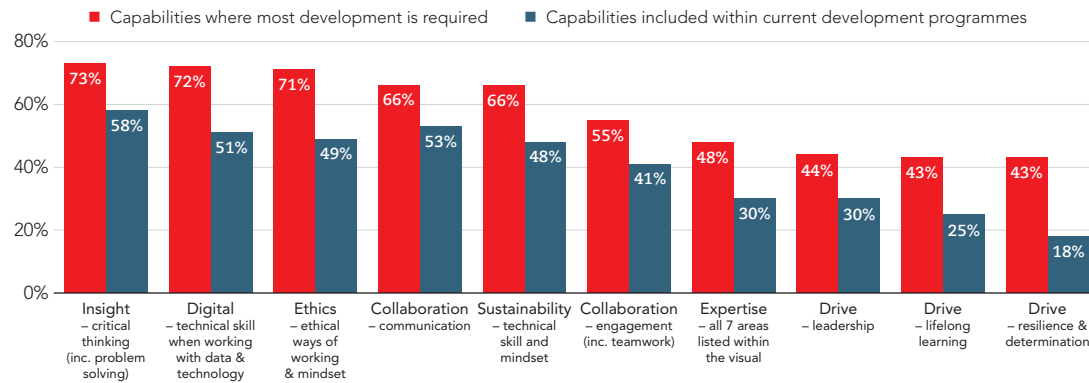
The views of learners

Within the top 10 there are five capabilities that arguably are uniquely human. Two relate to collaboration, one to sustainability and ethics when combined with critical thinking, and two relating to drive.
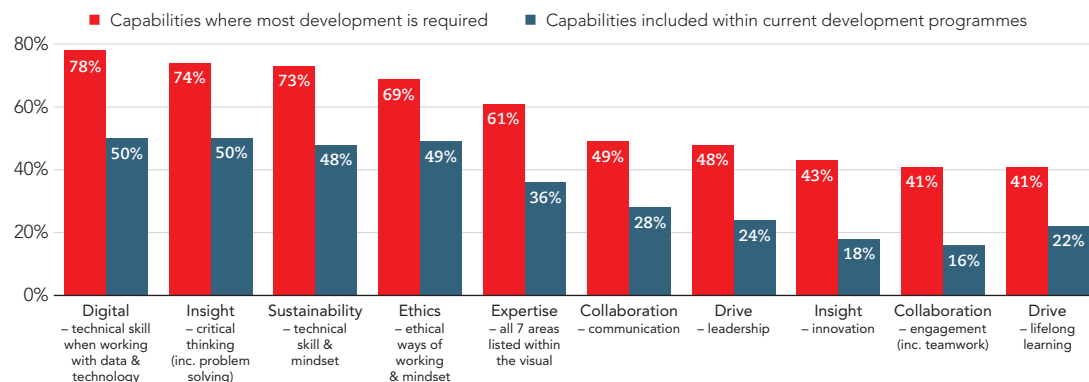
The views of educators and learners presented together

	EDUCATORS Most development required	EDUCATORS Capabilities currently included	LEARNERS Most development required	LEARNERS Capabilities currently included
Insight – critical thinking (inc. problem solving)	73%	58%	74%	50%
Digital – technical skill when working with data & technology	72%	51%	78%	50%
Ethics – ethical ways of working & mindset	71%	49%	69%	49%
Collaboration – communication	66%	53%	49%	28%
Sustainability – technical skill & mindset	66%	48%	73%	48%
Collaboration – engagement (inc. teamwork)	55%	41%	41%	16%
Expertise – all 7 areas listed within the visual	48%	30%	61%	36%
Drive – leadership	44%	30%	48%	24%
Drive – lifelong learning	43%	25%	41%	22%
Drive – resilience & determination	43%	18%	-	-
Insight – innovation	-	-	43%	18%

Source: ACCA survey of learners and educators

Starting with these aforementioned human capabilities, our evaluation yields several key issues and potential next steps.

THE CAPABILITY ISSUE AND RELATED L&D DIMENSION(S)	ISSUE EXPLAINED	POTENTIAL NEXT STEPS
Developing uniquely human capabilities – RELEVANCE, RELIABILITY	Human capabilities are complex by nature, and many educators are unequipped to understand and/or to respond to support their development. Nonetheless, a number of specific capabilities are crucial to being an effective professional (see Box 1.1, Box 3.2 and Box 3.3).	Develop the L&D approach to considering the essential capabilities by encouraging collaboration between educators, HR functions and employers to define precise development needs and implement solutions: ■ HR specialists are experienced in evaluating the essential capabilities. ■ Employers are expert in defining what they need, how and when. ■ Educators provide education methodologies.
Demand versus supply – RELEVANCE, RELIABILITY	Encouragingly, the top-ranking capabilities requiring most development are also, in the main, incorporated within L&D programmes, eg critical thinking and problem solving, digital skills, ethics and the professional accountant's expertise. For the capabilities deemed to become more important as a career evolves, eg communication, teamwork, leadership, resilience and determination, and innovation, there are distinct gaps between the requirements for development and their inclusion within initial development (IPD) programmes. Worryingly, a significant minority of educators believe that these areas are best developed via a career, as part of continued professional development (CPD), but for employers these capabilities are also required, in some capacity, earlier in careers and within IPD (see Box 3.4).	Incorporate capabilities of collaboration and drive, even if they do not appear to be directly relevant at the time, eg professional accountancy exams may not include teamwork, but the ability to work well in teams will aid appreciating different stakeholder perspectives, which is a core part of exams and practical experience requirements of professional accountancy programmes. Co-deliver with business and industry experts (see Box 3.5).
Educator did versus learner received awareness gap – RELEVANCE, RELIABILITY, MOTIVATION	As compared to educators, learners are less aware of the capabilities being developed including the rationale for them, or do not appreciate the methods used as being effective in developing the capabilities, eg engagement and teamwork.	Embed awareness and appreciation campaigns throughout the programme for the capabilities being developed and the difference they make when well discharged for business and society (see Box 3.6).
Short and long-term disconnections – RELEVANCE, RELIABILITY	Driven by resource constraints of employers and educators, learning often focuses on assessment success. Yet the long-term goal is for complete, rounded professionals.	Share the resourcing burden, expand the L&D mindset and extend action beyond exam training, for instance through blended learning programmes focusing on practical experience; therefore, call on employers and professional bodies for support. Set the expectation that L&D will be a continuous journey (see Box 3.5).

THE CAPABILITY ISSUE AND RELATED L&D DIMENSION(S)	ISSUE EXPLAINED	POTENTIAL NEXT STEPS
Balancing the capability breadth and depth – **RELEVANCE, RELIABILITY, MOTIVATION, PERSON AND PEOPLE**	There is the pressure of a growing L&D syllabus without corresponding scope to extend programme duration. Different roles require capabilities in differing combinations and often at different times, necessitating many permutations for L&D interventions (see Box 3.7).	Design and deliver L&D with flexible learning in mind: ■ combining and integrating different capabilities ■ requiring the learner to undertake learning with the appropriate method and at the appropriate time for them ■ focus tutor interaction on the highest priority learning need. (See section 3.3.1) Pivot L&D to be appreciated as part of continuous learning that is undertaken at the appropriate stages and with appropriate methods across the career journey.
Expertise is an underpinning component for many of the other capabilities – **RELEVANCE**	The ACCA Career Navigator's expertise capability supports understanding and connecting complex business issues and is required when discharging other capabilities, eg expertise underpins successful application of insight and professional scepticism (Box 3.8). However, the importance of connecting professional accountancy expertise with other capabilities is not appreciated by a significant number of learners and educators.	Engage with professional bodies and employers to understand the expertise toolkit and how it connects with the other capabilities is required at each stage of the qualification and CPD process, and across a career.
The industry and geographical profile matter – **RELEVANCE, RELIABILITY, PERSON AND PEOPLE, MOTIVATION**	Different industries or geographical markets have different business and finance focuses, and therefore differing capability and L&D requirements (see Box 3.9).	Research the industry profile of where learners are working to understand the capabilities they need and the learners' characteristics.
Employers are not the only stakeholders – **RELEVANCE, MOTIVATION, PERSON AND PEOPLE**	There are many reasons underpinning the purpose of learning, it isn't always about employability, and sometimes it's driven by other stakeholders (see Box 3.10).	Understand the dynamic drivers behind the learning purpose and need, including who is driving learning (see section 3.2).

Box 3.3: Example of some of the essential skills where development is required

'...preparation for the work of the future requires an emphasis on a different set of skills... judgment, critical thinking, creativity and abilities to interpret fluid situations and interact with others. To prepare students for this world of work, education will need to stress 'foundational middle skills... adaptability, problem-solving, common sense and team-building skills. ...how interactive they are, how much the problems reflect 'real life,' how much teamwork is required and how team dynamics are assessed.'

Source: Goldman Sachs 2016

Box 3.4: Opinion on the role of educators relative to that of others

'Professional development is like passing your driving test. If you want to drive properly, pass your test for basic competence, then continually improve... At the time of learning, for many learners, capabilities like leadership or critical thinking may not appear obviously relevant, and even if deemed relevant they don't easily lend themselves to exam forms of development and assessment...My job is to help students pass the exam, the role of the accountancy body and employer is to make the exam syllabus relevant and provide experience'

Source: Participant, ASEAN-ANZ Roundtable

Box 3.5: Opinion and example of working together for continuous learning

'Learning must run alongside the continuous career journey. During the qualification process, we set expectation that qualification is only the starting point of the learning journey.

'In both qualification and CPD stages of this journey, we work with a variety of employers integrating their business issues into the programme. These business issues often require several of the capabilities, which helps learners appreciate the interconnectedness between them in a real-life context.

'Employers are involved in a variety of ways, from sharing real business problems in which learners work together and sometimes compete in developing solution options; influencing decision-making to select the appropriate strategic solutions; to monitoring and providing on-going interventions.'

Source: Adapted from the comments of several participants, ASEAN-ANZ, India, China Roundtables

Box 3.6: Example of raising appreciation for the capabilities

'Alumni are part of our capability achievement awareness campaigns. Alumni are asked to describe the difference the L&D content and approach have made: specifically, what capabilities have been gained and how they have helped achieve learning purpose. This approach motivates, supports L&D relevance for learners and helps us appreciate L&D success. It has allowed us pivot away from surveys on how happy our current students are to what really counts – has learning purpose been achieved.'

Source: Participant, North American roundtable

Box 3.7: Opinion on the broadening role of the accountant

'The trainee accountant's role broadening, there's a greater demand for broad and deep business and soft skills. Organisations are looking for students who know how to think, are curious and adaptable. As educators it is very difficult to know how to incorporate content into a syllabus in a practical way'.

Source: Participant, UK Roundtable

Box 3.8 An employer's opinion of the importance of professional accountancy expertise

'When in business and faced with complex or unfamiliar matters, we find that the people who have completed professional training just shine. They will always revert back to the expertise components of their L&D. So over the course of a career, it's going to make a massive impact'.

Source: Participant, ASEAN-ANZ Roundtable

Box 3.9: Example of the importance of understanding geographical profile of the capabilities required

'Many of our entry level accountancy, business and finance processing jobs are based in the Philippines and India, this means the opportunity to understand aspects of expertise upon which to layer insight capabilities may be a weakness of our professionals based in other locations. Equally, these processing roles require some insight, eg to check that the work they are performing is answering the business request'.

Source: Participant, UK Roundtable

Box 3.10: Example of multiple stakeholders and their impact on capability development

'Exacerbated during Covid-19, in many geographies parents are increasingly becoming the buyers of L&D and for a significant minority the purpose of education is based on developing high levels of expertise or standing in a community, even if they are not the skills that employers are seeking'

Source: Pearson 2021; this opinion was supported by participants at several roundtable discussions

Survey participants were then asked how the capabilities could best be developed (Figure 3.3).

FIGURE 3.3: Survey results on the approaches to develop the capabilities

Educator and learner responses to the learning approaches that will best develop the capabilities required of sustainable business and finance professionals.

EDUCATORS	EXPERTISE	INSIGHT	COLLABORATION	DRIVE	ETHICS	DIGITAL	SUSTAINABILITY
Work experience or simulations	69%	62%	66%	59%	61%	59%	53%
Combined academic instruction and work experience	67%	58%	54%	51%	63%	49%	59%
Learning from peers and those with more advanced skills	63%	62%	77%	70%	64%	47%	57%
Combining learning and assessment of that learning	58%	49%	46%	48%	54%	47%	53%
Appreciation of the detail	52%	50%	39%	39%	43%	33%	39%
Appreciation of the big picture	46%	60%	41%	44%	45%	51%	56%
Artificial intelligence and/ or machine-led learning that adapts to the learner's skill level	39%	35%	29%	29%	25%	61%	35%
Gamification	18%	19%	24%	20%	20%	34%	17%
LEARNERS	EXPERTISE	INSIGHT	COLLABORATION	DRIVE	ETHICS	DIGITAL	SUSTAINABILITY
Work experience or simulations	70%	56%	60%	58%	65%	54%	59%
Combined academic instruction and work experience	64%	47%	43%	45%	51%	41%	46%
Learning from peers and those with more advanced skills	60%	55%	74%	56%	56%	43%	49%
Combining learning and assessment of that learning	55%	47%	41%	46%	47%	37%	46%
Appreciation of the detail	40%	40%	33%	31%	38%	22%	34%
Appreciation of the big picture	35%	49%	32%	41%	30%	44%	51%
Artificial intelligence and/ or machine-led learning that adapts to the learner's skill level	33%	34%	22%	28%	20%	65%	33%
Gamification	15%	14%	19%	22%	15%	28%	13%

Source: ACCA survey of learners and educators

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS

What's clear is that there's no one magic solution

A combination of approaches are required to develop the various capabilities, a view shared by others researching this same theme (McKinsey 2021) (see Box 3.11)

The **70:20:10 learning model** (see Figure 3.4) is very much alive and features within the top three ranking approaches. Good L&D approaches all have learners, the workplace, communities as part of a varied and integrated methodology. This will incorporate continual improvement interventions throughout, based on the formative and summative assessments incorporated within the programme. In doing so, these educators are improving L&D reliability and relevance, person and people focus, and are therefore likely to be more motivational.

FIGURE 3.4: The 70:20:10 learning model defined

Source: Slidemodel n.d.

Programmes will develop relevant capabilities when employing the appropriate **balance of both the 'big picture' and the detail**. For each of the capabilities this will vary, for instance professional accountancy expertise has an emphasis on attention to detail, because that relates to the technical tools of the profession. For sustainability, insight and digital skills, the weighting is balanced towards appreciating the big picture. In practice, both are needed together for the individual to be an effective professional (see Box 3.12).

Box 3.11: Opinions on building workforce skills at scale

The 2021 McKinsey survey of employers outlines the variety if approaches develop employee skills.
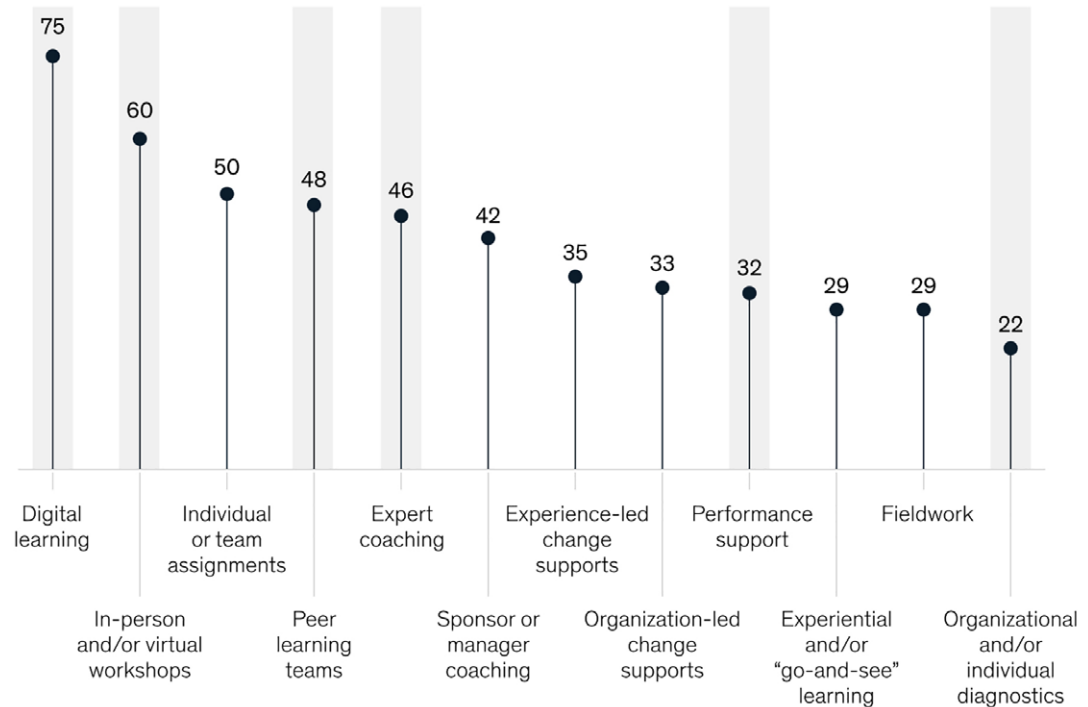
Source: McKinsey 2021

Box 3.12: Example of balancing the big picture with the detail

The consensus amongst educators participating in the roundtables was that educators should encourage their learners to:

1. ask the 'big picture' business questions that define the business problem
2. use detailed expertise and insight approaches to gather data and analyse it
3. develop added-value solutions to the 'big picture' problem
4. implement those solutions using collaboration and insight capabilities, for instance those related to governance, project management, influence and negotiation capabilities.

In each of these steps, educators agreed that they constantly challenge learner thinking by posing reflective questions such as these.

■ Are you meeting the stakeholder's needs?
■ What risks are associated with the approach you took? What could you do to mitigate them?
■ What have you done well? How will you ensure you continue doing this?

Source: Consolidated opinion from across several roundtables

Box 3.13: Example of peer assessment

To provide opportunity to learn from others, ACCA's Ethics and Professional Skills online learning module includes peer assessment, requiring learners to present their work, review and provide feedback on the presentations of others, and use this to build a plan for continual improvement.
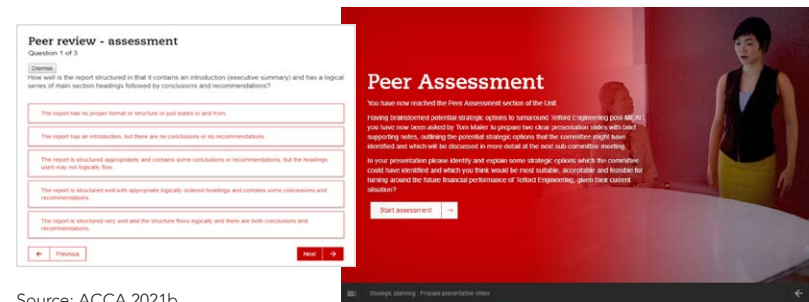
Source: ACCA 2021b

Peer learning, despite being a powerful L&D tool, was reported to be generally underused by the education experts we consulted, especially within non-university L&D settings. Through peer learning, learners are made more responsible for their learning and it provides an opportunity to understand their position on the follower-to-leader team-worker scale. Further, feedback from peers and tutors, followed by self-reflection, can be incorporated to drive continual improvement (see Box 3.13). As an L&D tool, good peer learning supports dimensions of motivation and demonstrates a focus on people, through the peer group approach, and the person, through the feedback to individuals.

For educators, successful peer learning requires an open coaching mindset because the approach focuses more on being the facilitator and moderator than on being the instructor. Learners, especially the more reserved learners, need to buy-in to peer learning, therefore any introduction of peer learning must be supported with engagement and training. Data and logistics might also be a concern, especially for enhanced peer learning that includes provision of structured psychometrically validated feedback or creating balanced cohorts to stretch learning for individual learners. While initially financial investment might be high to achieve the data and digital dimension of peer learning, there is potential for great rewards. These rewards are broad, deep and long-lived because learners are integrating learning about themselves and others (drive and collaboration) together with the more technical professional capabilities, hence they have greater L&D relevance and reliability.

A surprising finding from our research, and without significant difference between learners and educators or across age ranges, is the low positive response rate to **gamification and AI** as potential approaches to develop a broad range of capabilities. On deeper reflection, this appears to be a story that will change in the near future, but for now there appear to be two main explanations for the survey result:

■ lack of understanding of what gamification and AI are and can achieve, illustrated by the anomaly of elevated responses for developing digital capabilities
■ fear among tutors that the technology will be complex or that it will make the tutor role redundant.

As we explore later in this research, the reality is that gamification and AI can directly support the development of Bloom's taxonomy's higher-order skills, or indirectly do so by being used for Bloom's taxonomy's[4] lower-order skills or L&D processes, thereby freeing up tutor time for the higher-order skills (see section 3.3.4, subsection on AI and gamification).
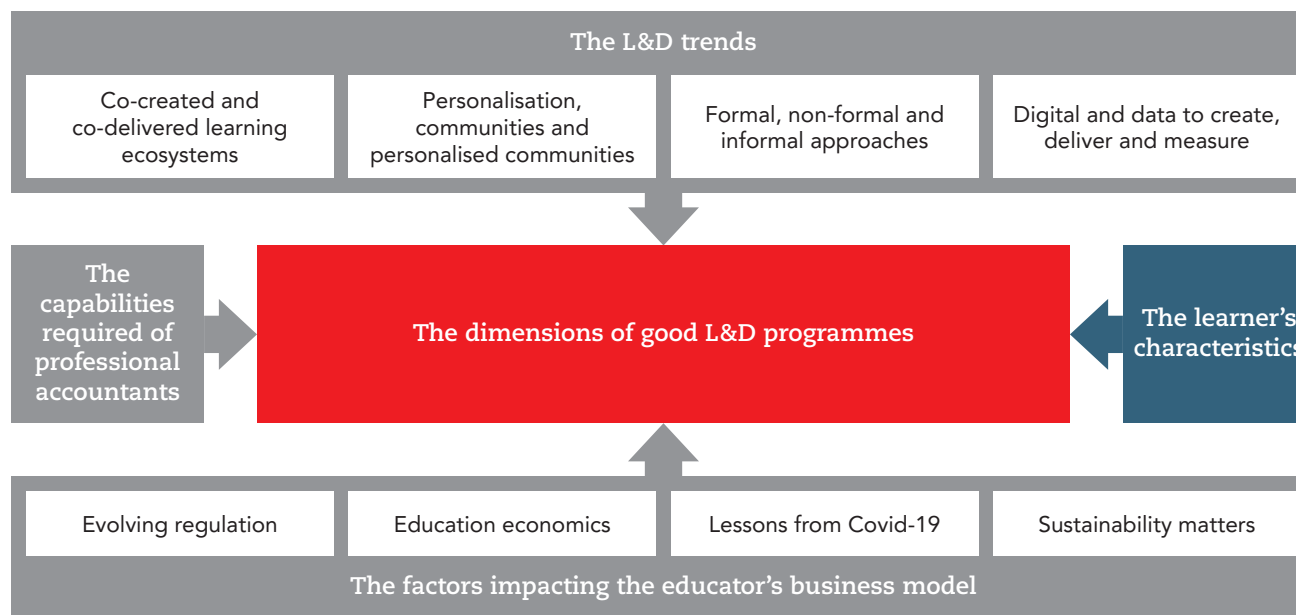
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4   Bloom's taxonomy is a hierarchical, and controversial, ordering of cognitive skills that can, among countless other uses, help teachers teach and students learn (TeachThought University 2022).

3.2 The learner's characteristics

If learners are the focus of learning, then we would expect educators to consider their diverse characteristics as part of programme design. The reality is that educators do recognise the importance but our survey identified that for many reasons educators struggle to reflect them in their programmes (see Figures 3.6, 3.7 and 3.8).

FIGURE 3.5: The learning and development ecosystem – The learner's characteristics

The L&D trends

| Co-created and co-delivered learning ecosystems | Personalisation, communities and personalised communities | Formal, non-formal and informal approaches | Digital and data to create, deliver and measure |

The capabilities required of professional accountants → **The dimensions of good L&D programmes** ← The learner's characteristics

| Evolving regulation | Education economics | Lessons from Covid-19 | Sustainability matters |

The factors impacting the educator's business model

Educators were surveyed on the characteristics most important when designing L&D programmes, whether they considered them, and if not why not.

FIGURES 3.6, 3.7 and 3.8: Survey results on the learner characteristics of importance to L&D and why some educators do not consider them

Educators consider the following learner characteristics of most relevance when designing programmes:
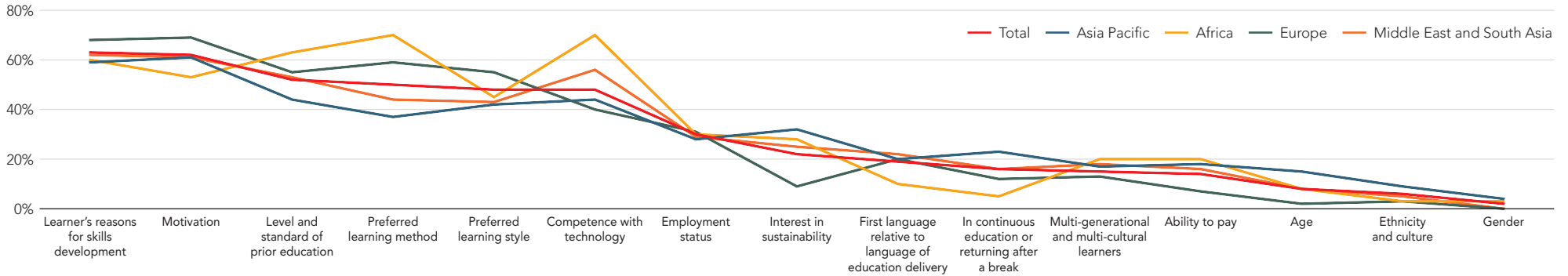
In practice, many educators struggle to reflect them all...

- Yes, all of them
- Yes, but only some of them
- No
- Don't know
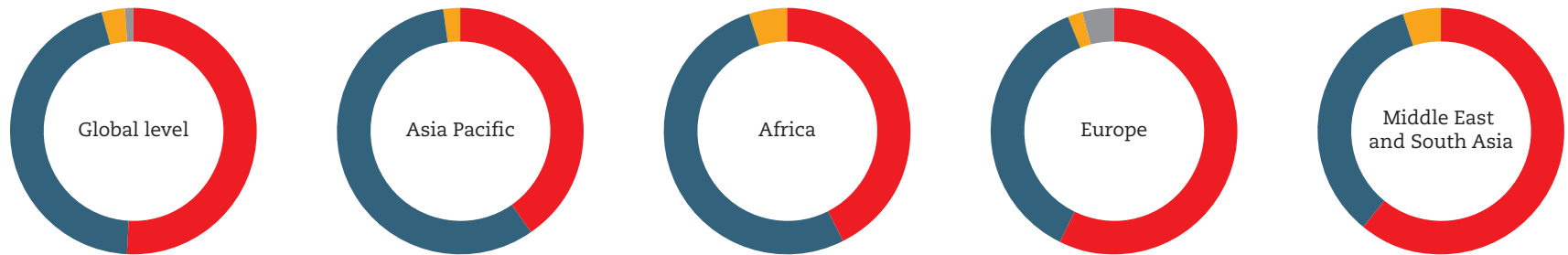
...for the following reasons:
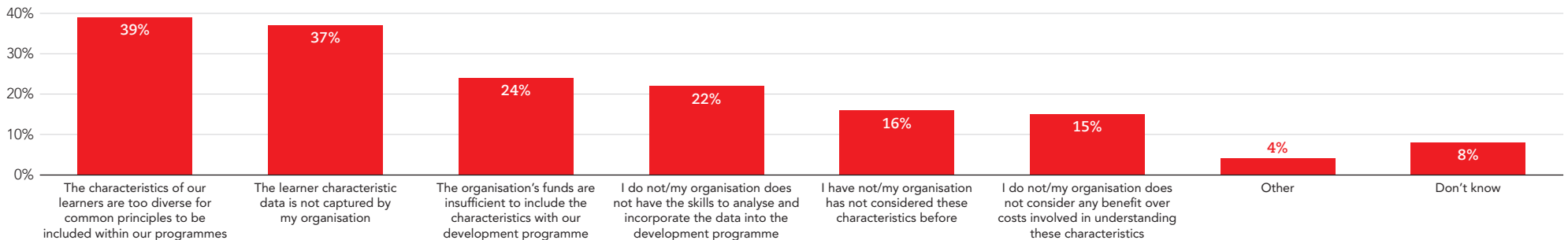
Source: ACCA survey of educators on the learner characteristics

Evaluation of the survey provides understanding of the key issues together with potential next steps.

CHARACTERISTIC ISSUE AND RELATED L&D DIMENSION(S)	ISSUE EXPLAINED	POTENTIAL NEXT STEPS
Know your learner is the key to success – **PERSON AND PEOPLE, RELEVANCE, SUSTAINABILITY**	Understanding the learner characteristics at an individual or even at a cohort level can make a considerable difference to the overall approach taken to the programme, such as directing resource allocation to the most effective interventions to meet learner needs (see Figures 3.9 and 3.10).	Engage to understand learners, eg through surveys and planning sessions to develop interventions: ■ create a tailored S.M.A.R.T. plan for the learner ■ identify role models to drive aspirations and ambitions ■ adapt the programme, say for learners whose primary goal is to be professionals versus those seeking some business, finance and accountancy development for secondary reasons (eg entrepreneurs) ■ set expectations for what interventions can and, importantly, can't achieve.
Understanding learning purpose – **RELEVANCE, MOTIVATION**	The reasons for seeking skills development are intrinsically linked to motivation and in turn this is connected to resilience and determination, therefore better outcomes (see Box 3.14).	
Technology and sustainability are about content and delivery – **DATA AND DIGITAL, SUSTAINABILITY, PERSON AND PEOPLE**	Learners want to learn about technology and sustainability, but also want to appreciate how they apply to the educator's operating model (see Box 3.15).	Embed social and environmental matters into the business model (see section 3.4.4) and communicate this ethically to learners.
Generational impact on L&D expectations – **PERSON AND PEOPLE, RELEVANCE, RELIABILITY, MOTIVATION**	The range of people requiring skills development in the next five years is expected to widen, from 18 to 80 (CarringtonCrisp 2022), but will be weighted towards Generation Z. This raises questions of: ■ the capabilities that should be the focus of L&D programmes, eg generation Z are considered to be 'digital natives' while older generations are likely to have a wealth of experience ■ how the L&D approach can best reflect career plans, eg Generation Z are likely to take a portfolio approach to career development and change roles frequently (ACCA 2021c) ■ how do learners want to learn? (see Box 3.16).	Engage with official national and regional statistics, and research that maps generational, cultural and socio-economic profiles and learner profiles information that professional bodies and their regulators release. Thereafter, brainstorm opportunities, eg is there a cross-skilling opportunity between generations in the capability areas in which each requires development of one skill while being proficient in another?
Characteristics are not considered for a variety of reasons – **RELIABILITY, DIGITAL AND DATA**	There are limiting factors to understanding the learner: ■ access to information, eg GDPR ■ analysis capability ■ resource to create the ideal methodology (see Figure 3.8).	
Recruitment into the profession changing the profile – **PERSON AND PEOPLE, RELEVANCE, RELIABILITY**	A direct consequence of attractiveness and recruiting from a wider prerequisite skills base changes the capabilities most requiring development and/or the best L&D approaches.	Profile learners by engaging with: ■ regulator, trade and professional body reports outlining the profile of those entering the profession ■ learners and, as applicable, their employers, on their perceived strengths and weaknesses (see Box 3.17).

Learners were asked to list their top five reasons for seeking development, and the findings have been presented by region and age.
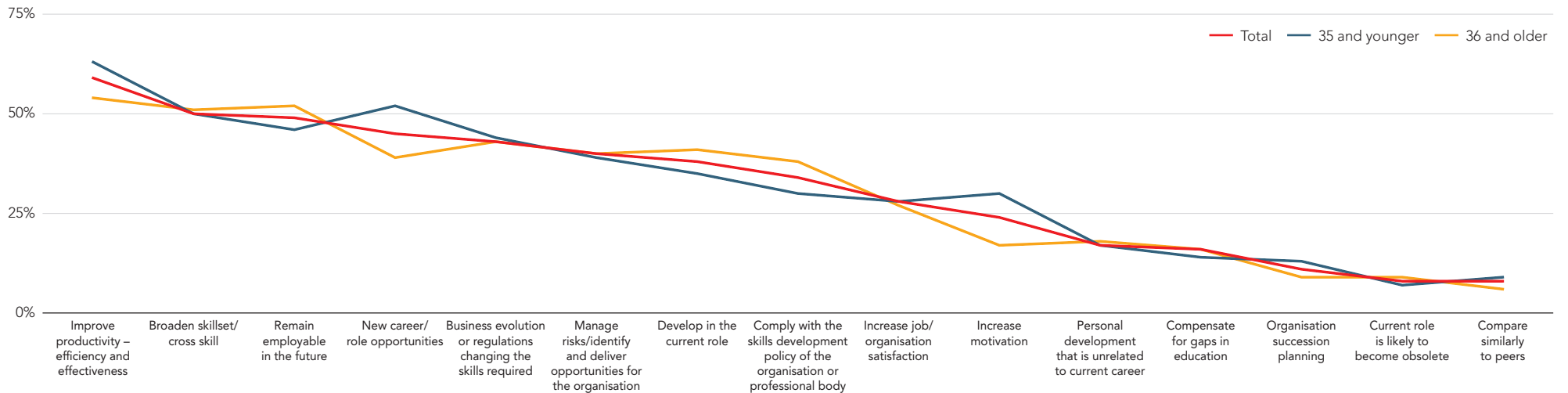
FIGURE 3.9 and 3.10: Survey results on why learners seek L&D

Regional analysis
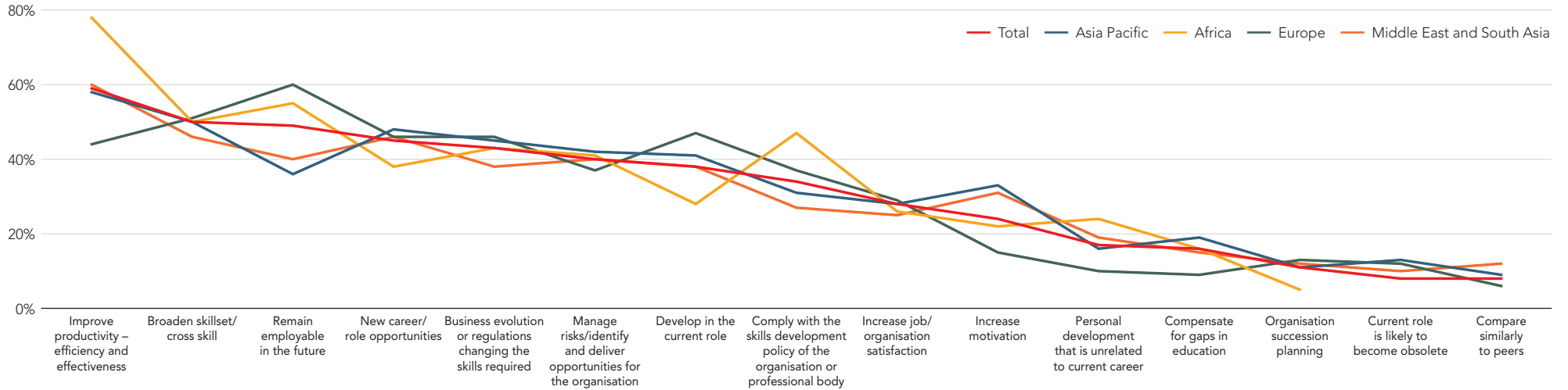
*Asia Pacific n=64, Africa n=58, Europe n=68, Middle East and South Asia n=52

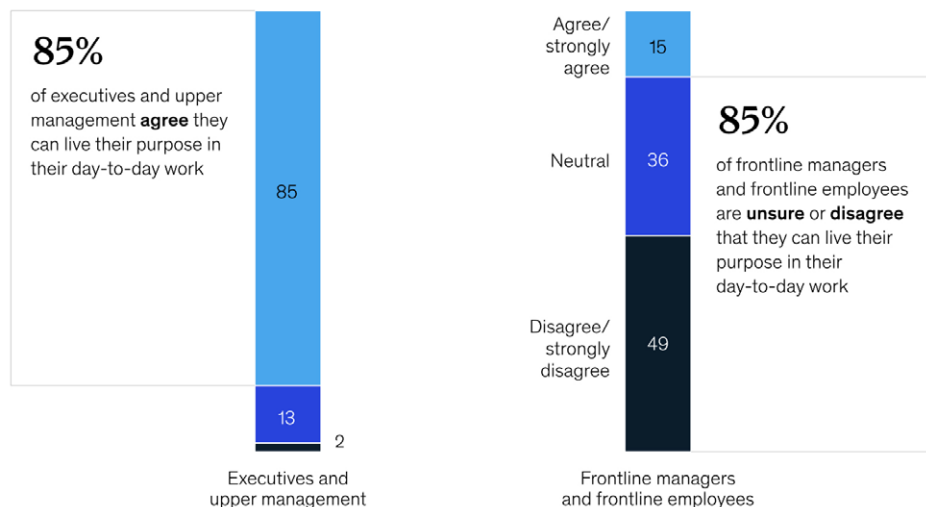Analysis by age

Source: ACCA survey of why learners seek L&D

Box 3.14: Survey results on understanding employee purpose and an example to support achieving it

Understanding purpose

A 2020 McKinsey survey of over 1,000 employees from the most junior to senior roles across an organisation, found that understanding the employee's purpose should be a central component to shaping L&D programmes. Of those surveyed 70% said their purpose stemmed from work, yet there were stark differences as to whether they can live that purpose in work.

A stark 'purpose gap' exists between upper management and the front line.

Living your purpose in day-to-day work, % of respondents

85% of executives and upper management **agree** they can live their purpose in their day-to-day work

Executives and upper management: 85, 13, 2

Agree/strongly agree: 15
Neutral: 36
Disagree/strongly disagree: 49

85% of frontline managers and frontline employees are **unsure** or **disagree** that they can live their purpose in their day-to-day work

Frontline managers and frontline employees

Source: McKinsey Individual Purpose survey, August 2020 (n = 1,021)

Source: McKinsey 2020

Knowing this information will help educators, especially those within employer L&D functions, understand the employee's relationship with the organisation's purpose – negative work and life outcomes for employees inevitably translate to negative outcomes for the business. Once this relationship is understood, L&D programmes can be shaped and adapted, and influence (not necessarily control) desired outcomes.

Example to support achieving purpose

Like many organisations during the pandemic, a company based in Bangladesh was forced to move to a 'working from home' business model. The activities and technological infrastructure of the business model supported working from home, therefore business leaders did not expect the negative impact this transition had on company loyalty and in turn productivity. The company surveyed and workshopped with employees to identify the precise factors impacting reducing loyalty, and this helped leaders realise that many employees valued their working community and missed it in when home working.

There has been an increase in job satisfaction following the introduction of a similar community, albeit online. There are additional features of direct access to the company's senior leaders and other teams for 360- degree sharing of ideas, updating staff on business changes, and pastoral interventions. This form of informal learning is increasing, in part thanks to readily available technology solutions, and is a cost-effective mechanism to for keeping employees engaged and developing their skills.

Source: Participant, MESA Roundtable

Box 3.15: Example of what learners want their educators to be known for

The CarringtonCrisp and LinkedIn survey of over 2,500 learners revealed that learners wanted their educator to be known for:

- enabling people from diverse backgrounds to have the opportunity to learn (26%)
- challenging world views with innovative and critical thinking (24%)
- focusing on social responsibility (23%)
- seeking a culture of enterprise, engaging with start-ups and social entrepreneurs (23%).

Source: CarringtonCrisp 2022

Box 3.16: Example demonstrating that learners do not want to be passive learners

While the examples relate to sustainability issues, they equally apply to other matters of interest to learners.

'Students have become the teachers in a global lesson takeover in "Teach the Teacher", a student-led campaign initiated by climate organisations SOS-UK, Mock COP26, EARTHDAY.ORG and Educational International. The initiative is designed to highlight the importance of climate education. Across 20 countries, pupils have replaced their teachers to lead lessons about up-to-date climate science in an effort to focus more on the lack of climate awareness in schools'.

Source: Walfisz 2021

Box 3.17: Analysis on changes in recruitment affecting L&D and an example of how to respond

ACCA's own research on the university sector suggests that:

- almost 4 out of 10 (37%) employers will consider a candidate with no Bachelor's degree but who has completed skills programmes with a leading employer (eg Google Career Certificates)
- one-third will consider a candidate without a Bachelor's degree, but with a professional certificate in a particular skill, and
- 31% will consider a candidate who has taken a number of short online courses with a reputable educator.

With so many entry routes to professional development programmes, educators will need to cater for a diverse starting base. Some educators gain understanding and address this issue using diagnostics.

'With the aim of driving richer experiences even before the course starts, we assess with the aim of raising to a similar level the capability competence of all learners. We provide adaptive diagnostic learning, delivered using digital solutions that also monitor engagement. For the learner, they have flexibility on when they learn, the approach sets out programme expectations and drives confidence for the course's prerequisite requirements. For us, we have a sense of how motivated the learner is and knowledge on how to adapt the course. This adaptive approach is used throughout our programme'.

Source: ACCA survey of employers and an interview with a leading educator based in China

FOR EDUCATORS, LEARNERS & EMPLOYERS

THE DETAIL FOR EDUCATORS

3.3 The learning and development trends

To provide L&D programmes that remain relevant and attractive, educators should be familiar with the current big trends (Figure 3.11):

- co-created and co-delivered learning ecosystems
- personalised communities
- formal, non-formal and informal approaches
- digital technology and data as enablers of quality education.

FIGURE 3.11: The professional education ecosystem – Current trends in L&D

The L&D trends

| Co-created and co-delivered learning ecosystems | Personalisation, communities and personalised communities | Formal, non-formal and informal approaches | Digital and data to create, deliver and measure |

The capabilities required of professional accountants → **The dimensions of good L&D programmes** ← The learner's characteristics

| Evolving regulation | Education economics | Lessons from Covid-19 | Sustainability matters |

The factors impacting the educator's business model

3.3.1 Co-created and co-delivered learning ecosystems

Learning ecosystems help educators accommodate growing demands from learners on what learning happens, when and how (Figure 3.12)

What exactly is a learning ecosystem? It is a data supported environment created to enable flexible, high-impact learning. Learning content can be combined in different ways, offered in multiple forms and times, often allowing learners to engage with each other online or in person, and can extend to mechanisms for recognition and recording of learning. Such systems have been used for a while by employer L&D functions and are growing in popularity with other forms of educator.

Features of learning ecosystems

Views from across the roundtables recommended that learning ecosystems can create scope for flexible higher-impact learning when the following features are incorporated:

- Modularisation, enabling programmes to be delivered in different combinations. There may need to be a core set of components that all learners complete, for instance to ensure a common foundational skill set base on which tailoring can be done reliably.

- Self-directed learning for the knowledge components of the programme, enabling tutors to direct effort to higher-order elements of Bloom's taxonomy, such as evaluation and making recommendations, and the more integrated capabilities.

- Alumni and employers telling the business story and providing work-experience.

- Learning that employs a templating approach where a learning outcome is the basis of the template:

  - for one learner the template is applied via one method of learning, say traditional instruction and for another learner a different method, say a project, is used

  - into which the content that will support that and other learning outcomes is integrated; these are termed vertically integrated courses.

'We create vertically integrated modules to combine different capabilities, so, for instance, in data analytics they offer a data element from an area of the learner's other specialism, eg social or environmental issues. This means that one module can be offered across several programmes.' **Participant, ACCA's Education Global Forum**

FIGURE 3.12: Demand for learning ecosystems
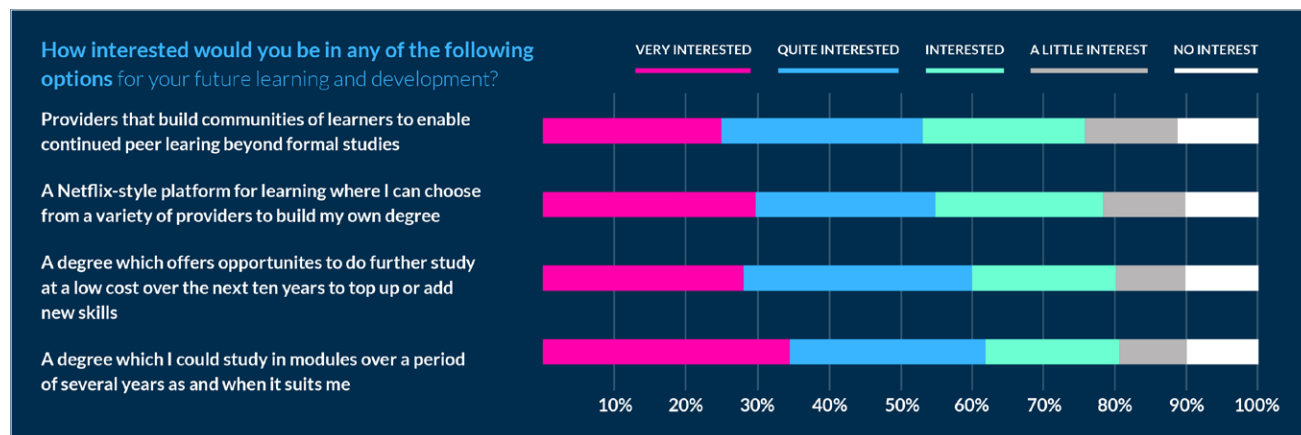
Source: CarringtonCrisp 2022

Guidance on creating learning ecosystems

While learning ecosystems can serve all the L&D dimensions, creating them can be burdensome at the outset. A combination of curating and creating may help with managing the educator's burden:

- crowdsourcing from previous learners who have gained employability skills and are now able to share their experiences

- creating learning-outcome templates that learners populate to create their own learning

- inviting external experts in the capability area to impart knowledge and skills, eg data analytics, sustainability, and human resources professionals, and professional negotiators and presenters

- involving employers who are keen to take part in the provision and delivery of content (see Box 3.18)

- content cloning using technology-driven methods; this is particularly useful for creating questions

- creating content based on immediate need, in short sprints; this is very useful when first starting an ecosystem. Here, the content required is identified through a prioritised talent-marketplace gap analysis of the skills required (demand) and skills available (supply). Demand is identified by asking business functions to outline their need and supplied via HR talent assessments and employees who volunteer their talents.

Over time, the risk associated with such systems is content creep, i.e. that content expands endlessly, a risk that can be compounded by capturing insufficient content metadata at the point of content creation or not using metadata for effective filing and sorting. Therefore, it is vital before embarking on such a system to ensure that, in addition to properly understanding the business need for creating the content within the system, the most relevant metadata for the content is being considered and captured to enable searching, periodic content cleansing and update.

Box 3.18: Analysis highlighting that employers want to be involved in L&D

With the aim of maximising impact from learning, 44% of employers definitely agree, and a further 37% mostly agree, that their organisation will seek to build long-term relationships with educators.

As seen in the earlier example on this matter (see Box 3.5), some educators are responding by involving employers, with interventions ranging from provision of real-world business scenarios and data to short work-experience opportunities.

Source: CarringtonCrisp 2022 and ASEAN-ANZ roundtables
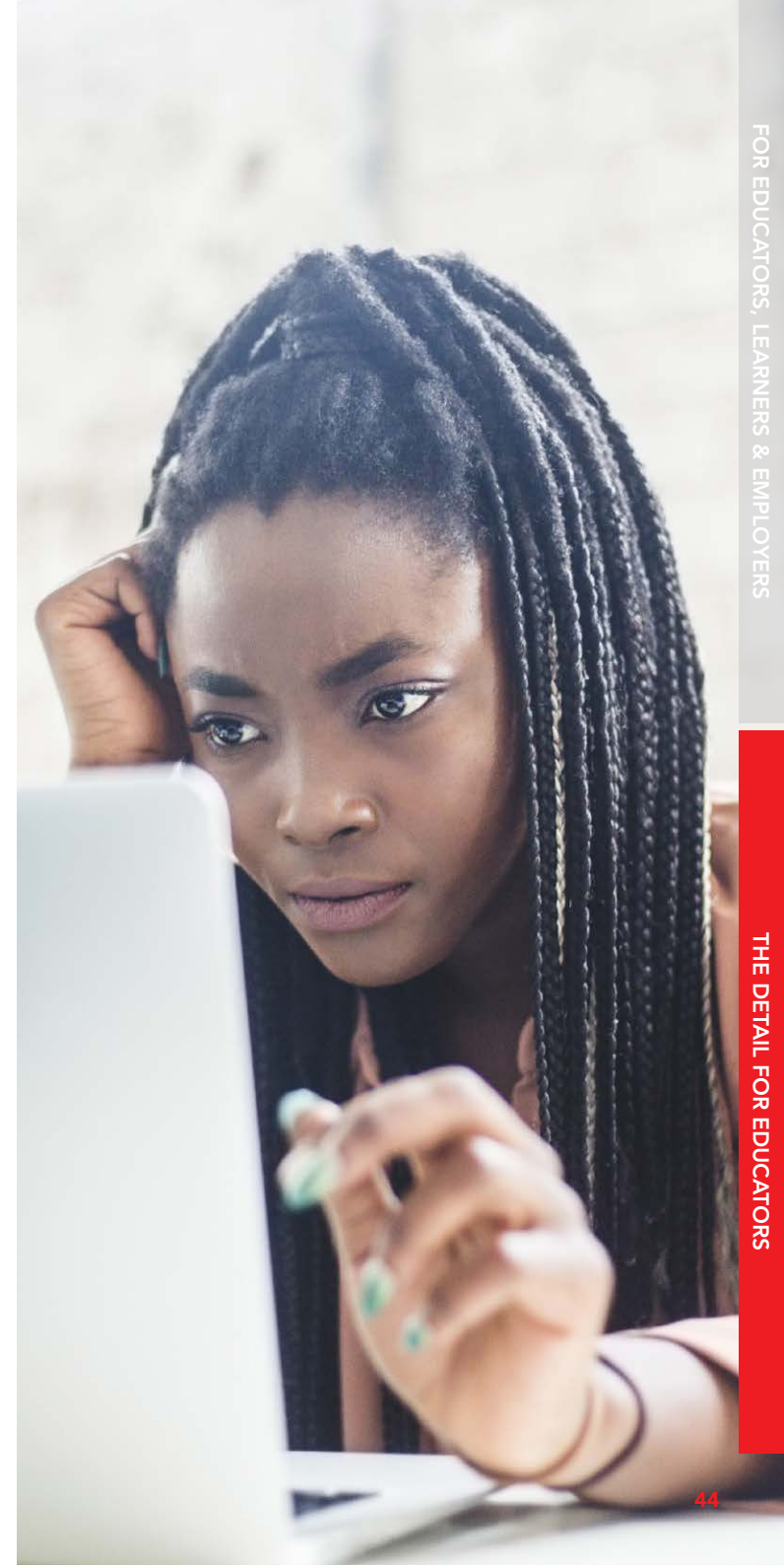
3.3.2 Personalisation, communities and personalised communities

The concepts of 'personalisation', 'community' and 'personalised communities' highlight dimensions related to 'motivation' and 'person and people'. A 'personalised community' is simply personalisation in a community setting.

Personalisation

Matters of purpose, well-being, social and emotional intelligence are often individual to the learner, and their consideration within L&D design are linked to better relevance of learning, learner engagement, resilience and determination, (Dhingra et al. 2021; Salzburg Global Seminar and Partners 2020). When these matters are incorporated then L&D tends to also be personalised, for which there are many examples:

- tailored L&D activities for best fit with specific learning preferences, for instance visual learning for one learner versus experiential for another

- time and length of learning intervention adjusted to the learner capacity to absorb

- frequent feedback based on individual progress and performance

- modular learning content where the learner selects and combines in their own order of need.

Research by Sana Labs suggests that with personalisation 98% of learners learnt better, and so were are able to retain three times more knowledge than those taught without it. and based on course completion rates indicated that 50% of them learnt faster (Sana n.d.). Therefore, demonstrating dimensions of reliability and motivation.

Community learning

Community learning blurs the 70:20:10 learning approach, especially when employers are part of the learning process, and is linked completion rates as high as 96%, comparing extremely favourably with the 3% associated with MOOCs (Massive Open Online Courses).[5] (Sana n.d.). Other benefits and features include those outlined within Box 3.19.

Box 3.19: Features and benefits of community learning as mapped to the dimensions

FEATURE AND BENEFIT	DIMENSION DISPLAYED
Greater embedding of learning outcomes through multiple formal and informal opportunities to practise	RELIABILITY
Integrated thinking as the technical and personal capabilities are merged in community activities	RELEVANCE
Broader knowledge through access to other learner's perspectives, and the ability to challenge them	PERSON AND PEOPLE, RELIABILITY
Accountability, as learners are likely to want not to let others down	MOTIVATION
Proactivity and motivation, especially when competition is a component.	MOTIVATION

Personalised communities

Personalised communities work well when there are sufficient learner numbers to create similarly profiled community cohorts, say, relating to level of proficiency. Incorporating assessment points within the community enables learners to be re-profiled and shifted into communities that suit them better for their learning journey (see Box 3.20).

Key considerations, when developing personalised communities, include:

- having a sufficient number of learners to create similar profile cohorts

- having learners who are willing to commit to the programme

- the programme has a clearly designed capability framework and taxonomy against which to measure progress for the learner, their cohort and the overall community

- having willingness and resources for continual cohort assessment and potential feedback

- having facilitators who are equipped to guide, mentor, coach, and instruct.

Much of the above depends on data, eg information relating to all the learners and their needs within a qualification or in a region. Therefore, educators should be encouraged by the intentions of employers to work more closely with them (CarringtonCrisp 2022) and make greater use of this population-level data and other support resources provided by trade associations, professional bodies and industry regulators.

FOR EDUCATORS, LEARNERS & EMPLOYERS

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Box 3.20: Example of a personalised community

Learners are initially placed into an online community cohort on the basis of their responses to a survey that has the aim of discovering the learners' motivation and approaches to learning, together with some operational information to support effective learning, such as the time-zone in which they are based.

Within the community cohort, learners are expected to work together on a joint project or within a team game, with a facilitator (a human tutor or an AI-based one) who:

- observes and moderates to support the achievement of specific capability outcomes

- provides interventions when individuals encounter difficulties

- coaches and mentors to create complementary skill sets and raise self-awareness among the learners.

Based on insights related to the above facilitation, community cohorts may be reformed into different groupings that expose learners to new ideas or learner profiles.

Source: developed from several employer L&D roundtable participant examples.

3.3.3 Formal, non-formal and informal approaches

The rise of the learning ecosystem and personalised communities creates opportunities for, and value to be realised from, non-formal and informal learning (see Box 3.21), in part because communities are synonymous with social learning, which is also a learner preference. Such approaches support dimensions of:

- relevance and reliability when multiple approaches are used

- motivation, especially within non-formal and informal situations, because learning is more subconscious, and is therefore experienced as less burdensome.

Rewards of economy, efficiency, and effective capability development justify demands on the imagination and creativity of educators to identify and support non-formal and informal learning opportunities. Such ideas are likely to arise when educators learn through engagement with creative and innovative employees and external stakeholders.

Box 3.21: Forms of learning defined

FORMAL	NON-FORMAL	INFORMAL
In a formal environment, eg class, office	Outside of a formal environment	Arises in all environments, therefore it includes social environments
Follows a syllabus	Might have a syllabus	No syllabus
Structured eg a plan exists for how the learning arises	Structured	Unstructured
Compulsory	Usually voluntary	Voluntary
Extrinsic motivation	Usually intrinsic motivation	Intrinsic motivation
Goals set by educator	Goals from conscious decision making	No learning purpose in mind prior to the learning experience
Assessment	No assessment	No assessment

Examples:

- Non-formal: relevant voluntary work experience that could be in an unrelated business, finance and accountancy area, eg being a retail shop assistant could develop collaboration capabilities.

- Informal: playing a game where the learnt capability is not the focus but is an important feature of success, eg demonstrating teamwork and leadership in the appropriate balance.

Source: adapted from OECD, n.d.

3.3.4 Digital and data to create, deliver and measure

Digitalisation and use of data are L&D imperatives, just as they are for other industries. In this section, we explore:

- data to inform
- AI and gamification to motivate, making learning more relevant and reliable
- appropriate use of technology to ensure effective use of data and digital technology as an enabler.

Data to inform

Data analysis and evaluation have the potential to mitigate hindsight risk: 'if only I had known, I would have done things differently!'. From the analysis of learner responses on smart phone voting apps, eg Mentimeter (n.d.) to more complex personality and assessment psychometrics, there is potential to monitor progress continually and adapt to whatever suits the individual learner's or the cohort's needs (see Box 3.22).

Data analysis can be extended to enhance many other aspects of the programme, from assessing the learner's experience and ensuring coverage of the learning syllabus to understanding continual improvement requirements (see Box 3.23).

Box 3.22: Example of exam feedback

ACCA's exam feedback is underpinned by the principle of being forward looking. The purpose is to provide feedback directly to students relating to their exam attempt, for instance linked to syllabus areas, different sections of the exam, and time management. There is also guidance for educators, which includes identifying and providing mitigations for problem areas.
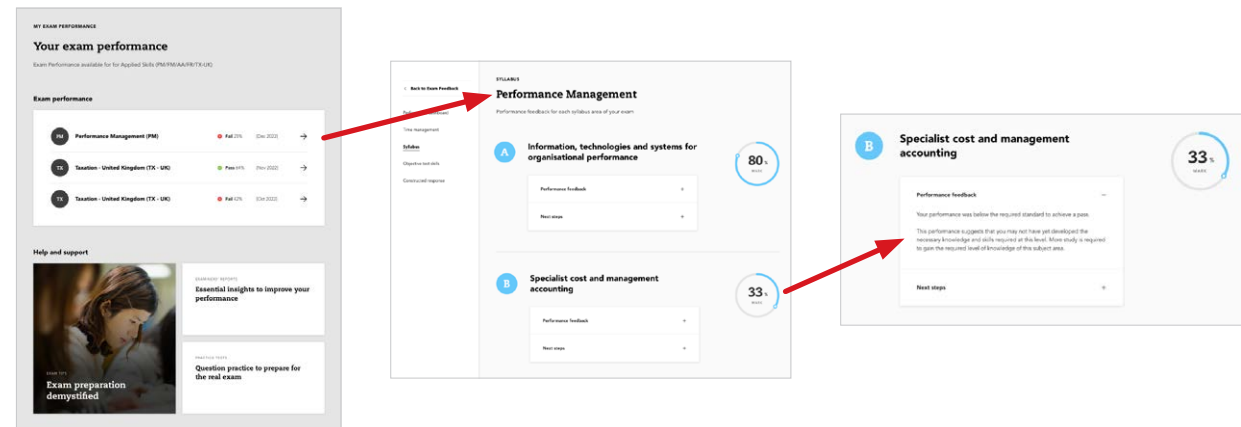
Source: Being launched in 2022 for students, with a subsequent phase giving educators their own unique insights into their students' performance.

Box 3.23: Example of data driving programme improvement

The Qatar Academy of Science and Technology approached the move to distance learning to cater for social distancing requirements during the pandemic, by regularly engaging and acting on feedback.

'Our fog lifted when we surveyed our learners, teachers, and parents on the third day of distance learning. Conducting the surveys so early was counterintuitive, on reflection it was the one true, yet simple, innovation that worked. The data spoke volumes and before any aversion to change set in, it led to training teachers on a more useful teaching platform that was implemented just a few days later. Further, we changed our guidelines on class times, homework, synchronous classes, and a myriad of other practices'.

Source: Salzburg Global Seminar and Partners 2020

To ensure high-quality data analysis and evaluation, educators should apply the following steps.

1. Clearly articulate the purpose of the analysis: what are the education decisions that must be made?

2. Data collection and cleansing incorporating high ethical standards.

    ■ What data is required?

    ■ Does the required data exist or will proxy data be used? What assumptions are necessary? For proxies and assumptions, what are the limitations? (see Box 3.24)

    ■ Can data be ethically accessed and used?

    ■ How is irrelevant data (eg data deemed to be 'white noise') within the dataset identified and removed?

3. Analysis to evaluate and inform recommendations: what are the patterns and trends? How do they relate to the purpose?

Box 3.24: Opinion on the perils of data analysis to evaluate learning impact

There are so many confounding variables. A person can do a training session, speak to a colleague, read a book, watch a documentary and do millions of other things that we are not measuring and don't have access to in our data. We can never prove that learning interventions make a difference to the impact or lead to full return on investment. We can only show strong correlations. More reliable alternatives can include measuring return on expectations.

Finally, when measuring L&D impact, one key consideration are the connections required between HR information systems and learning management systems. Often, these systems have not been designed to communicate with each other.

Source: Sana n.d.

AI and gamification

AI and gamification have potential for creating immersive L&D. Nevertheless, per our survey findings, AI is a largely untapped and unappreciated L&D tool. In fact, many education experts agree that AI and gamification, particularly the former, can enhance quality of engagement and performance across the capabilities. This is especially valuable for the many learners who suffered engagement and performance dips following poor use of technology during measures taken to support Covid-19 social distancing requirements. Further, educators mostly agree that its role could extend beyond providing L&D to monitoring and managing the process and business. Combining insights from expert roundtables and ACCA's qualification and education-development process produces the recommendations in Box 3.25.

Box 3.25: Examples on the use of gamification and AI

Understand the learner

■ Behaviours: class attendance and submission for assignments from which progression risk and opportunity interventions can be offered.

■ Actions: natural language processing, speech, gesture recognition to support continual improvement, for instance in collaboration capabilities.

Automate the learning and assessment of that learning

■ Data-driven course design and delivery: using data associated with previous performance of the programme, or learner characteristics, to inform future programme design.

■ Production of content: create content clones from pre-existing content and/or quality-assure content that has been produced by humans.

■ Monitoring performance of learner interactions with the programme: marking of learner responses and assessments, whether written, oral or video.

■ Calibration of results: psychometric validation of learner and cohort performance across all learner profiles and iterations of the programme, respectively.

Gamification and personalisation

■ Simulate 1:1 adaptive tutoring: learning activities provided to suit the learner's performance to date and their learner characteristics while also providing real-time feedback for continuous improvement. This can equally be used for tutor-training initiatives.

■ Gamification: immersing learners in real-world simulations but with potential to create extreme realities, where the game takes into account all the learner's:

    ■ achievements and mistakes

    ■ behaviours, judgement-making, emotional/affective state, eg hesitancy, changing decisions, tone of communication, and response to auditory or visual stimulus

When combined with aspects of results calibration, the learner can be placed onto a dynamic scale, eg a continually updated leader board.

Source: Salzburg Global Seminar 2020 and Luckin et al. 2016

Learners and educators can realise the following benefits.

■ **Efficiency:** time spent learning is theoretically reduced when adaptive learning data and digital tools are used, meaning that learners focus on capabilities not yet mastered and educators spend less time with human-led diagnostic systems. Further, using digital publishing activities, content can be more seamlessly refreshed than with paper print and distribution cycles.

■ **Effectiveness:** personalisation and metacognition (understanding of what is learnt and how, and emotional responses to the learning) are positively correlated with motivation and developing a growth mindset for lifelong learning. When acted upon, this information can lead to better programme performance, yielding a better quality of employability skills gained and greater learner satisfaction.

■ **Economics:** while initial investment in AI is likely to be high for many educators, there's scope for substantial return on investment, eg reduced course length or content development costs. The long-term value of the initial high investment can be significant because AI assumes continual automatic improvement of underpinning algorithms, so responding to learners' changing characteristics and capability requirements over time. Nonetheless, there will be costs associated with human oversight for purposes of AI governance and introducing creativity and compassion. Even if the AI in education focuses on lower-order Bloom's taxonomy learning, such as knowledge and analysis capability, this frees up human tutor time to focus on higher-order skills, such as evaluation, innovation, and recommending and influencing capabilities.

■ **Reliable learning:** stretching and monitored learning through rich alternative realities, such as gamification supported by AI, enables measured performance on 'what if' scenarios, often difficult to reliably create manually at scale (see Box 3.26).

The implementation of AI needn't be only for educators with large strategic investment budgets and digital competence. There are many talented gaming programmers who are willing to extend the reach of their profession to our education industry. If introduced first as a pilot, especially when outside certification programmes, there's scope to learn from lessons in a safe environment. Our further recommendations include:

■ design based on co-creation and collaboration with teachers as the orchestrators, who together with course designers and programmers draw across domains of psychology, sociology, linguistics, neuroscience, data science, and, of course, with regulators, whose views are vital, especially for programmes with recognised credentialing and for the aspects associated with data security (Luckin et al. 2016)

■ ensure data systems ethically capture and develop insights from the programme L&D process about its learners, its programme content and its metadata (eg content type, capability detail, etc) and the capabilities themselves

■ mitigate negative bias risk, which may impair learning integrity and learner motivation. If the purpose of AI is to support continual capability improvements, given that people often weight interventions towards correcting failures rather than reinforcing success, then there is a risk that the AI will be biased too.

Appropriate uses of technology

Whether for reasons of managing the L&D process or producing content or for more involved activities of delivering and measuring L&D interventions, technology will feature somewhere. Simplification of the current technology and more generally the L&D ecosystem is an important first step. Identifying simplifications and innovation opportunities should start with SWOT

Box 3.26: Example of gamification and AI in 'What if' scenario L&D

Gamification, especially when used with AI, creates an environment for testing undesirable or extreme scenarios, ones that we'd never want our professionals to encounter but that they must know how to deal with, should the need arise. This method helps develop professional scepticism, critical and ethical thinking.

Today this can be done by getting learners to role-play in a group game. The learner does not just assume one role in the scenario, but is required to switch roles with other learners. In this way they can understand the multi-stakeholder perspectives that exams regularly assess. The game's group members and tutors provide feedback. Tutors have the additional responsibility for making changes (multi-variables) to the scenario that stretch learners. Many games require learners to reflect on what they have learnt, then develop an action plan for continual improvement.

While this approach is time consuming and resource intensive it has improved performance in ACCA's Strategic Professional examinations (ACCA n.d.b). In fact, a more reliable and scalable method exists, using combined AI supported gamification and tutor oversight to:

■ adapt the scenario to allow for the learner's/gamer's strengths and weaknesses

■ provide continual feedback via hints and tips that help learners understand why they took a 'wrong' path before they become demotivated and lose confidence.

Source: Adaptation from India, China, Africa and North America roundtables

(Strength-Weakness-Opportunity-Threat) analysis for the whole, or at least the material components, of the L&D value chain. Our education experts suggest that a likely outcome from this first step is that technology-driven L&D will include synchronous video learning, together with asynchronous self-paced interactive online learning (Bjorkland 2021) accommodating:

- changing workplace skills

- more home working, hence home learning

- video engagement – as a trend this is fast growing, especially among Generation Z

- demand for a variety of learning approaches, eg to balance the requirement of 63% of learners who believe that 'in person' learning offers richer and a more effective experience, one more difficult to offer online, against the 71% who also want flexibility on what and when they learn in order to engage with lifelong learning (CarringtonCrisp 2022).

The co-creation, collaboration and communication associated with introducing technological change should extend into initial stages of the technology-related project, eg developing the business case, perhaps through critical review, including testing options by learners, employers, employees, trade and professional bodies. Such a review can help identify and develop mitigations for:

- resistance to change

- lack of technical digital and data skills among stakeholders, especially tutors, who are central to successful implementation (see Box 3.27)

- lack of trust in digital and data-driven methods, which is especially important for employers and education-approval authorities

- content not relevant enough or otherwise insufficient.

Box 3.27: Example on reskilling to make confident tutors

The following concerns were expressed across several roundtables. Some tutors raised concerns associated with being 'technologically challenged', driven by:

- not appreciating the value, for instance technology-based learning being useful only for asynchronous Bloom's taxonomy lower-order skills development, such as demonstrating knowledge acquired

- belief that they are unequipped to use technology effectively, beyond simple video conferencing.

In response to these problems, some of our educators have been delivering 'train the tutor' programmes to raise the base level of technological skills, incorporating demonstrations and practice sessions that sometimes even include the more digitally enabled learners teaching upwards, and this particular initiative has helped learners develop their own collaboration capabilities.

Source: Adapted from contributions from MESA, Africa, ASEAN-ANZ roundtables

3.4 The education business model

Beyond the trends changing the industry, there are additional challenges and opportunities for the education business model (Figure 3.13). Our educators were asked about the factors of most importance to them (Figure 3.14).

Interestingly, some of the most important business model factors relate to understanding the learner, eg their employability and preferred learning approach, yet as we saw earlier in Figures 3.6, 3.7 and 3.8, only a small majority of educators consider this data. Requirements for modularity and flexibility are key features of any L&D offering (see above sections 3.1, 3.3.1 and 3.3.4) due to the variety of careers that professionals pursue coupled with the diversity of the learner base.

In this section, we explore the business model drivers not yet considered:

- evolving regulation
- the economics for education
- the education environment, including learning the lessons from Covid-19 and sustainability matters.

FIGURE 3.13: The learning and development ecosystem – factors impacting the educator's business model
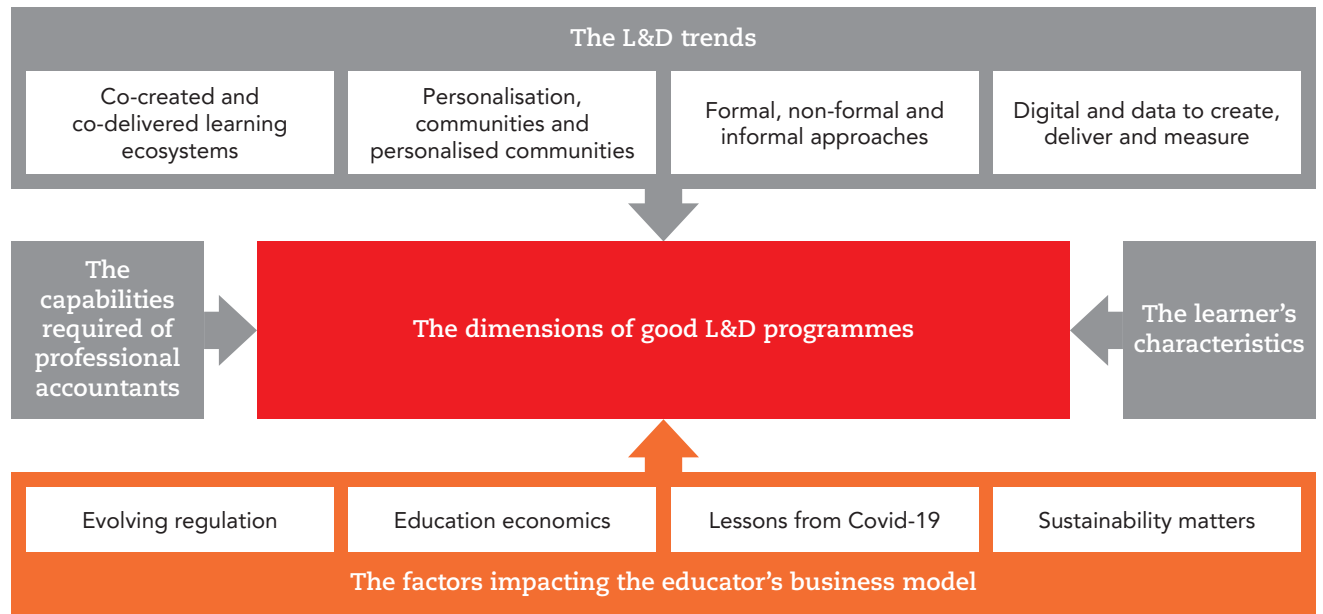
FIGURE 3.14: Survey results on the factors most disrupting the education business model
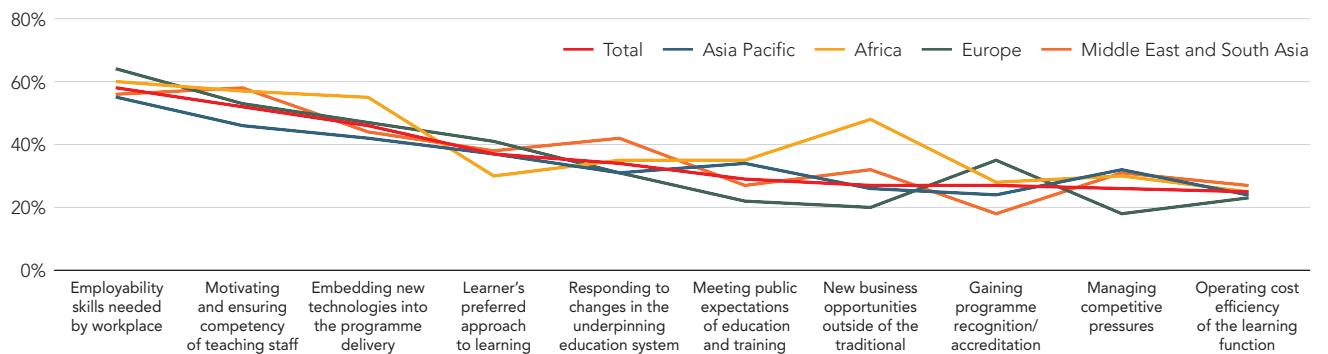
*Africa n=40, Middle East and South Asia n=77

Source: ACCA survey of educators

3.4.1 Evolving regulation

Both the accountancy profession and education are regulated areas; therefore, educators must remain abreast of, and respond to, the implications of regulatory changes and trends, or else learning may not satisfy the dimensions of relevance and reliability. Regulatory implications may relate to a range of important matters, ranging from licence to operate and access to funding, to opportunities for skills development and better-performing business models.

Accountancy profession

The minimum skills required of professionals and enabling their licence to operate are driven by a combination of regulations covering business governance, accounting, finance, reporting and assurance reporting or conditions of membership, such as those relating to codes of conduct and ethics. Just considering some of the examples from the UK government, Europe and internationally,[6] there are several new business opportunities resulting from:

- potential expansion of requirements relating to:
  - reporting, eg sustainability reporting
  - audit and assurance, eg extended external assurance, internal controls
- additional skills and reporting requirements for directors and audit committees
- greater emphasis on integrated thinking to ensure that interrelated environmental and social matters are better incorporated within business decision making and action.

In practice, there are L&D risks to be managed resulting from review and potential reforms of the profession, for instance relating to the timescales allowed in which to develop skills.
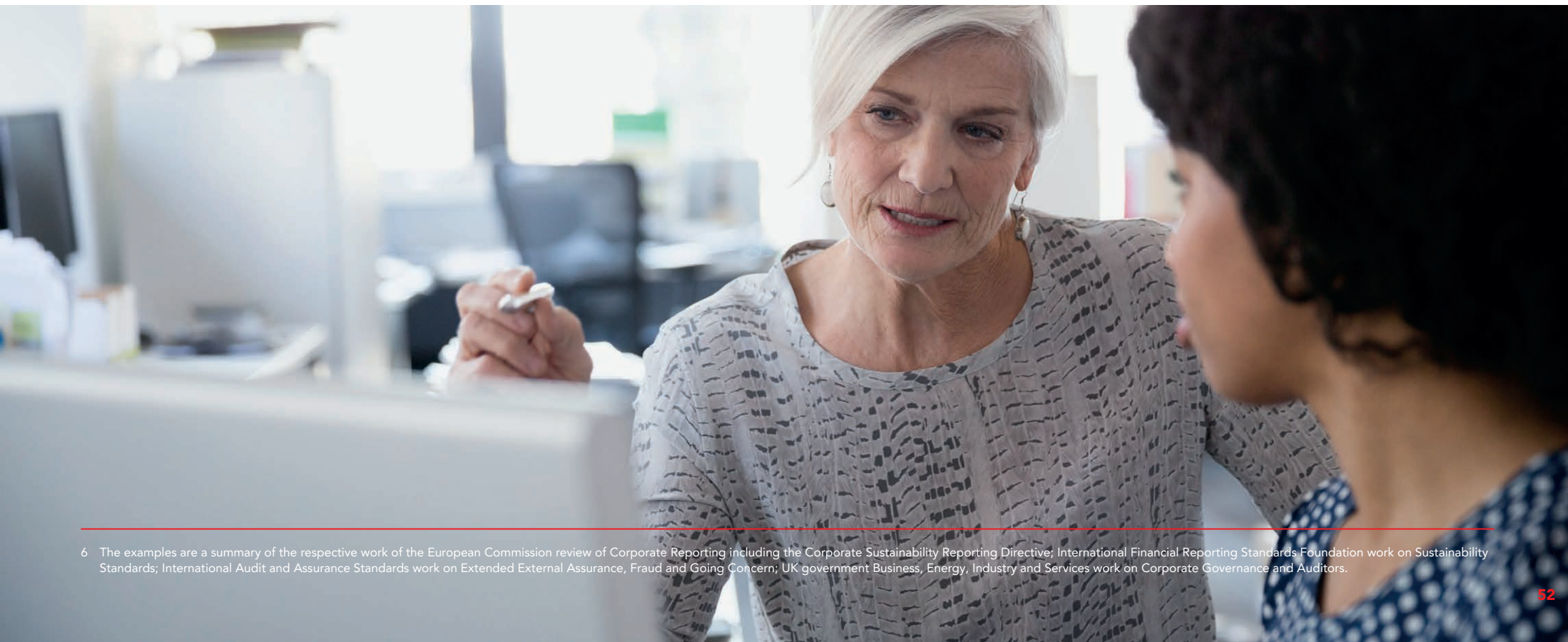
6   The examples are a summary of the respective work of the European Commission review of Corporate Reporting including the Corporate Sustainability Reporting Directive; International Financial Reporting Standards Foundation work on Sustainability Standards; International Audit and Assurance Standards work on Extended External Assurance, Fraud and Going Concern; UK government Business, Energy, Industry and Services work on Corporate Governance and Auditors.

Education

The broad spectrum of education regulation includes the growing volume of employee development regulation and changes to underpinning professional education systems.

The overall volume and type of employee development-related regulation is likely to affect the opportunity for educators to provide L&D services. Therefore, it is vital for educators to engage with their employer clients, or the business if the educator is an employer L&D function, to identify which regulations, especially voluntary ones, they are planning to comply with, how and when (see Figures 3.15 and 3.16).

Considering both graphs plus feedback from employer L&D functions, and assuming faithful reporting (what is reported is done), we infer the following.

- Given that companies in Europe have higher employee-development reporting emphasis than America-based companies, a higher volume of regulation could drive greater employee development, hence business opportunity for L&D.

- The growth of regulation and company responses is an area for educators to explore with employer HR and L&D functions; there are probably opportunities for educators to better support employers and their learners. In particular, voluntary regulation is likely to have a mixed impact, as evidenced by the reporting emphasis differences between non-European and non-American based companies.

FIGURES 3.15 and 3.16: Employee development regulation and reported responses by companies

Datamaran have provided analysis of the volume of mandatory and voluntary employee development regulation required by companies operating in each of these regions over the period of 2011 to 2021. International regulations apply to companies irrespective of where they are based.
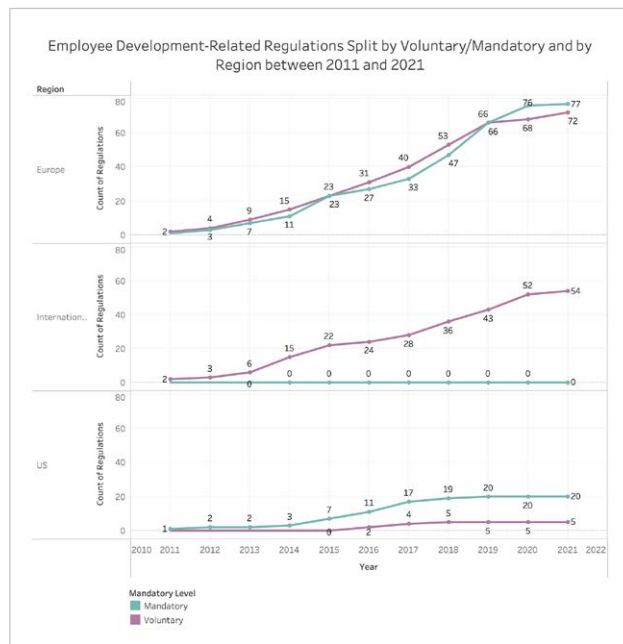
Further analysis by Datamaran provides insight on the emphasis given in financial and sustainability reports to employee development matters over the period 2012 to 2021. (The emphasis is the average of the matter being reported across all reports for the period).

Source: Datamaran n.d.
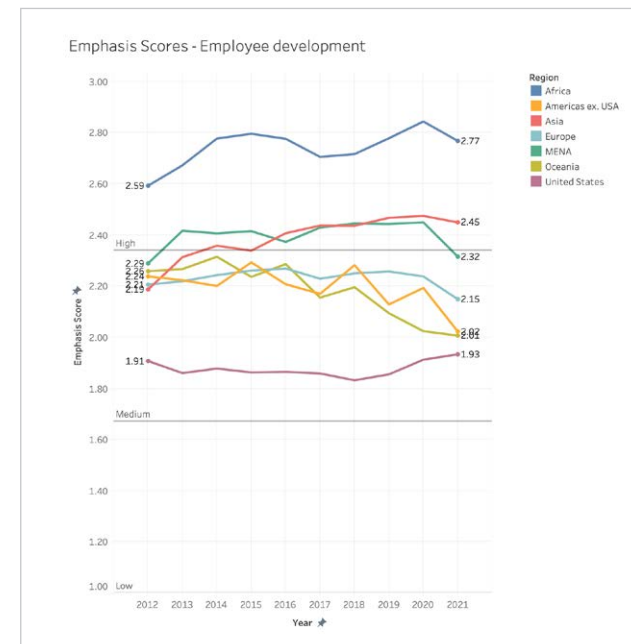
Policy changes to education systems, geopolitics and technology also have an impact on: attraction to the profession; base level of capability proficiency when starting learning; or the learning pedagogy.

Changes to education systems

Changes to education systems affect the strength and breadth of knowledge and skills of the future accountant entering professional education. Here we are seeing several initiatives.

- Many nations are working to universalise education and raise the basic standard, as seen in the 2020 India National Education Policy (Government of India 2020) and in moves by the European Commission (2021). Their aim is to ensure that no one misses out on the opportunity to learn and everyone has relevant validation of that learning from which to gain better employment. If successful, the base set and competence level of societal skills will be raised, including that of those entering professional education.

- Some nations want to make compulsory education more streamlined through the creation of 'all-through' education, where learners remain in the same environment from pre-school through secondary school. While education may be more consistent, there is an argument that learners are less exposed to the benefits of diversity, whether in the form of different teaching approaches or other learners, therefore having implications for the learning pedagogies of professional educators.

- Some countries seek to improve choice, quality and, in some instances, state funding through the creation of a mix of school types. Here, some schools within the mix, specifically independent schools that obtain funds through fees and charitable donations, are freer to set their own curriculums and manage their own budgets, thereby creating potential for disparity in what is learnt, how it is learnt and its quality.

- There are plans to rebalance and merge academic with technical education, for instance as seen with the focus on secondary and tertiary level technical training and apprenticeships in England by the UK government (HM Government 2021).

Geopolitics

Geopolitical decisions affect:

- attraction of learners and tutors to the accountancy profession, as seen with regulation relating to the freedom of movement and education fees following the UK's withdrawal from the European Union (ICEF Monitor 2021)

- the licence for educators to operate, as experienced following Singapore's financial and quality assurance regulations for foreign and non-state-managed degrees. This has led to the total number of private providers in Singapore dropping from 1,000 in 2010 to 291 in 2016, and the rise of joint ventures, including that between the East Asian Institute of Business Management and SIM Global Education (Custer 2016).

Technology

Support for technology, such as that by India's National Education Alliance for Technology, in the form of direct investment, collaboration with EdTech companies, education content and tutor training policy may mean that today's concerns of many employers and educators about digital capability are temporary (Barman 2022).

Despite these developments policymakers have more to do and it is here that educators working with trade organisations and professional bodies can drive appropriate action. By remaining up to date about changes and the implications for all stakeholders, educators can help drive better integrated thinking by policymakers.

FOR EDUCATORS, LEARNERS & EMPLOYERS
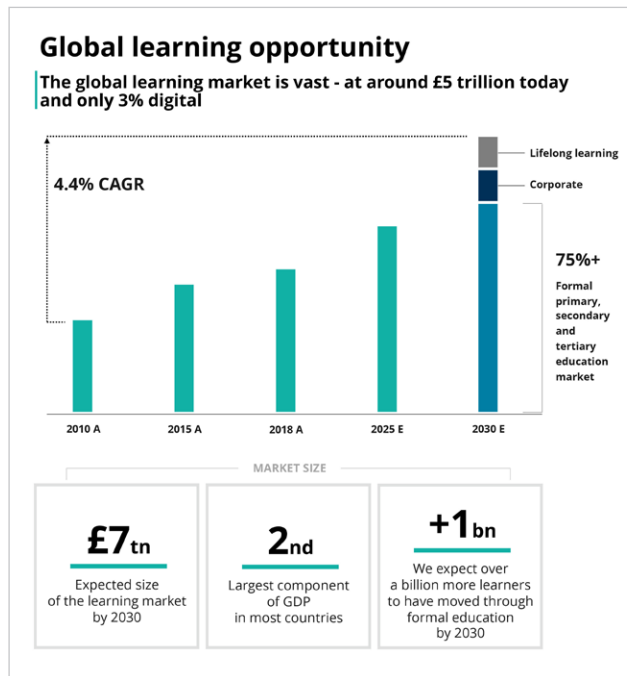
THE DETAIL FOR EDUCATORS

3.4.2 Education economics

The main economic factors identified by our education experts and the survey relate to appreciating the scale of the business opportunity, and managing competitive pressures and investment costs, mostly associated with introducing technology.

The business opportunity

Education is big business and is expected to grow at a compound annual growth rate of 4.4% from the 2021 base of £5 trillion to £7 trillion by 2030 (Pearson 2020) (see Figure 3.17).

By 2030, Pearson expects that 25% of the education market will constitute lifelong learning and corporate education. ACCA's own research and the work of CarringtonCrisp and LinkedIn indicate an increase in the budgets being allocated to lifelong and corporate education (CarringtonCrisp 2022). Further, 87% of 500 companies surveyed stated that these budgets will be accompanied by formal learning strategies, targets and key performance indicators (CarringtonCrisp 2022). Therefore, these are learning strategies that educators must seek to understand better, in order to maintain or build their market share (see Figure 3.18).

FIGURE 3.17: Projection for the education market and current employment development focus

Source: Pearson 2020: 4

FIGURE 3.18: Change in L&D budgets in the last and next two years

In their joint research CarringtonCrisp and LinkedIn suggest a trend of growing spend on education
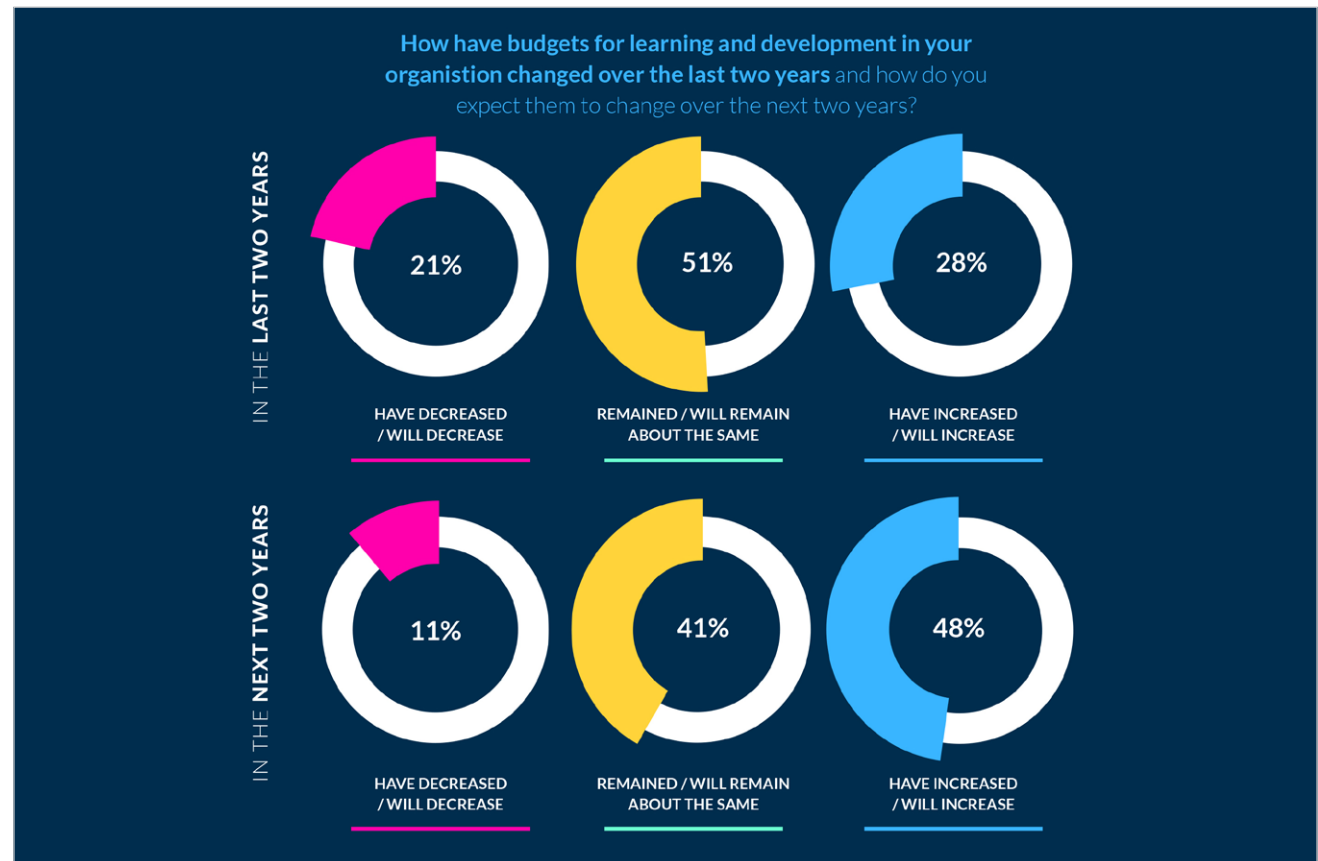
Source: CarringtonCrisp 2022: 6

Further, on the examination of 2020/21 company reports conducted by Datamaran, the type of employee development being pursued is as shown in Figure 3.19.

Driving this investment in L&D is largely a recognition that as roles evolve so will the capabilities required. For instance, learners will seek to:

- enhance their digital skills and develop other capabilities owing to digital transformation. If statistics from the World Economic Forum (WEF) become a reality, then by 2030:

  - 90% of jobs will require digital skills

  - automation is expected to pivot 50% job tasks towards higher-order skills activities, eg associated with the ACCA Career Navigator capabilities of insight (all except project management); collaboration's influencing and stakeholder focus and drive's change orientation and leadership (see Figure I3)

  - 5% of jobs will be eliminated (Eerd and Guo 2020)

- demonstrably develop through credentialing new capabilities (Pearson 2021) equipping them to perform in the 85% of new roles that are to be created by 2030 (Institute for the Future and Dell Technologies 2017), alongside those we are seeing today, for instance, in the growing number of integrated sustainability, business and digital roles (see Box 3.28).

FIGURE 3.19: Information from company reports 2020/2021 on employee development

Analysis by Datamaran of approximately 8,000 company reports from across the globe for the financial year 2020/21 provide an outline of the focus of L&D
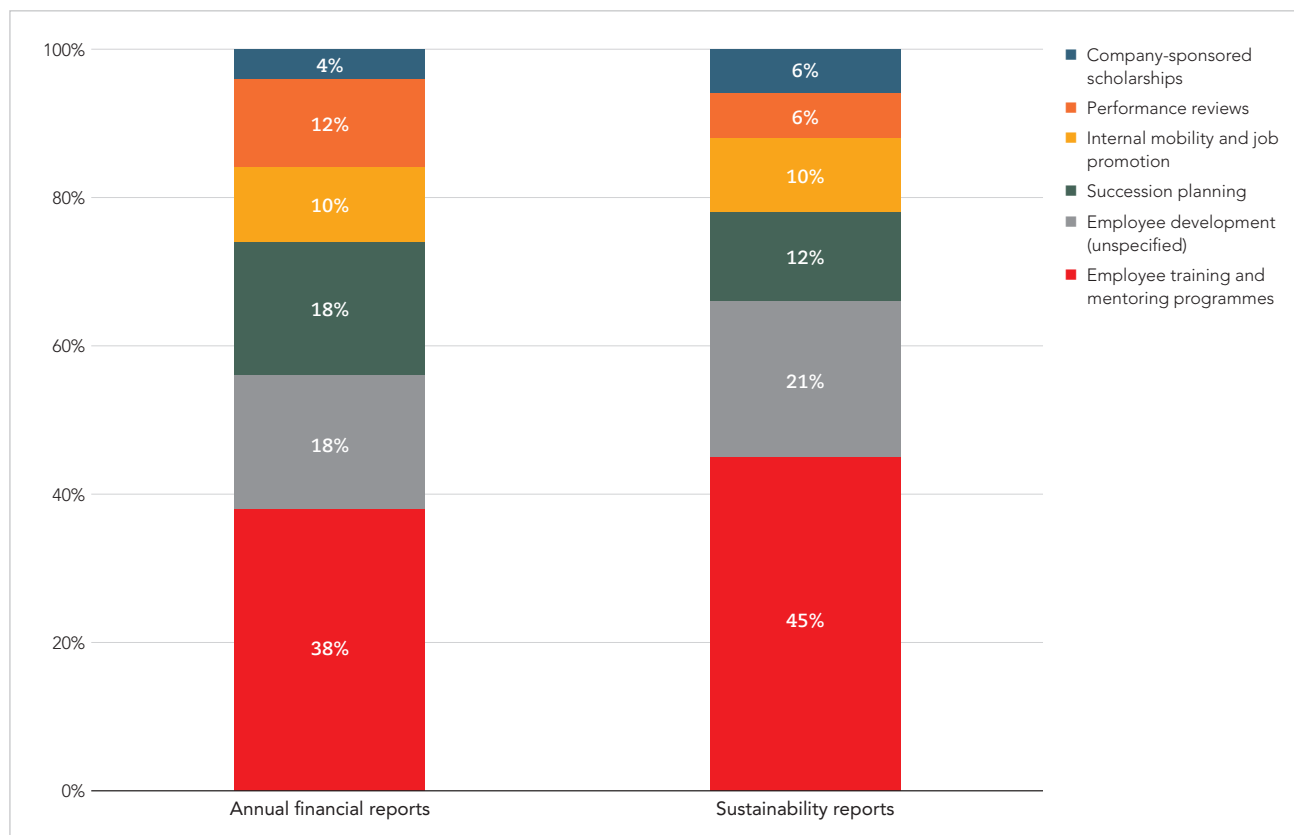
Source: Adapted from Datamaran n.d.

Competitive pressures

Large employers such as PricewaterhouseCoopers (PwC) and UBS, which may have traditionally invested only in upskilling their own staff, are now offering similar development to non-employees and other organisations (PwC n.d.). For them there are many benefits to such an approach:

■ increasing financial return on investment through chargeable learning provision

■ shortening the time to achieving return on investment

■ potential access to new clients for their core business.

Further, organisations whose businesses focus on digital engagement are seizing the opportunity to expand into education either directly or by enabling others to use their platforms (see Box 3.29).

Therefore, educators should consider how they can mitigate these risks, for instance through working with these employers and using the available technology platforms.

Box 3.28: Example of the sustainability capability linked to job roles and L&D

The ACCA Career Navigator (Figure 13) connects users into ACCA Careers, a recruitment tool for business and finance professionals. During November 2021, there was a role available for a professional accountant in the field of sustainable finance and reporting. To help learners apply and develop the skills, the Career Navigator presents together the details the role; the relevant capabilities; and the mechanisms to support learners in their development of sustainability competence.

Source: ACCA n.d.c

Box 3.29: Opinion on TikTok and its role in education

The social media app has become the unlikely hub for teachers and students, the reasons for which are thought to be based on the trends currently driving learning:

■ creators are empowered, so no longer is the tutor in charge of content but learners can be too, creating opportunities for peer learning

■ learners are able to demonstrate key, especially softer, workplace skills, therefore it is potentially more influential than certification

■ learning can be fun, making for engaged learners; in the maximum allowable 60 seconds of content per TikTok, creators can focus on driving interest and signposting deeper learning opportunities

■ the future of learning will be social.

While the 60-second limit, non-live connection and lack of accountability are major limiting factors, educators and learners are finding innovative ways to overcome these issues effectively and with brevity are demonstrating their unique selling point (USP), and this is especially important when the average attention time with most digital engagement is around 15 seconds before interest dissipates.
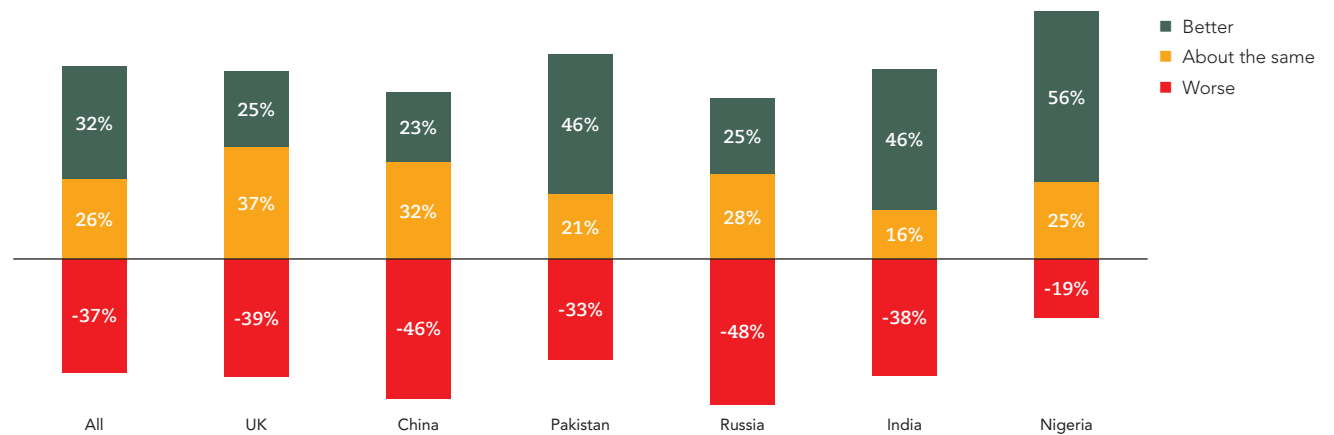
Source: Adapted from Faktor 2021 and ACCA's social media research
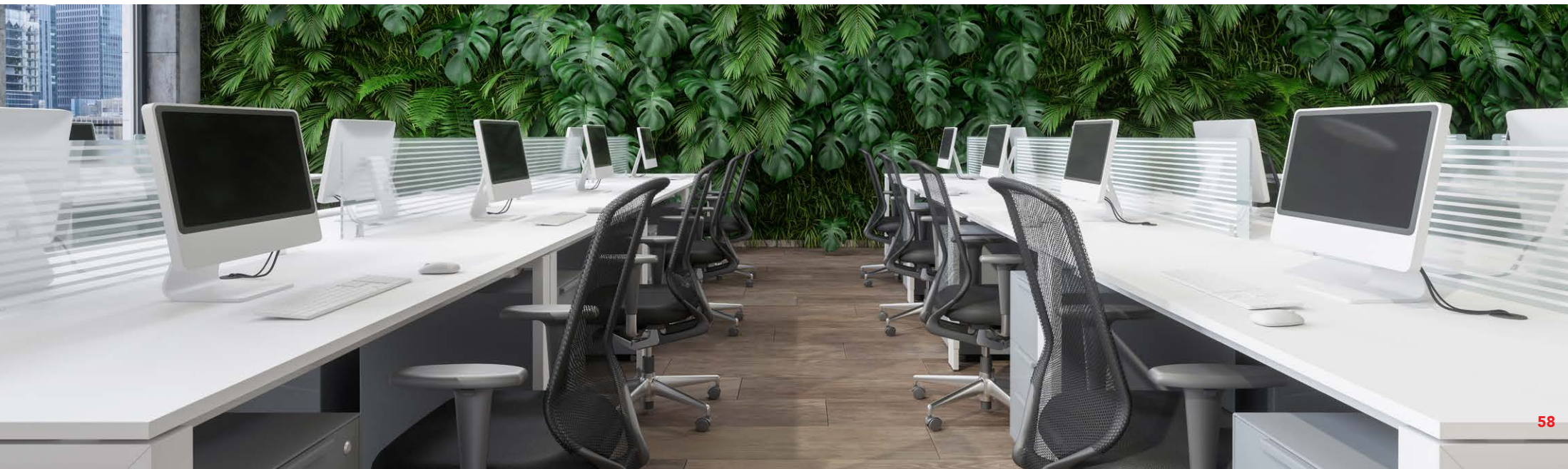
Investment in technology

The scale of investment associated with digitally enabled methods might be a concern for educators but is underpinned by a strong business case.

- There is growing demand for non-linear learning and calls for short-burst programmes to allow skills to be developed in an agile way and at a time that best aligns to the workplace need. These can best be fulfilled in efficiency and economy for the educator through technological methods that provide flexibility for when and how learning happens.

- There is more money available and increased appetite for online learning as remote working means that learners spend less on travel.

- There is potential for breaking down geographical, linguistic and several other accessibility barriers, therefore producing more opportunity for business development.

- 74% of employers now accept online qualifications as equivalent to 'in-person' ones (CarringtonCrisp 2022) (see Figure 3.20).

FIGURE 3.20: Analysis comparing online to in-person learning

Legend: Better / About the same / Worse

	All	UK	China	Pakistan	Russia	India	Nigeria
Better	32%	25%	23%	46%	25%	46%	56%
About the same	26%	37%	32%	21%	28%	16%	25%
Worse	-37%	-39%	-46%	-33%	-48%	-38%	-19%

Source: ACCA survey of learners and employers

3.4.3 Lessons from Covid-19

Before the pandemic, professional education was largely in person in its delivery and assessment. Covid-19 has had a major impact on educators, their business models and consequently their revenues (see Box 3.30).

The education industry has been accused of being slow to innovate, resulting in criticisms on the imperfect use of technology for distance learning during Covid-19 when it was first introduced by some educators (Salzburg Global Seminar and Partners 2020) and consequently a poor learner experience. The outcome for some educators is that there's now a resistance to technology-related innovation. Other Covid-19 related challenges include:

- expectations that learning is a 24-hour business

- reduced effectiveness, say when learners refuse to switch on their cameras when taking part in video conference learning, making it difficult for tutors to appreciate how teaching might be being received.

> ### Box 3.30: Survey findings of educators preparing learners for professional programmes
>
> - 82% of in-person (77% of blended) programmes experienced a decrease in revenue, with 54% saying that this was substantial.
>
> - 42% of online educators benefited, 20% reporting a substantial increase in revenues.
>
> Source: ACCA survey of educators

Our surveys suggest that 32% of educators are focusing on recovering from lost revenues, they are needing to:

- consider the lessons learnt on the contingency that was in place, addressing what else is required; the 26% of educators doing this have identified necessary improvements:

    - technology accessibility; being more interactive; coping with high traffic

    - preparedness leadership in the context of a crisis, eg multi-channel communication with a broader range of stakeholders, eg other educators and learner's stakeholders

- consider how their markets have evolved, where learners are now, and how they want to learn (see Box 3.31).

> ### Box 3.31 Analysis on workplace evolution changing L&D
>
> - 85% of employers are focusing on creating hybrid or more flexible working arrangements for their employees, meaning that L&D should follow (CarringtonCrisp 2022)
>
> - A 2021 McKinsey survey has identified that two-thirds of US-based employees are reflecting on their purpose, specifically on the overarching sense of what matters in life (Dhingra et al. 2021), and ACCA's research confirms this is a strong concern among Generation Z (ACCA 2021c). These learners are seeking career and personal development, work–life balance and resilience training. The result is a new business opportunity for educators that 23% are pursuing by restructuring their operations to broaden offerings.

3.4.4 Sustainability issues

2021 was the year in which the importance of sustainability grew considerably and as trade associations, professional bodies and employers make pledges (see Box 3.32) to mitigate environmental impact and serve their communities better, the pressure on educators will undoubtedly follow.

Box 3.32: Professional bodies sign up to achieve net zero

Thirteen professional bodies whose network represents more than 2.5 million members and students across 179 countries have signed up to achieve net zero as soon as possible. They will be publishing their plans in 2022 to implement this strategic objective within their own business models and by supporting the development of competency among members. Educators, as an important component of the professional body value chain, have a significant role to play.

Source: A4S n.d.

Through aspects of value and supply-chain management and pressure from learners, educators will need to respond, thereby removing the current disconnection between learners and educators that we see in the survey results, where the demand for sustainability exists among learners yet is not an important consideration within educators' business models (Weybrecht 2022).

Some aspects of sustainability have been easier to implement thanks to operational limitations arising from Covid-19, eg before the pandemic there was considerable resistance to:

■ paperless content, and

■ remote L&D: educators have been able to support reductions in emissions, eg reduced travelling to and from classrooms for learners and staff and reduced building-related operation.

In practice, to achieve long-lasting environmental and social-change education, business leaders will need to employ integrated thinking, ensuring that such matters are an integral part of strategy, implemented through the business model and reliably reported for the benefit of all stakeholders, including learners. This requires the following educator commitments and action:

■ Commitment to net zero carbon, measured through progress on associated science-based targets.

■ Reducing paper use and, when it is used, ensuring it is 100% Forest Stewardship Council (FSC) certified.

■ Designing digital products for energy efficiency.

■ Working only with suppliers who meet the same environmental and social criteria as they do

■ Encouraging a sustainable mindset among learners through simple changes, eg going paperless' memory aid approaches; schemes for cycling to education premises for in-person programmes.

■ Encouraging the use of public rather than private transport and providing recycling facilities

■ Committing to diverse representation.

■ Using community matters as case studies for learners to practise the variety of roles they can perform as sustainable business and finance professionals whilst also supporting the community.

And finally, when done well, there is scope for recognition of good programmes, as exemplified by the FT Responsible Education Awards (Financial Times 2021). The aim of these awards is to showcase and encourage innovative approaches in areas such as tackling climate change, increasing sustainability, and bringing about greater diversity and inclusion. There are categories of:

■ Best alumni 'change makers'

■ Best business school teaching cases

■ Best business school academic research.

4. **Conclusion**

Our research set out to explore the 'ingredients' and 'recipe' that must come together to drive effective learning.

The 'ingredients' related to the capabilities required of professionals and the learner are evolving. Changes in the capabilities required owing to rapidly progressing business landscapes call for a broader range of skills, and a growing learner population bring with them a diverse set of learning requirements.

The education industry, once accused of being slow to innovate, is dramatically transforming in response to drivers of new learning trends and factors changing the education business model. Data-informed learning is paving the way for continual improvement for the learner and educator, and extends across the end-to-end education process, from the design to evaluation of learning. Digital technology is also immensely powerful in hosting L&D, as evidenced by trends for learning ecosystems that support flexible learning. This will become more than an L&D hosting tool, for instance in the form of gamification, enabling learners to develop in realistic and sometimes extreme workplace simulations. Further, when L&D interventions incorporate 'in team' learning then there's scope for learners to experience personalised communities, enhancing metacognition, while also driving the practice of demanded interpersonal capabilities related to drive and collaboration.

The results of our evaluation of these drivers are six dimensions that together underpin quality L&D, which learners should seek in the programmes of their educators:

- **relevance:** meeting learner and stakeholder needs

- **reliability:** delivering learning outcomes that are trusted irrespective of different learning approaches for a given capability or learner

- **motivation:** driving the achievement of the learning purpose and supporting lifelong learning

- **person and people:** placing learners and their tutors at the heart of learning and the learning approach, at an individual, cohort and community level

- **digital and data:** supporting the development of L&D strategy and its implementation across content, production, delivery and monitoring

- **sustainability:** business models employ an integrated approach to environmental, social and financial matters.

Educators who embed these dimensions are well placed to realise the economic opportunities associated with a growing education market and to respond to the vast amounts of regulation that applies to them and the accountancy profession.
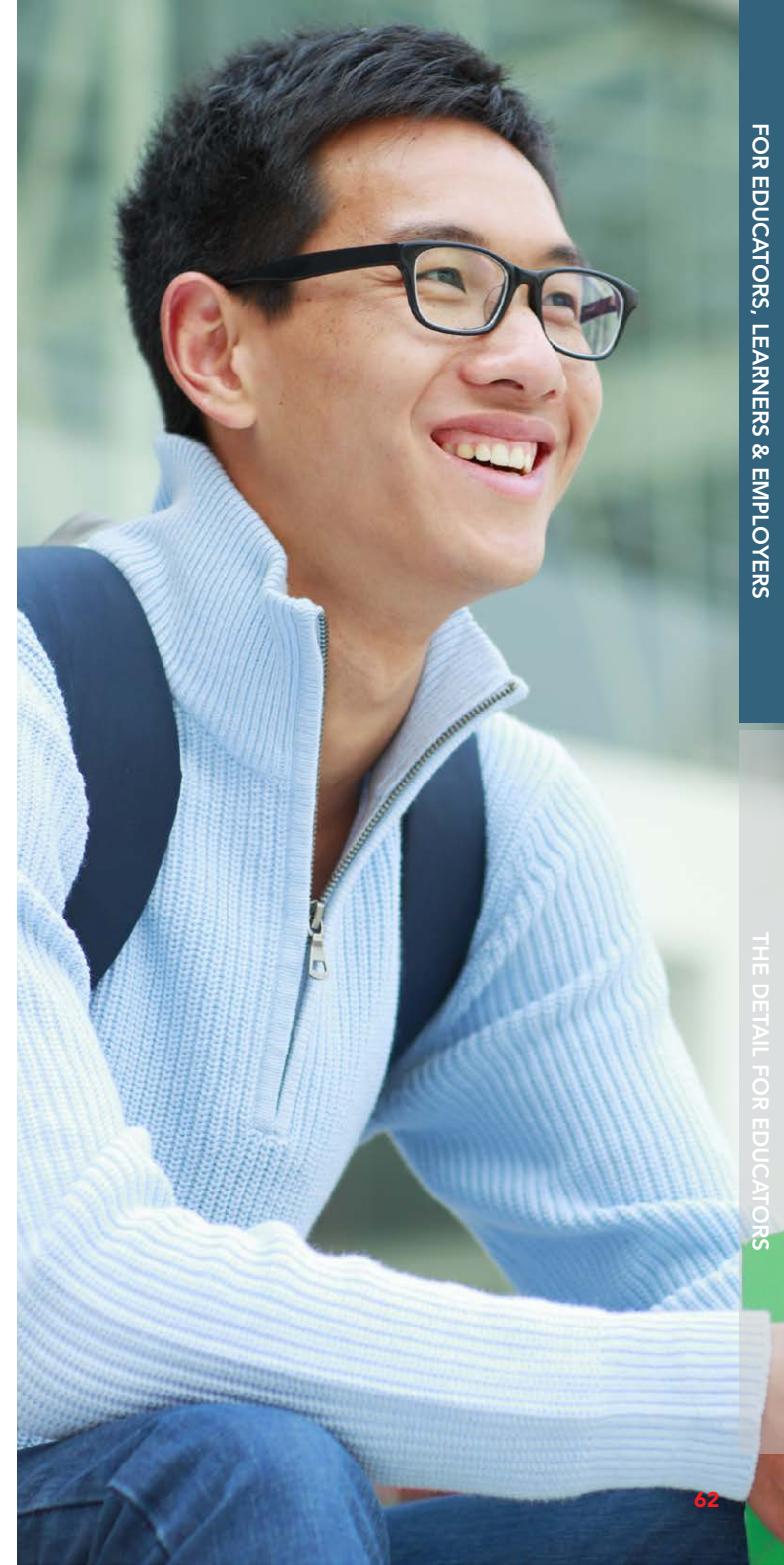
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