IPPR SCOTLAND

REPORT

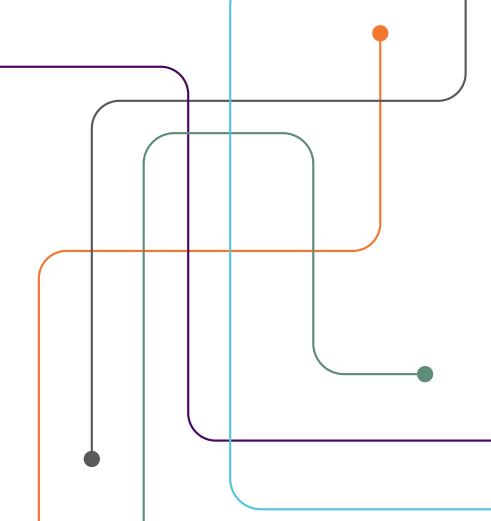# EQUIPPING SCOTLAND FOR THE FUTURE

KEY CHALLENGES FOR THE SCOTTISH SKILLS SYSTEM

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ABOUT IPPR SCOTLAND

IPPR Scotland is IPPR's dedicated cross-party progressive thinktank for Scotland, based in Edinburgh. Our research, together with our stimulating and varied events programme, seeks to produce innovative policy ideas for a fair, democratic and sustainable Scotland.

IPPR's purpose is to conduct and promote research into, and the education of the public in, the economic, social and political sciences, science and technology, the voluntary sector and social enterprise, public services, and industry and commerce.

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SUMMARY

60-SECOND SUMMARY

Developing a skills system that meets the needs of an ever-changing labour market is one of the biggest issues facing the Scottish government over the coming years. Scotland currently faces challenges around productivity, progression and pay, and, more generally, economic growth. In the longer term, technological and demographic changes will alter our economy and society, and will mean people will work longer, in multiple careers and for multiple employers. The skills system will need to reform and adapt to meet these challenges.

This discussion paper aims to stimulate debate and generate ideas for the future of the skills system in Scotland. It is informed by stakeholder events and interviews that set out to speak with people working directly with and within the skills system and those interacting with it. It outlines 10 future challenges for the skills system, and six priorities for action that must provide the focus in the short term in order to ready the skills system for the long term.

This paper forms part of a series of reports from IPPR Scotland in relation to skills in Scotland.

KEY FINDINGS

There have been substantial changes in the skills system in Scotland in recent years. These have included a move towards regionalisation, most notably in the college sector, the introduction of outcome agreements for further and higher education provision, a focus on full-time, recognised qualifications across the system and an emphasis on young people.

Our research with those in the skills system in Scotland, and those interacting with it, aims to understand the future challenges it faces, and the priorities for action in the short term to ready the skills system for the long term. In developing this work, we undertook a series of stakeholder events and interviews to speak with people working in and with the skills system in Scotland.

The purpose of this discussion paper is to stimulate debate and generate ideas for the future of the skills system in Scotland. This paper forms one part of a series of reports from IPPR Scotland, which will build a picture of where the skills system is now, where it needs to be to meet the needs of the future, and what decisions are required to enable it to do so. We believe a well-functioning skills system in Scotland needs to be at the heart of meeting many of the challenges that Scotland faces.

There are 10 key challenges facing the skills system in Scotland:
- funding the skills system in Scotland in the future
- addressing current weakness in the economy and delivering inclusive growth

- responding to the increasing pace of change and disruption in the economy
- promoting a high-skill business model among employers
- encouraging employees and learners to upskill and progress
- the changing effects of globalisation, Brexit and migration
- demographic change and shifting demand from the labour market
- longer working lives, multiple careers, multiple employers and the transferability of learning throughout learners' careers
- technological advances and the opportunities for new, more efficient learning methods and pedagogies within the skills system
- automation in the economy reaching mid-skill roles, and the need to produce technologically-savvy learners and employees.

RECOMMENDATIONS

A number of issues were raised consistently by our attendees and interviewees, which we have brought together into six priorities for action for the skills system in Scotland:

- **embedding an outcome approach and setting a clear national purpose of the skills system**
- **regional integration of the skills system**
- **clarifying roles of learning routes within the skills system**
- **learners and employers co-designing a responsive skills system**
- **improving flexibility of learning**
- **increasing transferability of learning**.

Action in these six areas will prepare the skills system in Scotland to meet the long-term challenges it faces, and to be at the centre of driving the changes that Scotland will need to see over the coming years.

1.
INTRODUCTION

Developing a skills system that meets the needs of an ever changing labour market is one of the biggest issues faced by the Scottish government over the coming years. While changes in technology will open new economic opportunities, they will also create challenges as roles and sectors are potentially lost from the economy, particularly through automation. Combined with the technological challenge, changes in demographics will see people working longer, in multiple careers and for multiple employers. In addition, Scotland – like the rest of the UK – faces pre-existing challenges around productivity and pay, and more generally economic growth, and a future outlook that will likely see fiscal constraint continue for some time in the public sector.

We know these challenges are coming, and we know that the society and economy that the skills system serves in Scotland will change hugely over the medium term. How decision-makers enable the skills system to anticipate these changes and respond to this new context is one of the most crucial questions facing the Scottish government and wider Scotland. The skills system can be at the centre of delivering some of the Scottish government's key priorities – inclusive growth, widening access and social mobility, overcoming Scotland's low rates of productivity growth, tackling low pay and encouraging career progression. The decisions made over the coming years will be crucial to ensure Scotland's skills system is equipped for the near and long-term future.

This discussion paper was informed by research that set out to speak with people working directly with and within the skills system, and those interacting with it, to gain an insight into the current and future challenges and opportunities the skills system in Scotland faces. Following IPPR Scotland's *Jobs and skills in Scotland* report (Gunson et al 2016), which set out a quantitative analysis of some of the issues facing the skills system, this paper sets out the key challenges to equip Scotland for the future from a qualitative point of view. Further work from IPPR Scotland will see proposals for how to address these challenges and reshape the skills system in Scotland for the long term.

The focus of this paper is on what we have called the skills system. For us that means the full range of skills, learning and education provision for post-16s in Scotland – from the senior phase of school, workplace learning, university, college and 'Modern Apprenticeship' provision. However, our particular interest is in the post-school and sub-degree level that provides mid- to high-skills provision in Scotland, given the importance of increasing the skills of people with no or low-level qualifications to delivering inclusive growth, and given weaknesses in Scotland's economy around career progression from

low- to higher-skilled work and around low pay outlined in IPPR Scotland's recent *Jobs and skills in Scotland* report (ibid).

The aim of this discussion paper is to stimulate debate and generate ideas for the future of the skills system in Scotland. The paper outlines the 10 future challenges for the skills system that emerged from our research, and six priorities for action that we believe must provide the focus in the short term in order to ready the skills system for the long term.

2.
POLICY CONTEXT

Our research took place following a time of great change in the labour market and the skills system. The effects of the global financial crisis and recession of 2008, along with the rise in levels of youth unemployment, have seen demands on the skills system in Scotland transformed in many ways. Meanwhile, the Scottish government has undertaken large structural reform within parts of the skills system, including college regionalisation. The next few years will see further significant economic and social changes take place in Scotland, especially following the result of the UK referendum on EU membership. It is clear that the skills system will need to adapt and reform if it is to meet the needs of the future world of work.

2.1 FUNDING THE SKILLS SYSTEM IN SCOTLAND

As of 2016/17, the Scottish government currently invests over £2 billion per year into further education (FE), higher education (HE) and wider skills activity (Scottish Government 2016a). This amounted to just over £500 million invested for college funding (both FE and HE), just over £1 billion for universities, just over £250 million for skills (including Modern Apprenticeships) and a further element of around £250 million provided by the Student Awards Agency for Scotland (SAAS) to colleges and universities to pay for tuition fees for EU and Scottish-domiciled HE students (at college and university).[1]

Since the financial crash of 2008, and the subsequent public spending cuts across the UK, the Scottish government undertook a series of cuts to the college sector. Between 2010/11 and 2014/15 college sector funding from the Scottish government has reduced by 18 per cent in real terms (Audit Scotland 2016a). Since 2014/15 funding levels for colleges have been protected in cash terms. This is at a time when the university sector has seen a real-terms increase in their income (Audit Scotland 2016b).

Funding for Skills Development Scotland (SDS), which makes up a significant proportion of the wider skills budget, has dropped in cash and real terms over the same period, falling from £204 million per year in 2009/10 to £176 million per year in 2016/17 in cash terms (Scottish Government 2009, Scottish Government 2015a). Funding for SDS is used to fund Modern Apprenticeships and the government's wider national training programmes. The Scottish government's draft budget for 2017/18 is currently being considered by the Scottish parliament and will be finalised in time for April 2017.

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1   SAAS provides tuition fee grants for many Scottish- and EU-domiciled undergraduate higher education students in Scotland, to meet the Scottish government's free education policy. The tuition fee grants are provided from the Scottish government's budget line for 'Student Support and Tuition Fee Payments'. Exact figures for this are not provided by the Scottish government in budget documents, but the overall budget line provides £300 million in total, and historically around £250 million per year for tuition fee grants.

2.2 JOBS AND SKILLS IN SCOTLAND

Employment

Following the 2008 financial crisis, Scotland experienced a sharp downturn in employment. Prior to the crisis, Scotland had a higher employment rate than across the UK as a whole. However, while there has been a jobs recovery in Scotland, this has been shallower than for the UK as a whole, resulting in Scotland losing its historically higher employment rate relative to that of the UK (Gunson et al 2016).

Youth unemployment

The youth employment rate in Scotland has been consistently higher than the UK rate both prior to the downturn and throughout the economic recovery (ibid). While youth employment dropped following the 2008 crisis, it has since recovered. The unemployment rate for 16–24-year-olds in Scotland, for August to October 2016, was 12.4 per cent in Scotland, compared to a rate of 14.0 per cent for the UK as a whole (not seasonally adjusted) (Aiton 2016). Youth unemployment in Scotland is now at its lowest level since 2001 and is consistently lower than the overall UK rate.

Productivity, progression and pay

Rates of productivity, career progression and levels of pay are clear weaknesses in Scotland. While productivity has improved in Scotland against the UK-wide rate, productivity across the UK has stalled in recent years. The proportion of working people progressing from low-skilled jobs to mid- or high-skill jobs is lower in Scotland than the UK as a whole (excluding Northern Ireland). Although pay rates in Scotland caught up with the UK rate between 2010 and 2015, pay in Scotland and the UK has fallen in real terms in recent years (Gunson et al 2016).

2.3 STRUCTURAL CHANGE IN SCOTLAND'S SKILLS SYSTEM

Regionalisation

Since 2011 there have been a number of reforms within the skills system aimed at creating a more regional approach.

Most notably this has been through the college regionalisation agenda which has seen a series of college mergers reducing the number of colleges from 42 to 26, organised into 13 regions. Enacted through the Post-16 Education (Scotland) Act 2013, regionalisation was intended to create more coherent college provision within regions, to place students at the centre of governance and shaping provision, and to better link provision to regional need. In addition, the aim of college regions was to increase efficiency and deliver savings, at a time of significant cuts to college budgets (as outlined in section 2.1).

In addition, skills investment plans (SIPs) and regional skills assessments (RSAs) have been introduced to bring a greater regional focus to investments through SDS. Furthermore, following the *Developing Scotland's Young Workforce* (DSYW) report, which set out the Scottish government's strategy on youth employment (Scottish Government 2014b), 21 industry-led DSWY regional groupings were established with the aim of delivering improved employer engagement with schools and colleges and encouraging employers to offer more young people jobs and training opportunities.

Outcome agreements

There has been a concerted move, in parts of the skills system, towards a greater focus on outcome funding rather than simply input funding. In the 2012/13 academic year, the Scottish Funding Council (SFC) introduced outcome agreements for both college regions and universities to set outcomes to be delivered in return for public funding. Agreements cover an extensive range of activities around priorities set out in the SFC's outcome agreements guidance (SFC 2015) with a particular emphasis on improving rates of widening access in Scotland. While outcome agreements have introduced a greater focus on the outcomes delivered by the university and college sector, input targets still pervade the sector with, for example, targets for university and college places set centrally. Equally, while outcome agreements exist for college regions and universities we have seen less of an emphasis on outcomes elsewhere in the skills system.

ONS reclassification of colleges as public bodies

Given the governance changes for the college sector outlined above, and formalised through the Post-16 Education (Scotland) Act, the Office for National Statistics (ONS) made the decision to reclassify colleges in Scotland as public bodies from 2014. This moved colleges from being independent of government to within the public sector, treated as arm's length bodies for accounting and budgeting purposes. This has had a number of implications for colleges in Scotland, most notably their inability now to hold reserves. To ensure pre-existing college reserves were not 'clawed-back' into central government budgets, a number of college regions established arm's length foundations (ALFs), transferring nearly £100 million at the time of reclassification (Audit Scotland 2016a).

2.4 SKILLS PARTICIPATION AND PROVISION

An emphasis on youth

Due to higher levels of youth unemployment in the aftermath of the 2008 financial crash, the Scottish government has prioritised education and training provisions to focus on young people. This included the *Opportunities for All* guarantee to provide a training or learning place for all 16–19-year-olds not already in employment, education or training (Scottish Government 2012).

In June 2014, the independent Commission for Developing Scotland's Young Workforce, chaired by Sir Ian Wood, published its recommendations on how Scotland could produce better-qualified, work-ready and motivated young people with skills relevant to modern employment opportunities (Scottish Government 2014a). The commission's *Education Working for All!* report informed the Scottish government's youth employment strategy (Scottish Government 2014b). The strategy implemented a number of the commission's recommendations and set a target of reducing 2014 levels of youth unemployment by 40 per cent by 2021 and increasing the number of Modern Apprenticeships.

Increasing numbers of learners accessing the skills system are under the age of 25. In the academic year 2014/15, 73 per cent of learning hours in colleges were by students aged 24 and under compared to 68 per cent in 2007/08 (SFC 2016a). The proportion of Scottish entrants to all levels

of study within the university sector under the age of 21 has increased from 34 per cent in 2009/10 to 41 per cent by 2014/15 (SFC 2016b). The majority of Modern Apprenticeship starts are also young learners with nearly 80 per cent of starts in 2015/16 aged 24 and under (SDS 2016).

A focus on full-time, recognised qualifications

Since 2007 there has been a decline in the number of part-time learners in colleges and universities and in the number of non-recognised qualifications being taught within colleges. Part-time provision in colleges, across both further and higher education, almost halved between the 2007/08 and 2014/15 academic years (enrolments) (SFC 2016a) while in higher education institutions part-time student numbers fell by nearly 25 per cent (enrolments) (SFC 2016c). The number of learners enrolling for non-recognised qualifications in colleges has decreased by 65 per cent over the same time frame (SFC 2016a).

2.5 FUTURE CONSIDERATIONS

Economic strategy

Published in March 2015, *Scotland's Economic Strategy* sets out the Scottish government's approach to creating a more successful country through increasing sustainable economic growth. The strategy's overarching goals are to increase competitiveness and tackle inequality and it sets out to achieve these through boosting investment and innovation, supporting inclusive growth and focusing on increasing internationalisation. A key aspect of the strategy is to ensure that everyone in Scotland has the opportunity to fulfil their potential, with the focus on increasing people's ability to participate in the labour market (Scottish Government 2015b).

Fair work agenda

Central to the Scottish government's economic strategy is the fair work agenda, which aims to tackle income inequality and address wider issues within the economy by creating a labour market that is fair and inclusive, and that provides sustainable and well-paid jobs (ibid). To deliver this, the Scottish government set up the Fair Work Convention, which is focused on five key dimensions:

- providing employees with an effective voice
- ensuring opportunity to access and progress in work
- guaranteeing security of employment, work and income
- recognising the importance of workplace fulfilment
- ensuring people are respected and treated respectfully, whatever their role and status (Fair Work Convention 2016).

Labour market strategy

Published in August 2016, the Scottish government's *Labour Market Strategy* has clear implications for the skills system in Scotland. The strategy centres around the ambition to create a labour market that 'drives inclusive, sustainable growth, characterised by growing, competitive businesses, high employment, a skilled population capable of meeting the needs of employers, and where fair work is central to improving the lives of individuals and their families' (Scottish Government 2016b). The strategy includes policies to better

align employability support in a bid to reduce inequality, to promote fair work and responsible business, to help women to return to work and to create greater productivity. It also commits to continuing to support people gaining the skills they need to participate in the labour market.

Apprenticeship levy

The UK government's apprenticeship levy will see larger organisations pay a levy based on their payroll to fund apprenticeship placements. While it is clear this will be UK-wide, and the levy will not vary, how the levy is implemented and how its funds are spent in Scotland will be decided by the Scottish government.

The Scottish government has consulted on the implementation of the levy and has since announced it will introduce a range of measures including the continuation of its commitment to increase MA new starts to 30,000 by 2020. The Scottish government also announced a new £10 million Workforce Development Fund, to be introduced in Autumn 2017, to better support in-work training.

The levy is due to begin in 2017 and is expected to provide £221million of revenue to the Scottish government in its first year.

Enterprise and skills review

The Scottish government recently published phase 1 of its enterprise and skills review. The review is examining how public enterprise and skills agencies, including Scottish Enterprise, Highlands and Islands Enterprise, Skills Development Scotland and the Scottish Funding Council, can better support individuals, businesses, colleges and universities to increase economic growth. Phase 1 set out the framework for the shape of enterprise and skills services in the future, and phase 2 will implement these conclusions and examine how all parties involved can collaborate to maximise opportunities and respond better to local needs.

Phase 1 had 10 conclusions around the following areas: creating stronger governance in the system; recognising both national and local needs; creating an open economy; driving innovation; and increasing skills provisions and economic success. To this end, a new Scotland-wide statutory board will be created to coordinate the activities of enterprise and skills support services; a review of the learner journey will be established with a focus on sustained employment; and a further review will be set up into the effectiveness of investment in learning and skills (Scottish Government 2016c).

Brexit

The UK vote to exit the European Union has created a great deal of uncertainty in Scotland and has reopened the constitutional question around Scottish independence. There are a number of potential impacts from Brexit on Scotland's economy, and many generate a number of headwinds against economic growth in the future. Equally, depending on the UK negotiations in relation to immigration and Scotland's response, employers' ability to recruit workers of all skill levels from across the EU may be reduced, resulting in a greater reliance on the skills system in Scotland and the UK to meet skills needs.

3.
WHERE IS THE SKILLS SYSTEM GOING?

As set out in chapter 2, the skills system has faced a period of change and uncertainty in recent years: in terms of Scotland's labour market, the funding and policy context, and in terms of structural change. Looking ahead, it is clear that the skills system will need to adapt to support more profound changes in the Scottish workforce and labour market. It is very likely that Scotland's ageing population, combined with demographic change more generally, together with technological advances will have a profound impact on the labour market in coming years, changing what learners and employers need from Scotland's skills system.

3.1 DEMOGRAPHIC CHANGE

Scotland's population is set to become markedly older over the coming years. The number of people in Scotland aged 60 and over is projected to rise from 1.3 million in 2014 to 1.7 million in 2030, representing a rise from 24 per cent to 30 per cent of the total Scottish population (ONS 2015). This is clearly a very positive outcome of many years of social policy; however, it is likely to have major implications for Scotland as a whole and the skills system in particular in a number of ways.

First, as increasing numbers of people retire from the workforce they will leave a substantial gap in skills and experience. With many industries in Scotland already reporting an inability to fill job vacancies, this imminent exodus could exacerbate the issue further.

Second, an ageing population is likely to change demand within the economy for certain skills and from particular sectors of the economy. For example, labour market projections for Scotland forecast an increase in the number of people employed in health and social work industries from 396,000 in 2014 to 429,000 in 2024 (UKCES 2016). The skills system needs to ensure it can respond to meet this change in demand over the coming years.

Third, as the Scottish population ages, the working-age population will gradually shrink as a proportion of the whole population. This has implications for tax revenues and demand on public services – particularly if immigration levels are constrained, depending on the outcome of the negotiations for the UK leaving the EU. The skills system will need to support more of the working-age population into work, and to increase the productivity levels of those in work.

Finally, an ageing population, combined with greater levels of economic and technological disruption, is likely to mean greater numbers of people in Scotland working for longer, working in multiple careers, in multiple sectors and for multiple employers, resulting in their having a greater ongoing need for skills throughout their working lives. How the Scottish skills system can adapt to meet the opportunity afforded by greater demand among all age groups, the need to transfer learning between employers and sectors over time, and how it can meet the demand from employees and learners for more ongoing learning will be crucial if Scotland is to harness the opportunities afforded by increasing life expectancy.

3.2 TECHNOLOGY-DRIVEN CHANGE

Technological changes will radically reshape Scotland's labour market in the future and will have a major impact on jobs.

It is likely that increasing levels of automation through technological advances will bring new jobs into Scotland that will require highly skilled, technology-literate workers, while reducing numbers of mid-skilled roles. The effects of technological change over the first decades of this century have already altered the labour market in many important ways; the next wave of automation is likely to alter Scottish employment profoundly through digital technology, robotics, artificial intelligence and big data analytics.

Whereas in the past the jobs most affected by the introduction of new technologies have been those involving largely routine tasks – machine operatives in manufacturing and clerical administrators in services have been among the groups most affected – the latest high-tech developments are likely to affect a far wider range of jobs. This will likely include those that involve complex interactions and require knowledge, experience and judgement. As a result, the impact of technological change is likely to spread to jobs further up the skills ladder, including many of the professions (Susskind and Susskind 2015). One estimate suggests that around half of all the jobs in developed economies are at risk of at least some automation (Frey and Osborne 2013).

However, technological change does not just destroy jobs, it also creates new ones. History suggests the jobs that are created will be more highly skilled than the ones that are lost. New technologies and new production techniques will therefore require the development of new skills and the skills system will need to respond and adapt to increased demand from the labour market in this area.

In addition, technological change may bring new opportunities for the skills system itself in terms of new pedagogies and new delivery mechanisms – whether in terms of artificial intelligence, as argued in *Possibility Thinking* (RSA 2016), or more generally through the use of new technologies in teaching and learning across the skills system. This is likely to be a greater imperative in the parts of the skills system most focused on the workplace and work-based learning.

3.3 FUTURE LABOUR MARKET

The current labour market demand for skills is not well matched to the supply of skills in terms of qualifiers from the skills system. However, unless the shape of provision changes, through demographic change and technological advances, this demand and supply is likely to become even less well balanced in the future.

In 2014, there was a large gap between demand for mid-level skill, sub-degree entry-level vacancies and supply of sub-degree qualifiers. IPPR Scotland estimated that there is an aggregate gap in Scotland between skills demand and supply of 29,000 people annually (Gunson et al 2016). The greatest gaps occur in caring personal services, where supply equates to only just over half of the 16,000 entry-level workers currently required. In administrative occupations – including elementary administration – and service occupations, there are 21,000 vacancies currently being advertised to fewer than 10,000 potential applicants.

Looking ahead, it is likely that as our population ages, and as technology advances, we will see greater demand for personal care services, and health services, due to increasing numbers of older people. At the same time, we are likely to see an erosion in mid-skill roles as automation reaches its next phase.

While it is likely that the overall proportion of jobs will shift to more professional and high-skilled occupations, it is important to remember that in absolute terms there will still be a large number of mid- and low-skilled jobs becoming vacant as a result of people retiring from the workforce. A significant proportion of the jobs that will be created over the coming years will be a result of 'replacement demand' – as people leave the workforce. A large number of new workers will therefore be required in sectors and occupations that tend to rely on vocational education and qualifications (Clifton et al 2014). Efforts to improve the supply of skills to the economy need to focus on high-level skills, but they should encompass mid-level skills too.

3.4 WHAT NEXT FOR THE SCOTTISH SKILLS SYSTEM?

Bringing the current and future challenges facing the skills system in Scotland together, we consider there to be 10 key challenges, as outlined below. These key challenges are brought together from our interviews, events and desk-based research for this discussion paper. The following provide a mix of opportunities and challenges, and we will return to them in chapter 5 in the context of our findings from our qualitative work with the skills system in Scotland.

1. Funding the skills system in Scotland in the future.
2. Addressing current weakness in the economy and delivering inclusive growth.
3. Responding to the increasing pace of change and disruption in the economy.
4. Promoting a high-skill business-model among employers.
5. Encouraging employees and learners to upskill and progress.
6. The changing effects of globalisation, Brexit and migration.

7. Demographic change and shifting demand from the labour market.
8. Longer working lives, multiple careers, multiple employers and the transferability of learning throughout learners' careers.
9. Technological advances and the opportunities for new, more efficient learning methods and pedagogies within the skills system.
10. Automation in the economy reaching mid-skill roles, and the need to produce technologically-savvy learners and employees.

4.
RESEARCH METHODS

IPPR Scotland, in conjunction with the Further Education Trust for Leadership (FETL), hosted a series of events and interviews looking at the position, purposes and needs of the skills system in Scotland and the challenges it faces. These form the foundations of this paper.

A roundtable event was held in May with representatives from a wide range of stakeholders in the current Scottish skills system. This brought together leading Scottish employers, further and higher education practitioners, skills practitioners, members of interested bodies and charities, academics specialising in skills and the labour market, representatives from the Scottish government and members of the Scottish parliament. These discussions centred on broad issues relating to the skills system.

To build upon the findings of the roundtable event, a skills symposium was hosted in September. This comprised of a wider range of delegates than the roundtable, and included training providers, employers, learners, representatives from the secondary, further and higher education sectors, and trade unions, MSPs and skills practitioners. The symposium was broken down into sessions based on key themes and questions that emerged from the roundtable.

In addition to the two stakeholder events, IPPR Scotland conducted a series of interviews with people from across the skills system and from organisations interacting with it, including experts from the further and higher education sectors, academics specialising in the skills system and the labour market in Scotland, regional college principals, training providers and the trade union sectors. Learners were also interviewed along with representatives from business and industry. The interviews looked to gather further expertise and gain detailed evidence and opinion around the themes that came out of the discussion events.

Furthermore, we undertook desk-based research into the context and future challenges facing the skills system in Scotland.

This paper sets out the main themes that came out of these three phases of discussions.

5.
KEY PRIORITIES FOR ACTION

This chapter examines the current view of the skills system in Scotland, with the aim of outlining how we can move from where the skills system is to where it needs to be.

Throughout our fieldwork for this paper we considered the views of stakeholders across the skills system. There were a number of consistent issues raised by interviewees and delegates from across the system and across our interactions, and we have brought these together into six priorities for action for the skills system in Scotland:

- **embedding an outcome approach and setting a clear national purpose**
- **regional integration of the skills system**
- **clarifying roles of learning routes within the skills system**
- **learners and employers co-designing a responsive skills system**
- **improving flexibility of learning**
- **increasing transferability of learning**.

Widening access was a recurrent issue and clearly one that cuts across all aspects of the skills system in Scotland.

The aim of this discussion paper overall, but in particular this chapter, is to stimulate debate and generate ideas for the future of the skills system in Scotland. These priorities for action are the areas we believe must be focused on in the short term in order to ready the skills system for the long term.

5.1 EMBEDDING AN OUTCOME APPROACH AND SETTING A CLEAR NATIONAL PURPOSE

Across our research there was consensus that the primary purpose of the skills system should be threefold: to equip learners with the skills they need to fulfil their potential; to get people into fulfilling work; and to meet the needs of the labour market and the wider economy. However, there was less consensus about how the skills system should achieve these objectives.

One interviewee, an expert in further education and skills, stated the primary purpose was 'learning to do a job, learning to do a good job and learning to do a better job'. There was also consensus that there were 'sub-purposes' below this primary purpose, which include wider social dimensions to ensure that individuals have the skills to reach their full potential and to enable individuals to avoid poverty.

Some saw getting a job as an end in itself, while others considered the need for a more qualitative judgement as to what social economic

contribution employment outcomes were delivering. In this sense, *any job* was not a success for everyone.

However, there was clear agreement that currently the skills system as a whole, and its constituent parts (including FE, HE, Modern Apprenticeships and other work-based training programmes) would benefit from a more clearly defined national purpose outlining what the skills system is aiming to achieve, and outlining clear and measureable outcomes for the system as a whole.

As one expert in higher and further education summed up:

> *'I don't feel we're yet effectively articulating what the skills system is, what its primary purpose is. Because of that we then don't have clarity of roles within it and that leads people/ agencies to compete around available resource rather than to collaborate around desired outcomes. So they focus on carving up the input measures – who gets the money – rather than sharing accountability for the outcome measures, what these skills deliver and how they're driven.'*

Given the weaknesses in Scotland's labour market around rates of productivity, career progression and in-work poverty (Gunson et al 2016) a clear measure of success for the skills system could be its contribution to addressing and improving these areas, and in doing so contributing to the delivery of inclusive economic growth. This would move beyond 'positive destinations' and gain a more qualitative judgement on outcomes of qualifiers from the skills system, and outcomes for employers engaged with the skills system.

Having a clear national purpose would lend itself to embedding an outcome approach to funding the skills system. Many parts of the current system are still measured against a number of input targets. As one expert in higher and further education stated: 'at the moment we still use an awful lot of input measures… but we're not looking at what kind of courses they're doing – whether it's in a useful sector, whether the quality is delivering, what that is then used for.' Further, as a college principal commented: 'setting a number for full-time students does not address what the issues are.'

While SFC outcome agreements have seen parts of the skills system – most notably FE and HE – move towards a more outcomes-oriented approach, it is clear that this could be expanded.

Although the public good of learning must be recognised, input measures risk focusing resources on less impactful learning and risk reducing the impact of public investment in the skills system. A focus on outcomes would encourage the whole skills system to focus on the tangible advances made by learners following a period of learning or training. In our view, aligning an outcomes approach to clear national purposes around generating improvements in productivity, career progression and pay – alongside a cross-cutting priority around widening access and inclusive economic growth – would ensure we maximise the ability of skills providers to develop skills needed by learners, employees and employers. Transparency of outcomes would

also inform learners' choices in terms of what routes or providers they attend based on prior positive learner destinations.

5.2 REGIONAL INTEGRATION OF THE SKILLS SYSTEM

It was clear that a number of our participants believed there are inefficiencies between different parts of the skills system, with administrative barriers affecting learner choice. In the current system, different elements are not integrated efficiently. The lack of cohesion means that changes in some areas of the skills system have the unintended consequence of adversely affecting other parts of the system.

One expert in higher and further education stated:

> 'The transaction costs and opportunities lost in these silos is really alarming. Institutions spend time bidding to different government bodies for funds rather than the actual bodies getting their purses together to enable institutions to benefit learners more. The more powerful, clear and funded the bodies are then the better it is for the skills system.

> 'If I was looking at some colleges and some courses particularly at FE level, the thing that most affects learner choice is whether or not they get bursaries or grants for that, not thinking about whether it's a course that will take them anywhere in their career terms or whether it's something they want to do.'

While colleges have already been regionalised, into 13 college regions, this leaves the rest of the skills system unintegrated, with risks in relation to decisions over provision, and in relation to the opportunities learners have in any given area. Equally, it leads to risks in terms of where investment flows in the system, and whether investment is being made in the most impactful parts of the skills system for a given area. With school education funded through local authorities, SFC funding for FE and HE colleges separate to SFC funding for university provision, and SDS funding for Modern Apprenticeships and wider training programmes funded separately from employers' own workplace learning provisions, it is clear that there is risk of administrative barriers and budget silos creating unintended consequences in the skills system.

The closer integration and collaboration of skills agencies, potentially most effectively at the regional level, would improve efficiencies, reduce duplication and focus the system to better meet specific economic and social needs. Equally, this may allow for the best use of resources in a time of potentially restricted budgets.

The Scottish government's review of skills and enterprise agencies offers large opportunities to reduce administrative barriers within the skills system and the ability to bring decisions around budgets and provision together, whether at the national or regional level.

5.3 CLARIFYING ROLES OF LEARNING ROUTES WITHIN THE SKILLS SYSTEM

It seems clear that there is a potential lack of clarity in relation to the individual learning routes within the skills system, what they are trying

to achieve and who each route is for, in terms of career stage and career aspirations. There is a risk that this makes it difficult for learners to understand the opportunities that are available to them and equally difficult for employers to engage in the route most applicable to their needs.

From our research this seems to be a particular issue for FE in the college sector. One expert in further education and skills stated that 'schools are compulsory and protected by the law, universities are selective and protected by the Queen – via royal charters – but nobody protects colleges, they depend on our professionalism'. As a result, they described colleges as the 'adaptive layer' in the skills system.

However, it is not clear whether the system has the tools available to be fully adaptive to demand and need from learners, employers and employees. For example, there was confusion among our participants as to is primarily a work-focused, vocational route for all ages, or, at the other extreme, whether FE is an educational top-up route for younger people to top-up qualifications to then enter additional education at HE level. Without an understanding of its purpose it is difficult to judge success. Clearly, FE's role is likely to include an element of both, but there was some doubt as to whether the qualifications currently provided through FE open up all routes to additional education, including university level. Equally, promoting lower-level Modern Apprenticeships to mid-career or older employees and learners has risked blurring the aims of apprenticeships and blurring who they are targeted at.

In addition, a lack of clarity as to the aims of the individual elements of the skills system may also risk creating an unclear picture for learners. A combination of more clearly defining what the individual elements of the skills system are attempting to achieve and improving learner information about the outcomes for different learning routes and what they are for should be clear priorities for the skills system in Scotland. This would potentially reduce real and perceived gaps and overlaps in the system.

As one expert in further education and skills said: 'I don't think it is a conscious system, I also don't think it is a contentious system. It is conscious about its own sectors and its institutions. But it is not conscious about the linking pins or the gaps.' These 'gaps' in between routes should be filled with better guidance and advice to ensure that learners' needs are the driving factors behind choices.

5.4 LEARNERS AND EMPLOYERS CO-DESIGNING A RESPONSIVE SKILLS SYSTEM

It was clear that, for many participants from across the skills system, employers are not always currently able to engage in the system in the most beneficial way. Engagement is seen to vary dramatically between providers, industries and regions. This includes employers' own views, and is seen as to the detriment of employers, providers and learners. Finding the right points for engagement, and crucially at the right levels (from the boardroom to the classroom), would improve the ability of the skills system to deliver impact.

Equally, learner participants reported that different parts of the skills system had very different levels of learner representation and different levels of engagement from learners in content and delivery of learning. Furthermore, while the skills system was often seen as confusing, this was seen as a need for improved information, advice and guidance around learners' choices.

The varying levels of interaction with employers and learners manifests itself in at least two ways. First, the clear skills mismatch between demand from the labour market and supply from the system is a clear indication that the skills system, and potentially learner demand, is not sufficiently responsive to employer demand.

Second, and equally, where employers do reach the point of recruitment, they report that learners do not have the skills they require, whether in terms of universal skills or in terms of those skills specific to the role, employer or sector.

The perspective of those in the skills system is often that employers are not willing to engage early enough in the learner's education route to take greater ownership of learners' skills levels and areas. While the employers we worked with see the skills system often as too difficult to get engaged in, too inflexible to employers' need and too restrictive in terms of modes, content and routes of learning. This may be a view that holds across different sectors but is likely to be in particular felt by smaller businesses and those furthest from sectors with a historical interaction with the apprenticeship system.

While employer and learner representation nationally and regionally may have been improved in recent years, at least within the college sector, there is a need to push engagement further down towards the classroom level too. Within Modern Apprenticeship frameworks, while clearly employers are more engaged in the learning as a matter of course (given that all apprenticeships in Scotland are attached to a job), both employer and learner participants reported that a lack of flexibility to shape the content of learning and also the delivery of learning was sometimes a weakness. Improving employer and learner engagement throughout the skills system, and from the classroom level to the boardroom and governance level, would allow the possibility for a co-designed skills system, and a much more responsive system both to demand from employers and learners' needs.

Meeting labour market demand, when it is constantly changing, means that it is crucial for the Scottish skills system to be both adaptive and responsive. As technological advancements and other external influences change the nature of jobs, new educational courses and degrees will need to be established to train people to undertake the new types of jobs that will be available. This requires better communication between employers and skills providers, as well as advanced labour market data.

The implementation of the apprenticeship levy in Scotland offers some real opportunities to harness employers' passion and enthusiasm for the skills system, and to drive a skills system co-designed by employers, employees and learners. Participants agreed that the funding generated by the levy in Scotland should be assigned fully to the skills system,

contributing to funding the system in an era of tightened public spending, and ensuring fairness when compared to levy spend in the rest of the UK. However, participants also saw the opportunities for improved engagement with employers as, in many ways, just as important as the opportunity for additional funding.

5.5 IMPROVING FLEXIBILITY OF LEARNING

It was clear from our participants that they viewed the flexibility of the skills system to have narrowed. In recent years, there has been a concentration of resources in the skills system to provide young people with learning and training opportunities to tackle the higher levels of youth unemployment seen in Scotland in the aftermath of the 2008 financial crisis and economic downturn. Also, within FE, there has been a focus on full-time recognised qualifications and a fall in part-time study.

A more flexible system that allowed learners to choose from the full range of part-time and full-time courses, the right mix of online and face-to-face learning for them, and equally that allowed a greater choice for learners in the content of their learning rather than solely narrow learning for their current job role, would be of great benefit to learners and employers, and potentially maximise the skills system's ability to deliver on its outcomes.

This flexibility will become especially important as changing demographics and technology will mean that employees will be more likely to change careers more often, and require everything from short bursts of intense learning, at the start of career or in-between roles, to very part-time learning alongside working. The skills system will need to help to facilitate this so that it can enable participation by the full range of employees and learners, and the full range of employers.

5.6 INCREASING TRANSFERABILITY OF LEARNING

A final priority for action raised through our research is to increase the transferability of learning across the skills system. It was clear that participants from across the system itself, as well as learners and employers, saw a need to improve the ability of learners to build on previous learning, throughout their careers, rather than beginning from scratch at each transition from one block of learning to the next.

This came through from participants, in particular, in relation to transition between HE in college and HE in university (known as articulation), but also for workplace learning at the point of transition from one employer to another. Equally, as mentioned above, there was a concern that if FE is acting as an educational top-up route for many learners (rather than a solely vocational job-focused route) then there was doubt as to whether learning in FE would be recognised for direct entry to all universities. If so, this could close one educational route for FE qualifiers.

If learners are duplicating learning or finding educational routes closed off to them, due to a lack of transferability of learning within the skills system, then this will limit the ability of the skills system to deliver against Scotland's economic and wider needs. Given the pattern of participation within the skills system, this is likely to affect those from

deprived backgrounds to a greater extent than those from the least deprived backgrounds.

The Scottish Credit and Qualification Framework (SCQF) was created specifically to ensure there was recognition of prior learning in the skills system and that individuals would be able to progress through and dip in and out of the system. Embedding its use across the skills system, and in particular through recognising prior learning for admissions should be a priority.

In the future, as we work longer, with multiple employers and sectors, and with multiple blocks of learning, it will become ever more important to ensure that learners can build their learning throughout their careers rather than having to needlessly duplicate learning, or see future routes blocked to them.

Building a system where the skills system and employers are able to recognise the skills already acquired by a learner should be a priority for action. This would likely require a greater emphasis on recognised qualifications from workplace and non-workplace learning – a more modularised approach on a common spine across the whole of the skills system.

One expert in further education and skills suggested that 'what is missing is a national transcript which sets out what specific types of learner are the equivalent of – for example, in Lego, three red bricks are the same length as a green brick'.

6.
CONCLUSION: WHAT DOES THIS MEAN FOR THE SKILLS SYSTEM?

This discussion paper has outlined the context of the current skills system, and our fieldwork has considered the skills system as it stands from the perspective of those within the system and those interacting with it. We have also considered some of the future challenges facing the system over the longer term, together with what we see as the priorities for action to get the skills system prepared for the future.

It seems clear that there are a number of key challenges facing the skills system in Scotland. As technological change and demographic change alter our economy and society, the demands on the skills system will change. At the same time the opportunities for the skills system to adapt to deliver even greater impact, particularly for learners, than it does currently will open up too. The pace of change facing the skills system, or more accurately Scotland's society and economy, will undoubtedly quicken over the coming years. It is likely that the skills system will need to respond to this changing context with limited financial resources.

If there was an overriding finding from our research it would be that participants in our fieldwork believe that the skills system must focus on serving the future. This will require decisions soon in the short term to enable it to do so for the long term.

In this paper we have outlined 10 key challenges for the future facing the skills system.
1. Funding the skills system in Scotland in the future.
2. Addressing current weakness in the economy and delivering inclusive growth.
3. Responding to the increasing pace of change and disruption in the economy.
4. Promoting a high-skill business-model among employers.
5. Encouraging employees and learners to upskill and progress.
6. The changing effects of globalisation, Brexit and migration.
7. Demographic change and shifting demand from the labour market.
8. Longer working lives, multiple careers, multiple employers and the transferability of learning throughout learners' careers.
9. Technological advances and the opportunities for new, more efficient learning methods and pedagogies within the skills system.
10. Automation in the economy reaching mid-skill roles, and the need to produce technologically-savvy learners and employees.

In addition, we have outlined the six key priorities for action, based on the views of the skills system itself and those interacting with it:

- embedding an outcome approach and setting a clear national purpose of the skills system
- regional integration of the skills system
- clarifying roles of learning routes within the skills system
- learners and employers co-designing a responsive skills system
- improving flexibility of learning
- increasing transferability of learning.

We believe action in these six areas will prepare the skills system to meet the future challenges it faces.

The aim of this paper is to generate debate and to stimulate ideas for the future of the skills system in Scotland, to ensure we get reform of the system right. IPPR Scotland will publish a report in the coming months on our recommendations for reshaping the skills system for the year 2030. This research is a key element of that.

The parts of the skills system that this discussion paper has focused on – FE, college HE, Modern Apprenticeships, national training programmes and workplace learning – have the greatest concentration of students from the most deprived areas in Scotland. They are also arguably the parts of the skills system most important to delivering the Scottish government's objective of inclusive growth – delivering economic growth and reducing inequalities – through developing areas of the economy that are currently low-pay, low-productivity and low-progression. It is therefore reform of the skills system that will be one of the key components of delivering the Scottish government's key objectives over the coming years.

By focusing the skills system as a whole on a clear national ambition and purpose, moving to an outcomes approach and prioritising funding around these ambitions, and moving towards greater integration of budgets and decisions within the skills system – alongside creating a more flexible system, with transferability of learning across it, and with learners and employers genuinely co-designing learning at the classroom level – we would develop a skills system that delivers even greater impact for learners, employers, the economy and Scotland as a whole, and equips Scotland for the future it faces.

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