

Towards 2030

A framework for building a world-class
post-compulsory education system for Wales

Final report

Review of the oversight of post-compulsory education in Wales,
with special reference to the future role and function of the
Higher Education Funding Council for Wales (HEFCW)

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Contents

Abbreviations	3
Acknowledgements	4
1. What is Wales trying to achieve?	6
2. Executive summary	9
2.1 Wales' future	9
2.2 Status of the Welsh post-compulsory system	9
2.3 International experience	11
2.4 Guiding principles	12
2.5 Recommendations	12
3. Welsh post-compulsory system	15
3.1 Current governance arrangements	15
3.2 Emerging themes and issues	20
3.2.1 Status and quality of the educational system	20
3.2.2 Connectivity between Welsh and UK higher education systems	21
3.2.3 Status and role of further education	22
3.2.4 Post-secondary landscape	23
3.2.5 Education and research infrastructure and capacity	25
3.2.6 Role of intermediary organisations	26
3.2.7 Engagement with Welsh society and the economy	27
3.3 Main messages	28
4. Lessons from international experience	30
4.1 International experiences	30
4.2 Regulatory and governance arrangements: intermediary organisations	36
4.3 The post-secondary landscape	40
4.4 Mechanisms of coordination: performance agreements, compacts and profiling	45
4.5 Summation	48
5. Conclusions	50
5.1 The case for reform	50
5.2 Guiding principles	52
6. Recommendations and other matters	53
6.1 Recommendations	53
6.2 Implementation matters requiring further consideration	56
7. Appendix A: Terms of reference	58
8. Appendix B: Tertiary Education Authority (TEA)	59
8.1 Role and responsibilities of the TEA	59

8.2	Structure and organisation of the TEA	60
8.2.1	TEA Governing Board	61
8.2.2	TEA Academic Advisory Board	61
8.2.3	TEA executive	62
9.	Appendix C: International experiences of reference jurisdictions	63
9.1	United Kingdom and Republic of Ireland	63
9.1.1	England	63
9.1.2	Northern Ireland	64
9.1.3	Scotland	65
9.1.4	Republic of Ireland	67
9.2	Other jurisdictions	69
9.2.1	Alberta, Canada	69
9.2.2	Australia	70
9.2.3	Finland	72
9.2.4	Hong Kong Special Administrative Region	73
9.2.5	Israel	75
9.2.6	New Zealand	76
9.2.7	Ontario, Canada	77
10.	Appendix D: Programme of evidence taking	79
10.1	Framework for evidence taking	79
10.2	Schedule of evidence taking	80
11.	Appendix E: Submissions	83
11.1	Letter seeking submissions	83
11.2	Submissions received (alphabetical order)	84
	Notes	85

Tables and figures

Table 1:	Reference jurisdictions	30
Table 2:	Overview of system governance across reference jurisdictions	32
Table 3:	Coordination models by reference jurisdictions	37
Table 4:	Intermediary bodies in Europe	38
Table 5:	Organisation and governance of post-compulsory/post-secondary sector	43
Table 6:	Performance-based funding and performance agreements	46
Figure 1:	Governance framework for the Irish higher education system	39

Abbreviations

ACE – Adult and Community Education

FE – Further Education – usually includes vocational, work-based and/or adult education with a strong focus on employment skills. Programmes are less advanced than at the tertiary level and can be provided in a variety of institutional settings, not only those considered as post-secondary non-tertiary institutions¹

FEI – Further Education Institution

HE – Higher Education

HEI - Higher Education Institution refers to all institutions awarding higher degrees, irrespective of their name and status in national law

LLL – Lifelong Learning

University – for the purposes of this report, this refers specifically to those institutions which conduct research and award higher degrees, and are legally ascribed this status

VET – Vocational Education and Training

WBL – Work-based Learning

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In undertaking this review, I met and engaged with a wide range of people, and entered into many stimulating and thought-provoking conversations about post-compulsory education, student and societal achievement and success, the role and responsibilities of institutions in the 21st century, and ultimately about identifying the appropriate mechanisms to ensure national objectives and goals are met while recognising and respecting the strategic importance of ambitious institutions and institutional leadership. Many people gave of their time, meeting with me to discuss the current situation and its challenges, and look to the future; others wrote submissions. My impression is of a Welsh post-compulsory system, and its people, which is strongly committed to strengthening its role and contribution to society and the economy, to enhancing quality and participation, to seeking excellence within a competitive national and global economy and internationalised educational system and labour market.

In preparing this report,

- Desk-based research was conducted about the Welsh post-compulsory system, and international reference jurisdictions;
- Interviews were held with key stakeholder groups from across the Department of Education and Skills, secondary schools, further and higher education institutions, work-based learning and adult and community education, business and trade union groups, HEFCW, and other agencies such as QAA and ESTYN (see Appendix D);
- Interviews were held with government and intermediary bodies in other UK nations and the Republic of Ireland (see Appendix D);
- Discussions were held with Sir Ian Diamond, chairperson of the *Review of Higher Education Funding and Student Finance Arrangements in Wales*;
- Call for Evidence was launched in October 2015 with a formal closing date of 26 November 2015, although all responses after this date were accepted (see Appendix E).

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1. What is Wales trying to achieve?

This report is being produced at a significant and opportune juncture in the development of education in Wales, across the UK, and internationally. Around the world, education is widely recognised as bringing “significant benefits to society, not only through higher employment opportunities and income but also via enhanced skills, improved social status and access to networks.”² Yet, today, globalization, technological and demographic change, and the combined effects of the prolonged nature of the Great Recession, resource absorption challenges, and accelerating economic competitiveness are placing considerable pressures on education to deliver and demonstrate better value and benefit for citizens and society.³ Wales faces demographic, social and economic challenges alongside a combination of uneven regional development, weak education and employability skills, a changing labour market mix, and the lack of major large centres with the primary exception of Cardiff.⁴ At the same time, there are on-going modifications in the relationships between UK nations, and between the UK and the European Union. The recently published UK government consultation paper, *Fulfilling our Potential: Teaching Excellence, Social Mobility and Student Choice*, proposes a new governing architecture for higher education (HE) in England with knock-on implications. All these developments are changing the policy environment in which Wales operates while also opening up new opportunities.

Over recent years, the Welsh Government has taken a series of steps to further develop and improve its educational system so that it can better meet the demands and needs of the 21st century. The *Policy Statement on Higher Education* (2013) set out its ambition for a “for a world-class higher education system in Wales that serves the interests of learners and the nation in the twenty-first century.” The statement included policy priorities for HE to 2020. This was followed by *Qualified for Life* (2014) which elaborated on a vision and action plan for 3-19 year olds where “every child and young person...[can] benefit from excellent teaching and learning” “that inspires them to succeed”. Other reports followed, urging reform of the school curriculum (*Successful Futures*, 2015), music services (*Task and Finish Team on Music Services in Wales*, 2015), teacher training (*Teaching Tomorrow’s Teachers*, 2015) and HE governance (*Achievement and Accountability*, 2011). *Policy Statement on Skills* (2014) was followed up with a *Skills Implementation Plan*. The Higher Education (Wales) Act 2015, due to be implemented in 2017, gives HEFCW significant new regulatory powers and functions. A *Review of Higher Education Funding and Student Finance Arrangements in Wales* was announced (2013)⁵, of which the interim report, *Review of Higher Education Funding and Student Finance Arrangements in Wales* was published late 2015.⁶

Whilst recognising these achievements, the Welsh Government identified on-going challenges for the system stemming from the complexity of the post-secondary education landscape and governance arrangements across further education (FE) and HE, work-based learning and adult and community learning, on-going changes to public funding, and requirements to broaden the range of the services to meet the needs of citizens and society in the 21st century. Over the years, different parts of the system have responded to and sought to meet these challenges in different ways, establishing “different arrangements for, different degrees of engagement with, and different levels of effectiveness in the delivery of the key functions:

- providing strategic direction, support and coordination;
- monitoring financial performance; assessing, controlling and mitigating risk;
- assuring the quality of education provided to students and research and innovation provided to the public;
- providing leadership, management and governor training and development; distributing revenue funding on a formulaic and/or targeted basis;
- planning capital investment and disinvestment;
- intervention to protect student welfare and institutional sustainability when necessary.”

Thus, oversight of post-compulsory education in Wales is currently undertaken by a mix of Welsh Government and Welsh Government-sponsored bodies. Looking forward, the Welsh Government deemed this an “appropriate time to review and align the arrangements for the oversight of governance in and between institutions involved in the provision of post-compulsory education.” (see Terms of Reference in Appendix A).

Education plays a vital role in the national eco-system underpinning and ensuring personal success, health and satisfaction, and contributing to economic and social outcomes for countries as well as global benefits. Because there are direct correlations between societal value systems and policy choices, how Wales balances its objectives for a skilled labour force, greater social equity, balanced regional growth, active engaged citizens, strong competitive institutions, attracting and retaining talent, and global competitiveness, matters. This means ensuring the post-compulsory system is characterized by: open and competitive education, offering the widest chance and choice to the broadest number of students; a coherent portfolio of differentiated high performing and actively engaged institutions, providing a breadth of educational, research and student experiences from 16 years throughout active life; developing the knowledge and skills that Welsh citizens

need to contribute to society throughout their lives, while attracting international talent; graduates able to succeed in the labour market, fuel and sustain personal, social and economic development, and underpin civil society; and operating successfully in the global market, international in perspective and responsive to change.

Towards 2030: A Framework for Building a World-Class Post-Compulsory Education System for Wales proposes an agenda with a set of objectives and initiatives for post-compulsory education, including 6th form, FE and HE, work-based learning, and adult and community education. The report is ambitious and forward-looking, mindful of future scenarios for the landscape of Welsh society and the economy towards 2030, and of Wales' position within the United Kingdom and within an increasingly competitive Europe and global economy. Rather than seeing local, regional, national and international agendas as contradictory facets of educational endeavour, this report sees them as operating within a balanced, complementary and synergistic portfolio of activities.

This report is cognisant of the stated vision for education in Wales, its strong societal values, desire for enhanced social equity and a high quality system with global reach, and the importance of education for human capital development and as a public good. Embracing these principles and aims places reciprocal responsibilities on government and on institutions. *Towards 2030: A Framework for Building a World-Class Post-Compulsory Education System for Wales* sets out a framework for the future, and makes recommendations around the optimum post-compulsory governance arrangements to meet the needs of Wales in the 21st century.

Professor Ellen Hazelkorn

Tuesday, 1 March 2016

2. Executive summary

2.1 Wales' future

Welsh post-compulsory education sits at a crossroads. A confluence of social, economic and broader competitive factors, nationally and internationally, are challenging traditional assumptions, structures and governance arrangements for education. Policy changes across the UK, alongside potential changes in the UK's relationship with Europe and the European Union, pose additional challenges. Economic disparities across Wales, and between Wales and the rest of the UK, are focusing policy and public attention on the need for education and research to better serve society as well as underpinning personal achievement. Developing a strong economic base with high quality employment, able to attract and retain talent in Wales, is critical. As people live longer and healthier lives, the concept of a "job for life" is becoming as redundant as an "education for life", and so life-long learning (LLL) is a necessity in the 21st century.

These developments pose significant challenges. But, Wales has a unique opportunity to take advantage of changes across the UK, Europe and internationally, to mark out its own future. *Towards 2030: A Framework for Building a World-Class Post-Compulsory Education System for Wales* sets out an ambitious but realistic pathway. It proposes a more sophisticated approach to post-compulsory education governance than heretofore, ensuring more effective co-ordination amongst public institutions and Welsh societal goals, in order to:

- Enhance educational and career opportunities and quality, across the whole post-compulsory spectrum, and people's lifetimes;
- Anchor and underpin regional social, cultural and economic development;
- Boost institutional and national global competitiveness.

2.2 Status of the Welsh post-compulsory system

The Welsh post-compulsory sector comprises a multifaceted and diverse set of institutions, providing for learner needs from 16 years onwards. Reflecting this complexity, governance, regulation, quality assurance, and performance review is overseen and monitored by a myriad of organizations, some of which are Welsh-based, while others operate within the broader English or UK post-compulsory system. The higher education system is overseen by HEFCW, but recent changes in the way higher education is funded have led to changes in HEFCW's responsibilities with more emphasis being placed on its regulatory

role under the Higher Education (Wales) Act 2015. The desire for better coherence in educational provision, improved quality, and strengthened critical mass have led in recent years to structural, organisational and legal changes.

Drawing on interviews with key stakeholders from across the Welsh government, the post-compulsory education system, and the broader Welsh society and business community, a number of issues were identified:

- Post-compulsory institutions have played an important role in Wales' history but a step-change is required;
- Accelerating competition within the UK and internationally, alongside changes in HE governance in England, pose challenges but also present opportunities for Wales;
- Insufficient strategic thinking by government or by the institutions, at all levels, leading to insufficient collaboration, lack of critical mass, and too much competition for limited resources with little benefit for Wales;
- Absence of an overall vision for the post-compulsory system aligned to the social, cultural and economic needs of Wales, regionally and nationally, now and in the future;
- Confusion around the overlapping roles, and duplication of resources, between and across different institutions, between further and higher education, and between different agencies;
- Absence of coherent learning pathways and educational opportunities for students, of all ages, gender and talent, from school, into/through further and higher education, and especially throughout their working lives;
- Inability to attract and retain talent in Wales due to inadequate educational (including at post-graduate level) and employment opportunities;
- Important common reference points with respect to Welsh universities operating within the UK, inter alia qualifications framework, quality assurance, research, internationalisation and branding;
- Intermediary organisations can help ensure long-term strategic and objective decision-making;
- Overall absence of strategic capacity and joined-up thinking at and between government and institutions.

2.3 International experience

To inform future thinking about Welsh education governance, eleven jurisdictions were examined. The report also draws on the academic literature and other relevant experiences to discuss different approaches to organizing and governing post-compulsory education systems in each. It then highlights the main lessons which might inform policy decisions about the regulation and oversight of post-compulsory education and training in Wales.

Three main features were reviewed and discussed: regulatory and governance arrangements; the post-secondary landscape; and mechanisms of co-ordination. The advantages and disadvantages of the different approaches, and lessons for Wales were also identified. The main findings with relevance to Wales are, *inter alia*:

- Intermediary organizations play a significant role in implementing policy, allocating resources, monitoring and evaluating performance, and regulating the system, as well as providing objective advice to government and institutions;
- Intermediary organizations have the capability to implement, oversee and sustain policies and policy change over longer periods of time;
- “System” approach provides capacity to develop strategic, coordinated and coherent approach to educational provision delivering “collective impact” for society;
- “System” approach helps balance the needs and requirements of society, and the educational system overall, with the advantages of having strong, diverse, ambitious and autonomous institutions;
- Negotiated performance agreements or compacts provide a mechanism to help shape the system in ways which meet national objectives and institutional mission;
- Institutional profiling can help differentiate institutional missions for the benefit of government, institutions, students and stakeholders, and celebrate this diversity.

Taken together, these experiences and lessons lead to consideration of the following reform directions:

- Adoption of a post-compulsory system perspective which can ensure a strategic, coordinated and coherent approach to educational provision for all learners and society;
- Establishment of a new post-compulsory intermediary body with the legislative authority to undertake and implement system planning and coordination functions;

- Better alignment between national policy priorities, institutional funding and mission, and performance and productivity whilst respecting institutional autonomy.

2.4 Guiding principles

Drawing on the experience of and aspirations for Wales, and lessons learned from the international reference jurisdictions, the following key principles underpin the approach taken, the case for reform, and the recommendations:

- System-view – build a coherent educational eco-system for Wales, which meets the needs of Welsh society and economy, now and in the future;
- Learning for Life – based on the fact people are living longer and healthier, and democratic society depends upon active, engaged, responsible citizens;
- Societal Contribution – education contributes to society and the economy through its graduates, new knowledge and innovation, all of which are vital for personal and societal success and sustainability;
- Competition and Diversity – strong competitive and diverse institutions, working collaboratively and responsibly, to enhance excellence, strengthen competitiveness and build critical mass in a global environment;
- Learner Focused – placing the needs of learners of all ages, gender and talent, throughout their active lives, at the centre of the educational system, enabling and facilitating changing opportunities and life-circumstances over time;
- Institutional Autonomy – respect for institutional autonomy within an over-arching framework of a system-approach to educational provision and delivery, and strengthened institutional governance, responsibility and accountability.

2.5 Recommendations

Towards 2030: A Framework for Building a World-Class Post-Compulsory Education System for Wales identifies six high level recommendations, and associated sub- recommendations – which in combination, can help bring about the systemic changes required to develop a post-compulsory education system fit for the 21st century. (Full details are listed in Section 6.)

New legislation will be required. This should be undertaken as expeditiously and efficiently as possible to avoid any unnecessary delay, policy impasse, and disruption and distraction to the post-compulsory system;

1. Develop an overarching vision for the post-compulsory education system for Wales based upon stronger links between education policy, providers and provision, and social and economic goals to ensure the needs of Wales are future-proofed as far as is practicable.
2. Establish a single new authority – to be called the *Tertiary Education Authority* (henceforth TEA) – as the single regulatory, oversight and co-ordinating authority for the post-compulsory sector.
3. Place the needs of learners at the centre of the educational system, by establishing clear and flexible learning and career pathways.
4. Civic engagement should be embedded as a core mission and become an institution wide-commitment for **all** post-compulsory institutions.
5. Create a better balance between supply-led and demand-led education and research provision shifting away from a market-demand driven system to a mix of regulation and competition-based funding.
6. Create the appropriate policies, processes and practices to encourage better long-term and joined-up thinking about the educational needs and requirements for Wales, now and into the future.

Other issues requiring consideration during implementation:

- *Optimum configuration of the new TEA*: The modalities around moving from the current governance arrangements to one in which the FE and HE sectors are integrated into a single regulatory intermediary organisation will require further attention.
- *Inclusion of 6th Form*: Consideration should be given as to whether 6th form education, currently within the remit of post-secondary education, should be included within the TEA or reside within the Department of Education and Skills as part of the schools' agenda.
- *Strategic Review of Research*: Given the strategic importance of research, there is an urgent need for a targeted evaluation of research capacity and capability than was possible in this review;
- *Relations between the Government and the Intermediary Organisation*: A Service Level Agreement (SLA) between the Welsh Government and the TEA should be established to provide the formal framework of the government-to-intermediary agency relationship, and set out TEA responsibilities with respect to an agreed programme of work and

expected outcomes, and accountability to the Minister.

3. Welsh post-compulsory system

3.1 Current governance arrangements

The Welsh post-compulsory sector plays a vital role in the social, cultural and economic life of Wales, and in the lives of citizens. The sector, spanning 6th form, FE and HE, work-based learning, and adult and community education, is multifaceted and diverse, providing for learner needs from 16 years onwards. The Further and Higher Education Act 1992 made changes in the funding and administration of further education and higher education in Wales. Over the years, the sector has undergone considerable changes with respect to structure and organisation, governance and funding – alongside significant expansion in the number of students, providers, programme provision and research. New types of providers have entered the market in recent years, and a significant number of HE courses are now being taught in FE colleges, leading to some overlap in provision. Legislative change has accompanied these developments.⁷

Student participation levels have shown volatility over recent years, with the number of Welsh-domiciled young people under 20 years entering FE and mature and part-time students declining⁸ while those entering HE have been steadily increasing. Of particular significance, however, is the “decline in the number and proportion of Welsh-domiciled undergraduate entrants studying in Wales.”⁹ Over the next decade, the population of Wales is projected to increase by 3.1 per cent, rising by 6.1 per cent to 3.38m by 2039. However, age profile projections suggest an emergent hour-glass distribution between now and 2039: children under 16 years increasing by 2.3% and those over 65 years increasing by 44%, while those aged 16-64 are likely to decrease by 5.0%.¹⁰ These demographic factors are compounded by cross-border mobility which is influencing and impacting upon student, and employment and career choices and opportunities.¹¹

A significant feature of this changing landscape has been the trend towards greater consolidation through merger in order to create greater critical mass, strengthen strategic management, improve efficiency and enhance quality.¹² *Transforming Education and Training Provision* (2008) highlighted the need for secondary schools, further education institutes (FEIs) and higher education institutes (HEIs) to work more collaboratively and reduce inefficiencies in order to improve the provision of post-16 learning opportunities.¹³ Of the thirteen mergers since 2006, nine involved only FE colleges, three involved FEIs and HEIs, and one involved the merger of two designated FE bodies. At the same time, the HE sector has also undergone significant change, with several consolidations involving multiple mergers, most notably the formation of the University of Wales Trinity Saint David (UWTSD),

itself formed from a merger, which created the first dual-sector institution.¹⁴ Since 2005, legislation allowed institutions with taught degree awarding powers, and at least 4,000 full-time equivalent students, of whom at least 3,000 are registered on degree level courses (including foundation degree programmes) and able to demonstrate that it has regard to the principles of good governance as are relevant to its sector, to apply to use the title “university”.¹⁵

These changes have led to a more diverse and diversified educational landscape, with at least six different types of organisations.

- FEIs providing 16-19 education;
- FEIs providing 16-19 education, work-based learning and adult and community learning;
- Local authorities providing adult and community learning;
- HEIs providing further education;
- HEIs focused on higher education;
- Private providers of work-based learning, and technical and professional qualifications, some of which are in receipt of public funds.

Today, there are fourteen FEIs offering a mix of vocational and academic programmes, and nine universities in Wales, including the Open University in Wales, offering a range of undergraduate and postgraduate provision¹⁶

Reflecting this complexity, governance, regulation, quality assurance and performance review is overseen and monitored by a myriad of organizations, some of which are Welsh-based, while others operate within the broader English or UK post-compulsory system. The core architecture comprises the Welsh Government, HEFCW and ESTYN; local authorities also have a role with respect to secondary and 6th form education.¹⁷

- *Department for Education and Skills (DfES), inter alia*, has overall responsibility for policy, strategy and funding for post-compulsory education, including sponsorship of HEFCW, and for statutory regulation and approval of all qualifications, except for HE.
- Sixth form education falls under the remit of the Welsh Government; it is provided in a variety of institutional settings including being integrated within secondary schools or separately as 6th form colleges or within FE colleges.
- FE has been directly governed and funded by the Welsh Government, via the Department for Education and Skills (DfES), since 2006. Prior to that, responsibility for FEIs had rested with local authorities, followed by the Further Education Funding Council for Wales (FEFCW) as of 1992,

and National Council for Education and Training for Wales (ELWa), 2001-2006.

- The *Higher Education Funding Council for Wales (HEFCW)* is a Welsh Government Sponsored Body, established by the Further and Higher Education Act 1992, with responsibility for HE, research and related activities, and quality at eight universities, and the teaching activities of the Open University in Wales. It also funds HE, and HE courses at FEIs.
- *Estyn* (HM Inspectorate of schools and colleges in Wales) is responsible for inspecting quality and standards in education and training providers in Wales, which includes FE, work-based learning, and adult and community education;
- *Sêr Cymru* Is the Welsh Government's initiative to expand the research capacity of research-intensive universities in Wales. It is joint funded by Welsh Government and HEFCW with contributions from the individual recipient universities and aims to deliver according to the Welsh Government's *Science for Wales* strategy which was written by the Chief Scientific Advisor for Wales and published in 2012. *Science for Wales* defines three Grand Challenge areas of importance to Wales and expansion of research in these areas is funded at a tactical level through the *Sêr Cymru* programme.

In addition, the QAA, HEA, HESA, UCAS, HEFCE and the various UK Research Councils all have overlapping and hence significant responsibilities within the Welsh HE and research landscape. The REF (replacing the RAE) is a UK-wide process currently overseen by HEFCE. As part of the UK system and to facilitate greater coherence and information sharing/learning, the different ministerial offices meet together under different arrangements, and members of the intermediary bodies (HEFCW, SFC and HEFCE as well as DELNI) sit on each others boards.

The quality assurance landscape is particularly complex., with different inspection regimes have different sets of responsibilities; for example, Estyn has responsibility as described above while the QAA, operating under a service-level agreement with HEFCW, has oversight of HE programmes delivered in FEIs as well as within universities. This means that some institutions fall within the remit of both Estyn and QAA. The Welsh Government has been the statutory regulator of qualifications for schools and colleges, work-based learning and adult education, with responsibility for qualifications policy. As of September 2015, this regulation function transferred to Qualifications Wales, which works in accordance with the UK-wide National Qualifications Framework (NQF) and the Qualifications and Credit Framework (QCF).

The Welsh Language Commission and Coleg Cymraeg Cenedlaethol both have interests and responsibilities with respect to education. There are also a number of significant voluntary sector organisations, as well as trade and professional organisations, *inter alia*, Colleges Wales and Universities Wales, Committee of University Chairs (CUC), and the Learned Society of Wales.

Within the broader UK-context, Wales liaises regularly with counterparts in Scotland, Northern Ireland and England. Changes made in those jurisdictions have implications for Wales regardless of whether they are implemented in Wales or not. Thus, depending upon how changes to the architecture of English HE are applied – as proposed by the Green Paper, *Fulfilling our Potential: Teaching Excellence, Social Mobility and Student Choice* (2015)¹⁸ – the new Office for Students (OfS) and the Teaching Excellence Framework (TEF), *inter alia*, will have implications for the Welsh educational landscape. Similarly, changes proposed under *Ensuring a successful UK research endeavour*¹⁹ carry implications for university-based research.

Under the Learning and Skills Act 2000, the Welsh Assembly had established the National Council for Education and Training for Wales, known as ELWa, as an Assembly Sponsored Public Body with the remit for planning and funding a coherent post-16 sector in 2001. It was created as a bridge between FEFCW and HEFCW in order to facilitate cross sector understanding and development between the two organisations. It had a strong regional, collaborative and cross-agency dimension, influenced by *A Winning Wales – the National Economic Development Strategy* (2002).²⁰ After some difficult years, ELWa, with the exception of HEFCW, was merged with the Welsh Government in 2006.²¹

Recent changes in the way HE is funded have led to changes in HEFCW's responsibilities with more emphasis being placed on its regulatory role under the Higher Education (Wales) Act 2015. HEFCW has shifted from being concerned primarily with funding to being a regulatory body for the system, with statutory authority for the approval of fee and access plans drawn for HEIs and other providers of HE in Wales that have a fee and access plan. A framework document between the Welsh Government and HEFCW sets out the context within which HEFCW operates and details the terms and conditions under which HEFCW receives funds from the Welsh Government. An earlier review of HEFCW focused on, *inter alia*, its success as an intermediary body between the government and the institutions; accordingly, *Achievement and Accountability* (2011) proposed the creation of a new "arms' length" organisation to be called Universities Wales.²²

Widening access has formed a key part of the Welsh Government's agenda. The *Learning Pathways Framework* was introduced in 2010 by the Learning and Skills (Wales) Measure 2009, with the aim of increasing the number of young people progressing to further learning after the end of compulsory

education at age 16.²³ However, many of the difficulties being experienced at both further and higher education owe their origin to shortcomings earlier in the educational cycle. *Qualified for Life* (2014)²⁴ identified problems associated with variability in standards, literacy and numeracy, problem-solving and learning outcomes, while *Successful Futures* (2015) identified shortcomings in the curriculum and accountability with respect to learning outcomes.²⁵ However, an educational system is only as good as its teachers, a point emphasized in the abovementioned report and again in *Teaching Tomorrow's Teaching* (2015).²⁶ The latter called for raising the standard of teacher education by embedding teacher training in a research-rich environment, and improving the attractiveness of the profession. Ensuring stronger linkages between different education levels and programmes, and employment should be made more explicit in order to get around problems of system incoherence.

The educational system has been shaped by massification and the desire for greater rationalisation to strengthen quality and critical mass in order to achieve better coherence in educational provision, as well as the challenges associated with uneven economic development. With a population of just over 3m people, or 5% of the UK total, Wales is largely divided into two main regions – east Wales, and west Wales and the Valleys. The physical landscape is reflected in social, cultural and economic disparities.²⁷ The cities of Cardiff, Swansea and Newport comprise the main economic centres, while mid-Wales is predominantly rural. The economy is changing from heavy industry to being service-led with the aforementioned cities being “far ahead of their coalfield hinterlands in terms of the density of jobs in banking, finance and business services, in distribution (including retailing) and in public services.”²⁸ Nonetheless, manufacturing is comparatively more important in Wales than the rest of the UK, and there is relatively low business R&D and a lack of critical mass. GVA per head in Wales at 75.2% of the UK average is the lowest of all regions in the UK.²⁹ Cardiff's position within its broader city-region highlights the challenges associated with economic imbalances, and the knock-on implications for services, e.g. education and health, in weaker low performing communities located at a distance from transport and major markets.³⁰ Conversely, a report by Cardiff University illustrates the potential benefits of a strong anchor institution.³¹ Longer term economic sustainability is thus dependent upon the capacity to develop competitive high quality/high value employments with attractive salaries, in and beyond Cardiff.³²

The foundation years of devolution³³ have also played a significant role in shaping a system with distinct societal aspirations³⁴ alongside on-going changes within the broader UK system and particularly England with its more market-oriented approach.³⁵ Structural, organisational and legal changes have followed. The emergent complex landscape has become further complicated due to the way in which individual parts of the system have responded to

challenges according to their own needs and priorities, and given decreasing Welsh domiciled students studying in Wales (at either FE or HE level) this has increased intra-institutional competition. Due to the demographic trends, Wales will need to identify ways to further develop its existing population and workforce, and retain them as well as attracting others, including those who have left. This raises particular policy and governance challenges with respect to shaping system-level objectives and targets, and balancing Welsh national needs and ambitions with those of individual sectors and institutions.

3.2 Emerging themes and issues

Evidence was gathered from a wide range of key stakeholders across the post-compulsory system, within Wales and also across the broader UK landscape. A briefing framework document was provided to stimulate discussion. Throughout the process, many issues and challenges concerning the current governance framework as well as matters related more broadly to the post-compulsory system were discussed. This section of the report presents some of the common themes and issues raised throughout this process; it also takes account of issues raised during the review of HE funding and student finances where they are of relevance to the terms of reference for this review.³⁶ This is not meant to be comprehensive account of the interviews or of the submissions but rather it is indicative, pointing to some of the key issues raised. No judgement is made about the value, significance or accuracy of any of the different and often differing comments and perspectives. Issues are grouped together under common themes, and are presented in no particular order of priority (see Appendix D).

3.2.1 Status and quality of the educational system

There is broad view that the overall quality and performance of both the FE and HE sectors is good, and that they broadly meet student and societal needs. All sections of the post-compulsory system have undergone significant structural change over recent years, leading to better coherence between and within the 6th form, FE and HE provision, and new partnerships between institutions and employers. However, many challenges were also noted.

Some people suggested that the resulting multiplicity of institutions, many offering similar qualifications and courses, and the number of different agencies, created a complex and unnecessarily confused landscape for learners and other stakeholders. While post-1992 expansion had raised the proportion of students studying locally, there was a perception that the overall decline in mature students and domiciled Welsh students wishing to study in Wales – partially incentivised by the student funding regime – was intensifying unnecessary intra-sectoral competition.

Others commented on the relatively lower number of students progressing through the system. Insufficient attention was being given to students who did not progress to university or to mature and female students whose educational opportunities were described as limited and very traditional in the latter case. Traditional 6th form students undertaking A-levels had a much clearer learning pathway than other students. In this respect, some doubt was expressed as to whether the widening access agenda was being or could be met. There were also critical remarks by different parts of the system about the quality of education and level of preparedness for students progressing. Concern was also expressed about mature students and part-time education. With the exception of the Open University, most attention was given to 16-22 years old learners.

Correspondingly, concerns were raised about graduate opportunities, from both FEIs and HEIs, and the attractiveness of Wales as an employment and career location, especially for higher qualified students. The extent to which there was sufficient correspondence between educational provision and social and economic requirements of Wales was a recurring theme. Such concerns were also reflected in challenges associated with ensuring a bilingual workforce.

Many people commented on the interconnectivity between the Welsh and English education and employment markets, noting that it brought huge benefit to students, FEIs and HEIs, and Wales. However, there was some regret that the devolved Wales seemed to be reactive to what was happening in England, and that it had not yet put its own stamp on FE and HE policy. There was a feeling that debate in Wales across all sectors needed to focus on creating a different kind of workforce for the future, which is bilingual. This didn't mean that Wales should be isolated but rather that it needs to see itself within a broader context.

Finally, concerns were also expressed about the level of uncertainty within the system generated by the multiplicity of reviews over the past number of years, the long-term sustainability of the system and student funding, the increasingly competitive environment, and potential changes occurring in England with knock-on consequences for Wales. These and other issues are discussed below.

3.2.2 Connectivity between Welsh and UK higher education systems

Welsh universities are making a significant contribution to the economy, with significant spill over effects to parts of Wales which do not have a university presence.³⁷ Their research performance, especially evident in the recent REF, had continued to improve highlighting the fact that, despite their relatively small share of funding, Welsh universities are producing an above average share of publications, citations and highly cited articles. The universities were actively

involved in commercialisation and innovation activity, with new science parks and technology clusters in line with smart specialisation strategies. While it will take time to produce results, the expectation was that these developments should lead to good job opportunities.

Being part of the broader UK HE and research system was especially important. Whatever changes are proposed by this review, as well as the parallel funding review, it was essential that this relationship between the UK and Wales was maintained. Reference was made to the importance of maintaining the coherence of the QA system for comparability and benchmarking purposes as well as the way in which Welsh HE is marketed as part of the UK-brand. Comments were raised regarding matters of academic and research quality, and concern that any deviation from this link could be misunderstood by students and international audiences. In this vein, concerns were expressed about the extent to which prospective changes in the status of HEIs could affect university status vis-a-vis funding and whether they are government organisations (which they are not).

The REF was unanimously seen as an important research benchmark, nationally and internationally. There were, however, more mixed views about the proposed TEF. While some were adamant that Wales should participate in the TEF, others were more circumspect, suggesting that Welsh universities should look at what comes out of the TEF process and decide whether it should adopt, adapt or go its own way.

The porosity of the border with respect to student, graduate and labour mobility was commented upon by many people. Being part of the wider UK had benefits in terms of “brain circulation” but there were less favourable consequences. This includes the level of domiciled Welsh student outward mobility and conversely an overdependence of some universities on incoming English students, with some people asking about value-for-money for Welsh taxpayers. There is some evidence of students returning in the short term, or later in life, because of life-style choices, from which business felt they benefited.³⁸ Nonetheless, various people suggested that given lack of sufficient employment opportunities and the propensity of higher qualified graduates to migrate, simply expanding post-compulsory/HE provision could simply augment the emigration of such graduates unless there is closer alignment between the educational system and social, cultural and economic policy development.

3.2.3 Status and role of further education

FE was described as comprising a diverse set of institutions and institutional groupings, with some FEIs linked directly with HEIs through formal and/or informal partnerships and associations. The bulk of students are between 16 and 19 years, who then seek employment; a smaller group of older work-based

learners undertake apprenticeships. There was, however, a sense that the FE sector was not fully appreciated, and accordingly not able to operate to its full potential. Various reasons were put forward, including the range of challenges facing the sector stemming from chronic underachievement across economic and social policy, and geography. The latter had led to a situation in which the provision of many services coalesced around traditional affinities and practices, which inhibited other, perhaps more appropriate, partnerships being formed, and restricting student choice. Elitism was also a factor influencing popular perceptions and attitudes.

Thus, there were contrasting views within society and within the educational system about the role and purpose of FE. Some people, it was argued, seemed to see FE as simply providing skills for progression, as if in a conveyor-belt way. In this view, an FE qualification was not valued in itself. A slightly different view suggested that FE should be more responsive to the labour market; however, determining the appropriate balance between supply or demand-led could be difficult because of the extent of churn within the labour market. Given the absence of coherent educational pathways and labour market failures, it was felt essential that students were prepared with as many “competences” as possible in order to sustain future ambitions, and underpin on-going skill/retraining needs. A troubling scenario however was presented – one in which graduates with lower attainment tended to stay within Wales, while higher level students tended to leave; this has particular resonance for how FE vis-à-vis HE is perceived.

While much emphasis is placed on the role of FE to underpin employment skills, others argued that FE had a wider role which included tackling poverty, providing better gender opportunities, underpinning social and economic sustainability, etc.³⁹

There was a broad view that the FE sector was more amenable to dialogue about its position within Welsh society because of the way it perceived itself as part of the public sector performing a public service role. Many people expressed the view that this particular review was timely due to changes occurring within England. Likewise, respondents considered it important to take a holistic perspective of the FE and HE sector because changes in one part would inevitably affect the other.

3.2.4 Post-secondary landscape

The Welsh post-secondary sector is diverse, covering learners from 16 years to adulthood, and providing a multiplicity of educational opportunities from 6th form, vocational and academic programmes within FE and HE, work-based learning, and adult and community education. There are examples of good-to-excellent relations between FEIs and HEIs, with linkages between individual

institutions around specific initiatives, some of which have led to closer alliances and mergers. Some people felt that the group arrangements, between FEIs and HEIs, presented a good model.

However, there was also a view that these examples of “good practice” were episodic and individualistic. Overall, the view was that the post-secondary landscape was too complex, with overlapping organisations and duplication of resources and programming. FEIs and HEIs were too focused on their own agendas, with little evidence of genuine working relationships between them. There was too little discussion about the needs of learners or learner pathways or transitions between and across parts of the system. This concern was evident also in the fact that little reference was made to work-based learning or adult and community education.

Different perspectives were presented on these issues. A question was asked about why the relationship between FE and HE was included within the terms of reference of this review. This query arose from the observation that that issue attracts little discussion; likewise, transition between the two sectors was rarely discussed. On the contrary, the fact that there was overlapping provision meant that students could choose what and where they wanted to study.

Many others expressed the need for better co-ordination and collaboration across the system. Some concerns were also raised regarding the quality of programme provision, with higher education feeling that student preparation was inadequate leading to HEIs offering programmes in FEIs. Conversely, FEIs were unhappy with the way in which HE institutions tended to look down on them. There was a belief that the system was too focused on the short to medium term rather than longer term vision for students; this applied to ensuring graduates had the appropriate capabilities in literacy and mathematics, as well as on employability skills. There was an absence of duty-of-care with respect to the hand-over between parts of the system. Hence, there was a strong sense that the current system was not working to its optimum, and having strict boundaries between parts of the post-compulsory sectors was not (or no longer) desirable.

Some consideration was being given to employability skills but no discussion was emerging about different kinds or more flexible credentials, such as competency or stack-able qualifications that could be offered to meet the needs of mature or worker-earner learners. Little consideration was given to looking at the learning pathways from 6th form through FE and HE, and no one was really looking at where students go after completion. Too often emphasis was on the first job rather than the second or third especially as people were living longer. No one was looking at the post-22-year-old learner – either the Masters or doctoral student or other mature learners, including those seeking to enter or re-enter the educational system. Some institutions were better prepared than

others, but guidance, preparation and foresight was variable depending upon the institution.

This situation was compounded by the fact that education and social-economic planning capacity and capability was limited, and economic intelligence underdeveloped. A lot of data was being gathered, but it was not being thought about in a coherent cross-governmental way. Likewise, there was no formal space in which to have discussions about such issues; in so far as discussions did take place, it usually occurred on the margins of other events or meetings. The new Regional Skills Partnerships⁴⁰ were beginning to facilitate such conversations between FEIs and HEIs around skills and employability, but it was early days.

Diversity of educational choice and provision was considered essential for any developed society, but many within the FE sector felt there was a lack of parity of esteem, with HE seen as the dominant voice. Others questioned the extent to which the FEIs and HEIs saw themselves as part of a coherent system rather than individual actors.

3.2.5 Education and research infrastructure and capacity

Various comments were made about the relatively small scale of the Welsh educational and research system. While there were positive views about the dispersal of educational institutions around Wales, others suggested that this had encouraged a disaggregated situation with little overall coherence. Some people said that these difficulties were a factor of geography while others suggested that there was an absence of joined-up thinking at government level. Various people expressed the view that there was not enough strategic thinking going on by government or by the institutions which led to unnecessary competition for limited resources with little benefit for Wales.

These problems are particularly apparent in research. While research performance has improved, capacity remains quite limited; the number of researchers especially in STEM fields is significantly below what would be appropriate for a nation of Wales' size. Individual universities are seeking to improve their own performance, and have begun to focus efforts on building up core competences and expertise in particular strategic fields. Likewise, significant effort has recently been focused on developing science and innovation parks.

While all these developments were welcomed, some people were concerned that pursuit of individual institutional strategic interests was leading to insufficient collaboration and hence lack of critical mass. There was also some concern about the disconnect between Welsh national priorities and research activity and funding arising from inadequate governance arrangements and

high level dialogue, lack of clarity around priorities and appropriate policies, and insufficient focus on outcomes and impact. It was felt that these factors would undermine Wales' strategic capacity and pose serious challenges for Wales in an increasingly competitive UK-wide and international environment.

Concern was also expressed about the likely impact that changes arising from the Nurse Review of research funding infrastructure (2015) will have on Wales.⁴¹ Together with other issues, there was a view that Wales required its own strategy, governance arrangements, and research infrastructure which best met its needs.

3.2.6 Role of intermediary organisations

It was acknowledged that over the past 20 years, different governance arrangements had evolved for both the FE and HE sectors. Amongst the stakeholders, there were different and contradictory views about whether the current system worked well, should be continued or new arrangements introduced.

Some people expressed the view that the different arrangements were not helpful to promoting greater understanding and coherence, while others judged the two sectors to be quite distinct with different roles and responsibilities and therefore required different arrangements. There was a concern that if FE and HE were brought together, FE would be seen as the "Cinderella" – although Scotland was mentioned as a nation which had done this successfully. Some concern was expressed about the demise of ELWa which had created an overarching framework within which both FE and HE could work together.

Another topic of discussion concerned the role of HEFCW. There was broad acknowledgement from both the FE and HE sector that HEFCW's existence as an intermediary body had been beneficial to Wales and to the institutions, being an independent voice for universities while working with them to deliver government priorities, and enabling them to work across different government departments in an effective way without being "overly politicised". There was a corresponding role with respect to protecting institutional autonomy and academic freedom. There was also a recognition that HEFCW had been established on the basis of a traditional funding model, and that role was no longer tenable given other policy developments. Changes within recent legislation regarding HEFCW's regulatory responsibilities would need to be taken into account in any future governance arrangements.⁴² Some FE people spoke positively about the role that HEFCW played vis-à-vis the HE sector, while others felt that if direct governance was good enough for further education, then the same arrangements should apply to higher education.

The different viewpoints can be summarised as follows:

- FE and HE should continue to be treated differently as two distinct sectors, because their role and needs are quite distinct, and hence the governance arrangements should reflect these differences;
- FE and HE should be treated similarly, effectively as one post-compulsory sector, reflecting the increasing interconnectivity between the two sectors, and thus:
 - Both FE and HE should come directly within the remit of the Department of Education and Skills;
 - Both FE and HE should be overseen by a distinct intermediary body.

Looking to the future, there was strong sense that the current model was not delivering efficient and effective public policy nor was it capable of making good judgement calls. Despite the concerns raised above, there was broad support for bringing the FE and HE sectors closer together, with many voices recommending that a single new agency needed to be part of the solution. This view was often supported with reference to the size of Wales suggesting that a single body could more easily and effectively overcome problems of overlapping organisations and duplication of resources while optimising the benefits of size to be more collaborative and strengthen capacity to enhance quality and competitiveness. Such a body should enable a vision to be put forward which went beyond individual initiatives or programmes of activity at the institutional level. However, it needed to be respectful of the different and complementary roles of all parts of the system, providing more effective learning pathways from 6th, FE and HE, work-based learning and adult and community learning. The governance structure should oversee, promote and lead the changes required, and provide a holistic approach to implementation, whilst respecting institutional autonomy.

3.2.7 Engagement with Welsh society and the economy

Over the years, Welsh educational institutions have played an important role in the development of the Welsh society and economy. In recent times, more attention is being given to skills and employability at all levels, and the broader needs of Wales. Many of the institutions pointed to strong structured partnerships with employers. The Regional Skills Partnerships were broadly applauded as constituting a positive development. But the challenge remains a reciprocal one: developing an attractive high-value economy with well-qualified graduates from all levels of the post-compulsory landscape.

Fundamentally Wales is a micro-SME economy, comprised of low level manufacturing and service employments, although there are also some very large employers. There is a large dependency upon the public sector. While

people identified social care as a growing domain because of demographics there was also recognition that the level of dependency was out of step with likely changes in public finances. Cardiff is an exception having a broader and deeper economic base, and being more integrated into the UK economy – which also has implications for its institutions. In the future, people argued, more attention will need to be placed on developing a strong middle tier of domiciled Welsh companies, based around closer linkages between economic needs and educational institutions, especially to make the economy more attractive to keep students and graduates in Wales.⁴³ Ultimately, any student should be able to do all his/her educational studies in Wales and find suitable employment – which is not the current situation. And, while there is nothing to stop people going to university, there are limited (funded) opportunities to pursue advanced/post-graduate qualifications in Wales, and then move into employment.

The balance between serving Wales vs. serving their institution produced differences of opinion. Many expressed the view that there was insufficient connectivity between educational programmes and future Welsh social, cultural and economic development. There was little deep association with Wales as a region because the institutions were driven by student demand; thus they tended to be supply vs demand led. In the case of the universities, many of the students came from, and returned to, England. Others suggested that the relationship needed to be moderated in such a way that it was not simply about what employers want – as this could fluctuate – because education has a wider remit.

Many people expressed concern about insufficient future planning beyond simply reacting to employer-driven needs. No one was looking at imbalances in provision or mobility opportunities or constrictions for students. There was an absence of strategic co-ordination between education and social and economic development within the Welsh Government, and within the educational system overall or between sections of the system. People came together on particular issues, but no single body was responsible for coherence.

As a consequence, there was a need for a more coherent planning framework which included knowledge transfer, Welsh-language provision, and sharing good practice and actions to address higher-level skills gaps and promote business development. Given the social and economic challenges, how well organised is the post-compulsory sector in Wales to meet them? What needs to change?

3.3 Main messages

Based on consultation with stakeholders, the main messages emerging can be summarised as follows:

- Post-compulsory institutions have played an important role in Wales' history but a step-change is required;
- Accelerating competition within the UK and internationally, alongside changes in HE governance in England, pose challenges but also present opportunities for Wales;
- Insufficient strategic thinking by government or by the institutions, at all levels, leading to insufficient collaboration, lack of critical mass, and too much competition for limited resources with little benefit for Wales;
- Absence of an overall vision for the post-compulsory system aligned to the social, cultural and economic needs of Wales, regionally and nationally, now and in the future;
- Confusion around the overlapping roles, and duplication of resources, between and across different institutions, between further and higher education, and between different agencies;
- Absence of coherent learning pathways and educational opportunities for students, of all ages, gender and talent, from school, into/through further and higher education, and especially throughout their working lives;
- Inability to attract and retain talent in Wales due to inadequate educational (including at post-graduate level) and employment opportunities;
- Important common reference points with respect to Welsh universities operating within the UK, inter alia qualifications framework, quality assurance, research, internationalisation and branding;
- Intermediary organisations can help ensure long-term strategic and objective decision-making;
- Overall absence of strategic capacity and joined-up thinking at and between government and institutions.

4. Lessons from international experience

4.1 International experiences

This section discusses in broad detail different approaches to organizing and governing post-compulsory education systems. The discussion which follows highlights the main lessons from which Wales may learn in order to inform future decisions about the regulation and oversight of post-compulsory education and training in Wales.

The following jurisdictions were chosen:

Table 1: Reference jurisdictions

UK NATIONS AND REPUBLIC OF IRELAND
ENGLAND
NORTHERN IRELAND
SCOTLAND
REPUBLIC OF IRELAND
OTHER JURISDICTIONS
ALBERTA
AUSTRALIA
FINLAND
HONG KONG
ISRAEL
NEW ZEALAND
ONTARIO

The selection of jurisdictions was made on the following basis:

- Other UK nations and the Republic of Ireland between them provide a unique set of different models and experiences within broadly similar social, cultural and economic contexts; and
- Other jurisdictions, from different parts of the world, which share similar educational conditions and expectations as developed societies and economies.

Some of the latter, such as Ontario and Alberta, operate within a federal system, which provides some interesting parallels with UK nations which share some common features, for example, policy overlap with respect to the operation of the RAE/REF and the QAA. Table 1 below summarises the main

characteristics of each jurisdiction; fuller details about each jurisdiction are discussed in Appendix C.

The experience across the reference jurisdictions shows that there are differences in the way in which the systems are organized and governed. There is a variation between those which have direct ministerial responsibility and those which have an intermediary or buffer organization. There is some tension within all systems between policymaking, policy advice and policy implementation, with the former role usually being the prerogative of government, and advice and implementation being that of intermediary organisations. Some jurisdictions combine FE and HE within the same regulatory model, while others have different approaches for each part of the post-compulsory/post-secondary system. None of the examples include the equivalent of 6th form (16-18 year olds), which is usually included within the broader educational/schools portfolio.

It will also be evident that while each system has its unique features, each variation of governance model provides a stable education system. Context is important to understanding different policy choices, and accordingly resulting structures and governance arrangements. Thus, caution should always be exercised with respect to simply copying from other situations. Nonetheless, globalisation and the internationalisation of HE have led to a remarkable degree of commonality between different jurisdictions which are now experiencing similar challenges, and there is much to be learned from how different systems operate, and the strengths and weaknesses of governance in other domains. Ultimately, the choice of optimum model is one which is best aligned with the overall societal values and objectives for society and the educational system in Wales.

Three main features are discussed below: regulatory and governance arrangements; the post-secondary landscape; and mechanisms of co-ordination. This section also describes some of the advantages and disadvantages of the different approaches, and identifies some lessons for Wales.

Table 2: Overview of system governance across reference jurisdictions⁴⁴

JURISDICTION	TOTAL POPULATION	POST-COMPULSORY/ SECONDARY POPULATION ^{**} , ⁴⁵	TYPES OF INSTITUTIONS	KEY CHARACTERISTICS
WALES	3.063	306,265 ⁴⁶	Universities and FE Colleges	<ul style="list-style-type: none"> • 6th form, FE, WBL and ACE governed directly by the Department of Education and Skills, which is responsible for funding, staffing, etc. • HEFCW is the non-governmental department which oversees HE, and allocates public funding, and is responsible for quality; it is the lead regulator; • Estyn and the QAA have responsibility for quality assurance appropriate to the particular level; • Many aspects of the architecture for education are similar to that which pertains in England.
ENGLAND	54.3m	4,488,720	Universities and FE and HE Colleges	<ul style="list-style-type: none"> • HEFCE, a non-departmental public body, allocates public money to universities and colleges in England; develops and implements policy; has responsibility for “quality assessment”; is lead regulator. • QAA is an independent agency with responsibility for quality assurance of HE across England, Wales and Northern Ireland according to the Framework for HE Qualifications. • HEFCE contracts QAA to carry out reviews and undertake various other functions. • The FE college sector/system, comprised of colleges, training providers and work-based schemes, is funded by three main

^{**} Data for FE and HE are not strictly comparable across different jurisdictions, even within the UK, due to different counting rules.

				<p>funding bodies: EFA, SFA and by HEFCE for direct and indirect (franchised) HE.</p> <ul style="list-style-type: none"> • Office of Qualifications and Examinations Regulation (Ofqual) is the non-ministerial government department that regulates qualifications, exams and tests in England. • The governance architecture is currently under review.
NORTHERN IRELAND	1.7m	229,213	Universities and Regional FE Colleges	<ul style="list-style-type: none"> • DELNI has direct responsibility for FE (16-19 year olds) and HE, acting as both regulator and funder. • 6th Form, operates primarily within Grammar Schools, overseen by the Department of Education. • QAA has responsibility for quality assurance, and Ofqual regulates vocational qualifications.
SCOTLAND	5.1m	299,828	Universities and FE Colleges	<ul style="list-style-type: none"> • SFC, a non-departmental public body, oversees both FE and HE, and acts as an intermediary body between ministry and institutions with oversight and co-ordination for whole system. • SFC implements Outcomes Agreements across both FE and HE. • Scottish Qualifications Authority is executive non-departmental public body of responsible for accrediting educational awards.
REPUBLIC OF IRELAND	4.6m	255,022	Universities, Institutes of Technology, and Education Training Board Centres	<ul style="list-style-type: none"> • Higher Education Authority, an intermediary organisation, responsible for allocating funding, providing policy advice and exercising the main regulatory functions with respect to almost all publicly funded HEIs. • HEA operates Strategic Dialogue process (negotiated outcomes agreements) with HEIs in alignment with national performance framework. • FE and work-based learning/apprenticeship administered directly by ETBs, and SOLAS, which is the FE and Training Authority. • QQI is national quality and qualifications state agency responsible for qualifications, standards, awards, and recognition for all FE and HE programmes and institutions, and for maintaining the Qualifications Framework.

ALBERTA	4.1m	186,720	Comprehensive Academic and Research Institutions, Baccalaureate and Applied Studies Institutions, Polytechnic Institutions, Comprehensive Community Institutions, Independent Academic Institutions, and Specialised arts and Culture Institutions	<ul style="list-style-type: none"> • Post-secondary education, universities and colleges, are overseen by Ministry of Advanced Education. • HE is overseen through Campus Alberta which establishes collaborative, system approach; it provides advice to government but has no regulatory or power. • Apprenticeship and Industry Training Board oversees vocational education.
FINLAND	5.4m	333,197	Universities, Universities of Applied Sciences, Further and Continuing Education Institutions	<ul style="list-style-type: none"> • Ministry of Education and Culture oversees both FE and HE, and steers system via performance agreements with institutions every four years. • FINEEC is the single national QA agency for all educational provision, replacing individual agencies for different educational levels.
HONG KONG	7.2m	325,201	Publicly-funded Institutions, Self-financing Institutions, Institution Providing Locally-accredited Non-local Degree Programmes, Self-financing Institutions (Locally-accredited Sub-degree	<ul style="list-style-type: none"> • Education Bureau is responsible for all levels of education, and is advised by the UGC in terms of publicly funded HE. • UGC is non-statutory advisory committee responsible for deployment of funds for strategic development of the HE sector, and provides advice to both government and institutions. • Vocational Training Council offers pre-employment and in-service VET. • HKCAAVQ is statutory Accreditation Authority. • Recommendation to establish a FE Council is outstanding.

			Programmes), Vocational Training Institutions	
ISRAEL	8m	325,201	Universities, Teacher- Training Colleges, Academic colleges, Regional (FE) Colleges	<ul style="list-style-type: none"> • HE overseen by Council for Higher Education, which is statutory independent intermediary body, with responsibility for all issues connected with HE. • FE operates under TVET and governed directly by Ministry. • CHE operates the QA system for universities.
NEW ZEALAND	4.4m	304,466	Universities, Institutes of Technology and Polytechnics, Colleges of Education, Wānanga	<ul style="list-style-type: none"> • Tertiary Education Commission is the Crown entity responsible for funding all tertiary education institutions. • TEC implements policy priorities as set by the Tertiary Education Strategy. • QA responsibility divided between several different bodies according to institutional type and level, and according with the NZ Qualifications Framework.
ONTARIO	13.7m	814,506	Universities and Colleges	<ul style="list-style-type: none"> • FE and HE is overseen, at provincial level, by Ministry of Training, Colleges and Universities. • FE and apprenticeship is administered by Employment Ontario, which is part of the MTCU. • HEQCO, an agency of the government, provides evidence-based research to underpin improvement and policy, and evaluates postsecondary sector according to a performance framework/Strategic Mandate Agreements.

4.2 Regulatory and governance arrangements: intermediary organisations

The international literature refers to the concept of “co-ordination” as the way in which different systems are managed by means of governmental, quasi-government or inter-institutional arrangements. Van Vught described governance and regulation arrangements as “the efforts of government to steer the decisions and actions of specific societal actors according to the objectives the government has set and by using instruments the government has at its disposal”.⁴⁷ According to Meek, modes of co-ordination involve planning and resource allocation mechanisms, overall regulatory frameworks or a set of ideas.⁴⁸ The primary (lead) responsibility is usually given to the appropriate ministry or to a specific agency often referred to as a buffer body. Throughout and since the 1990s, there has been a noticeable shift to market-led and competitive mechanisms and self-regulation as the preferred way to regulate HEIs, with the above ministries or agencies performing a hands-off or “steering-from-a-distance” approach. However, in more recent years, given the importance that HE plays within the national eco-system associated with underpinning and sustaining competitive knowledge-intensive societies and economies, there has been a noticeable move in favour of greater co-ordination. Subsequent to the financial crisis in 2008, there has been a wider discussion around the limits to the role of the market in many other domains, such as banking and financial services – with implications also for post-secondary education.

It is important to note that distinctions between a market-led and state-led systems are not mutually exclusive. Clark argued that all systems are shaped by a “triangle of coordination” which involves and balances the needs and interests of the state (government and associated agencies), the market (competition amongst institutions), and the academic oligarchy (the collective voice of the academy).⁴⁹ Nowadays, the “triangle” has become a “pentagon”, in recognition of the significant role played by students, variably described as partners or customers⁵⁰, and society more broadly, variously described as stakeholders, as key players in the educational system. Likewise, concepts of institutional autonomy, which see institutions as important strategic actors, as well as academic freedom, which promotes and celebrates an independent and critical-thinking academy, remain important features and principles within both models.⁵¹

There are two basic governance models operating across the reference jurisdictions (see Table 1), of which the use of quasi-governmental intermediary agencies, or buffer bodies, is the most common.

Table 3: Coordination models by reference jurisdictions

Co-ordination Model	Reference Jurisdictions
Governmental (Direct State Regulation)	Northern Ireland, Australia, Finland, Alberta, Ontario
Quasi-Government (Steering via Buffer/Intermediary Organisations)	England, Scotland, Wales, Republic of Ireland, Hong Kong, Israel, New Zealand,
Inter-Institutional Arrangements	None

Because of the principle of autonomy, intermediary bodies are strongly favoured. Such organizations are usually an “agency of government that occupies a zone of relative independence between the government and the higher education institutions”; they differ from both government ministries and departments and from institutions and the latter’s governing boards. They also differ from self-regulatory or representative organisations which are often formed by institutions themselves (Locke, 2007). Depending upon the jurisdiction, an intermediary body’s role may be either/both advisory or regulatory (Trick, 2015, 6):

- An advisory intermediary body provides advice to the government on policy goals and policy instruments with respect to system coordination and planning issues (such as funding and academic quality) as they relate to governmental objectives and societal needs.
- A regulatory intermediary body has the authority to undertake and implement system planning and coordination functions such as assigning institutional missions, establishing enrolment levels, allocating government funds and approving academic programs.

International experience suggests that the most typical roles performed by intermediary organisations are the following, although the precise mix of responsibilities may vary considerably.⁵²

- Planning, co-ordinating and strategic steering;
- Maintaining macro-view of the system;
- Resource allocation;
- Monitoring, evaluating and managing performance;
- Regulation of the system and accreditation of institutions (public and private);
- Assuring and assessing quality of teaching and learning and/or research;
- Accountability measures;
- Monitoring risk, especially financial risk;
- Implementation of government policy;
- Providing formal and confidential advice to government;

- Independent role vis-à-vis both government and the institutions.

The latter role is what has given intermediary organizations their name as a “buffer body”. While this nomenclature is sometimes seen as pejorative, such organisations do help maintain a safeguard against political intrusion as well as helping maintain continuity in decision making and being able to face up to change when other actors lag in doing so.⁵³ This aids the Minister’s capacity to develop policy and have this implemented while reducing the risk of politicising policy changes. There are advantages for learners also; because their educational cycle extends beyond political cycles, it helps guarantee consistency in the system. As Trick notes, “the role of an intermediary body comes to the fore when there is a need to make judgments based on qualitative and non-standardized information”.⁵⁴

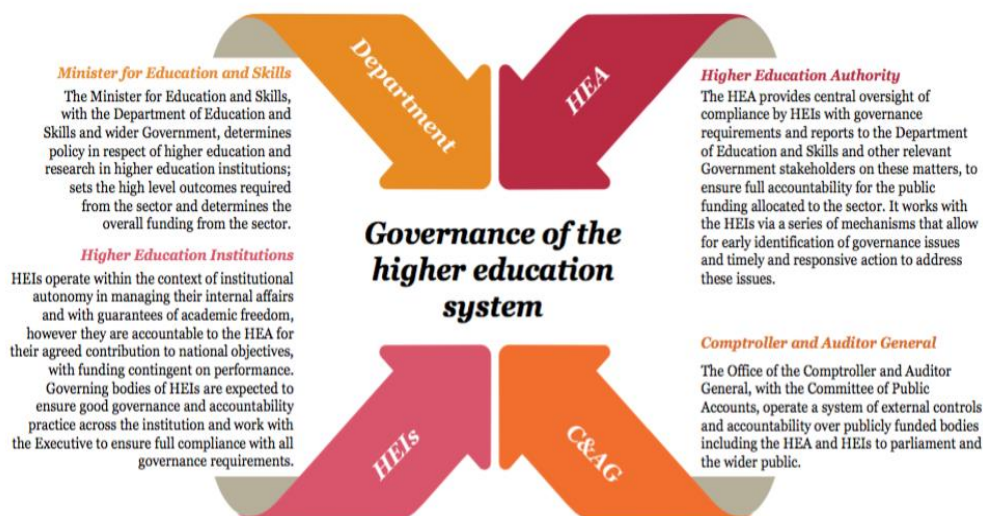
Looking at Europe only, Estermann noted that intermediate bodies have a broad range of different and overlapping responsibilities:⁵⁵

Table 4: Intermediary bodies in Europe

Responsibilities	Countries
Intermediate bodies with broad responsibilities with respect to funding, accountability, quality, policy and analysis.	Ireland, United Kingdom, Romania
Intermediate bodies with specific responsibilities either in funding, criteria setting or strategic advice	Belgium, Denmark, Italy, Latvia
Intermediate bodies for funding research	Almost all European countries <i>except</i> Greece and Malta

Ireland provides a useful example of governance within a multi-stakeholder environment, with the Department of Education and Skills, the Higher Education Authority (HEA), the HEIs, and the Office of the Comptroller and Auditor General. A clear delineation in roles and responsibilities was reaffirmed in the *National Strategy for Higher Education to 2030*, which also strengthened the role of the HEA as an intermediary agency with delegated authority.⁵⁶ An overview of the respective roles and responsibilities of these main actors is set out in Figure 1 below.⁵⁷

Figure 1: Governance framework for the Irish higher education system



Source: HEA (2015) "Governance Framework for the Higher Education System, p2.

The HEA has responsibility to:

- Provide expertise to the Department of Education and Skills and other stakeholders, and make decisions based on expertise;
- Advise the Government on the financial and other needs of the sector;
- Take decisions that are transparently objective;
- Take long term decisions, subject to government policy, that are outside the political cycle and provide a degree of objectivity as a result, especially in the case of decisions that may be controversial.

The relationship with the Minister for Education and Skills is framed around the delivery of national policy objectives, a service level agreement outlining specific required activities, and financial accountability and risk. The HEA monitors and evaluates HEI progress with respect to national objectives.⁵⁸

Finally, it should be noted that the particular system of regulation and governance can be altered or modified depending upon circumstances and government decision-making. For example, Australia had intermediary bodies for the HE and FE sectors but these were replaced in 1988 with direct control by government. The role of HEFCE in England is currently under review and may be replaced by a new Office for Students.⁵⁹ At various times every Canadian province has had one or more coordinating or regulatory bodies for HE; intermediary bodies continue to exist in Newfoundland and Labrador, Quebec and Nova Scotia.⁶⁰

From the experience of jurisdictions with intermediary organizations, we learn:

- The majority of the reference jurisdictions have an intermediary organization which acts to implement policy, allocate resources, monitor and evaluate performance, and regulate the system, as well as provide advice to government and institutions;
- The advantages of having the ability to implement, oversee and sustain policies and policy change over longer periods of time, and to withstand challenges associated with being perceived as too close to any particular political party or government;
- The advantages associated with having specialized staff, with the knowledge and expertise and capacity necessary to make judgments based on qualitative information that cannot be reduced to formulas and to support government in developing policies for steering the HE system.

4.3 The post-secondary landscape

The last decades have witnessed a transformation in the role, scale and expectations of HE. Rather than institutions attended by a small social elite, post-secondary (or post-compulsory) attendance is now seen as essential by the greater majority of people and for society. While the breadth of provision, most notably inclusion of 16-18 year olds, varies according to jurisdiction, post-compulsory/post-secondary education is now considered a normal if not essential pursuit. These demographic and labour market demands and global developments are reshaping systems of education. To meet 21st century demands, governments around the world, in different ways, are looking at the capacity and capability of their various institutions, and the system-as-a-whole, to meet the needs of society and the economy into the future.

The process of massification, therefore, requires a much more sophisticated response to expanded provision than heretofore. Assumptions that expansion would *on its own* provide mechanisms for social inclusion and mobility are being heavily questioned, and so-called entry routes are now seen as just as likely to close off educational and career opportunities as to open them. “This suggests that responsibility for the levels of participation of different social groups does not lie with the universities (and associated organisations) alone, but rather is shared across the educational system as a whole.”⁶¹ Accordingly, system architecture and governance have become matters of particular attention.

Pursuance of institutional or mission diversity has been considered a basic norm of HE policy agenda over the past decades. Diversity is seen to best meet educational and societal requirements through a varied set of FEIs and HEIs, each performing a different function according to their mission within the system. This allows the overall system to meet students’ needs; provide opportunities for social mobility; meet the expectations of different labour markets; serve the political needs of interest groups; permit the combination of elite and mass HE; increase levels of HEI effectiveness;

and offer opportunities for experimenting with innovation.⁶² One of the best examples is what is referred to as the California Master Plan, which differentiated between community colleges, state/regional universities and research-intensive universities as a way to help ensure the increasing breadth of functions in the best possible and most cost-effective way.⁶³

Various terms are used to describe or define “post-secondary education”, including “third-level” and “tertiary” education or “higher education” and “further education”; Wales refers to the “post-compulsory” sector. In the 1970s, UNESCO developed the International Standard Classification of Education (ISCED) as a framework to differentiate between shorter practical, technical or occupational skill-focused and longer theoretical programmes subsequently revised in 1997 and then again in 2011. Because national systems vary in terms of structure and terminology, this has become the international framework against which to benchmark performance or monitor progress against national and international objectives.⁶⁴ Institutions have tended to be categorised accordingly; in addition, most jurisdictions have developed their own qualifications framework.

Heretofore, governments either allowed their liberal market or co-ordinated binary systems to carve out distinctive educational pathways with each part of the system preparing graduates for different occupational destinations, which in turn had different knowledge bases which were reflected in the different curriculum within each sector.⁶⁵ However, nowadays, as people are living longer and are likely to change careers, not just jobs, many times during their lifetimes, there is a growing understanding that people in high participation societies require much greater preparation for a wider range of competences, and deeper embedding of what are euphemistically called “soft skills”. Developing competencies for problem-solving and innovation, as well as analytical and critical thinking, does not start in HE nor are the differences between vocational, professional and academic qualifications as distinct as previously conceived and organized. The concept of lifelong learning (LLL) stresses that “learning throughout life is a continuum.”⁶⁶ This requires much greater cohesion across the entire educational and life-cycle, from pre-school to active engaged citizenship, rather than a blame-game in which different sectors accuse each other of failings within the system overall.

Accordingly, increasing policy, and educational, focus has been given to the “transition” from secondary to post-secondary education, with more attention given to developing *coherent and integrated pathways* between these parts of the system⁶⁷ – which also underpins the recognition that completion of secondary education is no longer sufficient to prepare and sustain people in 21st century societies and economies. In other words, “students need more general post-compulsory education and greater mobility between vocational and higher education to match their education with employment opportunities.”⁶⁸ Wheelahan et al. argue that “the sharp distinctions between the vocational education and training (VET) and higher education sectors and between publicly funded and privately funded institutions are giving way to a

more differentiated single tertiary education sector with greater institutional diversity.”⁶⁹

A “world-class system” strategy highlights the necessity for policies that seek a holistic approach with different institutions specializing according to need, relevance and competences. Whereas vertical differentiation relies on status and reputation, horizontal differentiation focuses on “profile” and celebrates diversity.⁷⁰ Salmi has similarly argued that

At the end of the day, world-class systems are not those that can boast the largest number of highly ranked universities. They are, instead, those that manage to develop and sustain a wide range of good quality and well-articulated tertiary education institutions with distinctive missions, able to meet collectively the great variety of individual, community and national needs that characterize dynamic economies and healthy societies.⁷¹

At the very least a post-secondary framework is important to overcome educational gaps and to formally recognise the diversity of post-secondary opportunities, and to acknowledge the complementary roles that academic and vocational education, and FE and HE institutions, can play within a more coherent and integrated system.⁷² As part of this approach, adoption of a “whole of education” policy and the establishment of an Educational Forum, could help bring together key actors from pre-school to life-long learning (LLL), and provide an added essential benefit for successful societal outcomes.

There are some interesting examples of how different jurisdictions are recognising and beginning to approach these new challenges. Meek identifies a trend to shift the “balance between state regulation and the free market back towards the state” as a “rational response to a degree of market failure”⁷³. Ontario has similarly remarked on these changes in terms of the “post-secondary system as a whole...taking on broader responsibilities in terms of whom it educates and for what purposes, while individual institutions have increasingly specific mandates”.⁷⁴ The OECD has also recognised the importance of taking a “systems” approach to understanding how well institutions are meeting national goals and objectives.⁷⁵ Moreover, in a period of increasing accountability, calls for greater productivity and intensifying concerns for efficiency, a systems approach facilitates better co-ordination and the elimination of unnecessary competition and duplication of resources.

Table 5 identifies four different organizational and governance arrangements with respect to the post-secondary/post-compulsory system across the reference jurisdictions cited in this report: separate governance arrangements, HE system co-ordination, single authority governance, and policy instruments. There may be some overlap in the categories identified in Table 5; for example, Ireland has separate governance arrangements for FE and HE but maintains a co-ordinated approach to its HE system.

Table 5: Organisation and governance of post-compulsory/post-secondary sector

Organization and Governance Arrangements	Reference Jurisdictions
Single Intermediary Authority for Managing and Governing FE and HE	Scotland, New Zealand,
Policy Instruments for Managing and Governing FE/HE via the Ministry	Alberta, Ontario, Finland
HE System Co-ordination	Ireland, Hong Kong, Australia
Separate Governance Arrangements for FE and HE, no formal co-ordination	England, Northern Ireland, Israel, Wales

Of the reference jurisdictions, Scotland and New Zealand have a single intermediary agency with responsibility for formal oversight process of the whole post-secondary sector – which does not include 6th form education. Alberta, Ontario and Finland do this through the ministry; Alberta has established Campus Alberta but it has no regulatory function or power. Ireland, Australia and Hong Kong have a process of formal system-co-ordination for HE which includes, coordinating teaching and learning, regional engagement and/or research. The Hong Kong University Grants Committee takes a strategic approach “by developing an interlocking system where the whole higher education sector is viewed as one force, with each institution fulfilling a unique role, based on its strengths.”⁷⁶ System co-ordination is also a strong feature of US state systems.⁷⁷ SUNY, the State University of New York, a multi-campus system of over 60 different institutions ranging from community colleges to research-intensive universities, has coined the concept of “systemness” as a means of maximising the benefits in a “more powerful and impactful way than what can be achieved by individual campuses acting alone.”⁷⁸

In 2005, Scotland brought the FE and HE parts of their system together in the Scottish Funding Council (SFC), providing an opportunity for a more strategic, coordinated and coherent approach to educational provision with a strong focus on institutional mission delivering for Scotland. This also means that the SFC can take a macro and integrated approach to teaching and research, vocational and academic studies, etc. Colleges had been part of local authorities during 1990s and then the civil service. This has shifted the remit of the SFC from being concerned with universities, and then FEIs and HEIs aka institutions, to being concerned with the development of the Scottish educational system as a whole. According to Keep, this approach makes sense, providing a more rational approach to planning and collective engagement between the institutions as well as with their myriad stakeholders.⁷⁹

New Zealand presents a particularly useful case to study because of its comparative population to Wales (NZ has 4.4m compared with 3.0m for Wales). It established a Tertiary Education Advisory Commission (TEAC) in 2000 to “develop a strategic direction for tertiary education in New Zealand...[and] to produce a high-

level strategic direction which has wide acceptance that will endure over the medium to longer term.” In total, four reports were published, between 2000 and 2001. In its first report, the TEAC adopted a very broad definition of tertiary education, explaining its decision as follows:

Across the world there are many different approaches to defining the nature and scope of tertiary education. Differences include where the boundaries should be drawn between the secondary and tertiary systems, distinctions between the formal and non-formal sectors, and between “higher education” and other parts of the tertiary system. Plainly, there are difficulties in setting precise limits to the tertiary system and any particular boundary is likely to generate objections.

The Commission has chosen...to take the view that tertiary education should be broadly defined. This definition includes learning at all levels within public tertiary institutions (i.e. polytechnics, universities, colleges of education and wananga), programmes provided by private and government training establishments, business-based education, industry training, and all lifelong learning beyond the compulsory school system. It thus includes both formal and non-formal education, and what is often termed “second-chance” education. Embracing these diverse forms of education and training is particularly important if the challenges of promoting lifelong learning and designing a tertiary education system that contributes to the knowledge society are to be taken seriously.⁸⁰

The TEAC’s second report (2001) recommended that the Tertiary Education Commission (TEC) – which had been established by the Education Act 1989 – be given:

responsibility for policy advice and funding allocation for the whole tertiary education system, including community education, second-chance education and industry training....The Commission’s view is that a single coherent and comprehensive central structure would better facilitate the desired differentiation and complementarity of the tertiary education system, because its scope of coverage would mean that it would be able to steer all forms of provision.⁸¹

From the experience of the reference jurisdictions conceptualizing the post-secondary/post-compulsory landscape, we learn:

- There are a mixed range of models, with increasing emphasis being given to understanding institutions as being part of a “system” rather than individual self-serving actors;

- The advantages of a “system” approach is the capacity it provides for developing a strategic, coordinated and coherent approach to educational provision, with a strong focus on institutional mission, delivering “collective impact” for society;
- The advantages of a systems approach facilitates better co-ordination and the elimination of unnecessary competition and duplication of resources.
- There are important lessons in balancing the needs and requirements of society, and the system overall, with the advantages of having strong, ambitious and autonomous institutions.

4.4 Mechanisms of coordination: performance agreements, compacts and profiling

The focus on educational, and specifically learning outcomes, has been an important feature of HE policy over the last decades as attention has shifted to measuring and comparing quality. Today, alongside the push for greater accountability and efficiency, quality and excellence are a concern for all stakeholders: quality affects national geopolitical positioning and pride; it has become a beacon to attract mobile investment and talent; it is the basis of institutional reputation and status, and for performance assessment of scientific-scholarly research; graduate capability and opportunities depend upon it; and the taxpayer is concerned that it is receiving value-for-money and a good return-on-(public) investment. Traditionally, (higher) education quality has been measured by input factors: student entry numbers and qualifications, credit hours, staff-student ratio, academic qualifications, budget/income, etc. Today, there is an increasing focus on outcomes, impact and benefit.⁸²

But measuring quality is a complicated, complex and often contentious issue. The Bologna Process succeeded in placing consideration of quality within a broader educational framework in the way it formalised the concept of learning outcomes.⁸³ Global rankings succeeded in linking quality with elite resource-intensive universities but a more sophisticated approach is required. Ultimately it is important that the educational system delivers the appropriate outcomes that learners and society require and expect, now and into the future.

To underpin these objectives, there is growing recognition that forward planning and system co-ordination is necessary; having a macro-view of demographic and geographic patterns as well as social, economic and labour market changes, within the context of a competitive national and global perspective, and the capacity and capability to nudge or steer institutions to actually meet those needs, is vital. Because our educational systems are a vital part of our national infrastructure, this “requires long-term, coherent and focused system-wide attention to achieve improvement”.⁸⁴

To help achieve this, many countries have introduced performance-based funding models or performance agreements to encourage education institutions focus on

particular outcomes and to financially reward them for them for performance in line with government priorities. Performance-based funding has also been a strong feature of many US state system.⁸⁵ This shift replaces the more traditional approach of annual funding based on input factors or some historic calculation, which was increased (or decreased) in line with inflation, exchequer resources or political/discretionary decisions.

- *Performance-based funding* is a broad term, normally associated with a type of funding that rewards organizations on the basis of expected performance, instead of actual performance. Across the world there are many examples of funding formulas or assessment exercises where institutions receive public funds based on results achieved in the (recent) past; the RAE and REF, and QR, are examples of this type.
- *Performance agreements – or performance contracts* – look at future performance, and often involve a discussion or “negotiation” between the funder (the ministry or its agency) and the institution around a set of objectives and performance targets.⁸⁶

Broadly speaking, the former mechanism tends to be more top-down, while the latter relies on a diplomatic process which recognizes and respects institutional autonomy and the important role of institutional strategic leadership capacity and capability. Of the reference countries, several of them have introduced one of these mechanisms as identified in Table 6 below.

Table 6: Performance-based funding and performance agreements

Performance-based Funding and Performance Agreements	Reference Jurisdictions
Performance-based Funding	Israel, Northern Ireland
Performance Agreements	Australia, Finland, Hong Kong, Ireland, Scotland, Ontario, New Zealand,
Input or Annual Funding	England, Alberta, Wales

Drawing on the various experiences, it seems persuasive that some form of performance agreement is likely to be an on-going feature of post-secondary systems into the future. However, the evidence shows that the set of indicators or methods used varies considerably from jurisdiction to jurisdiction; in many cases, mechanisms are changed regularly in response to perceptions of what works best. As de Boer et al. argue, “There is no compelling evidence on what works well under which conditions. The reality is that ‘context matters’...given the uniqueness of each higher education system...”⁸⁷ Thus, the discussion which follows is not intended to be prescriptive nor to discuss the details of what and how performance should be measured. Rather the examples are presented to illustrate how different systems are being coordinated in order to ensure that national societal objectives are being

met.⁸⁸

Institutional profiling has become another important mechanism within performance management and for helping shape institutional diversity. As systems expand, methodologies have emerged which endeavour to make sense of them. The California Master Plan (1960)⁸⁹ had established a three-tier system: community colleges, state universities (BA and MA) and research universities (BA, MA, PhD),⁹⁰ while the binary system, was the dominant model elsewhere until the UK and Australia adopted a unitary model beginning in 1989 and 1992, respectively. Nowadays, in recognition of a more complex and competitive national and global societal and learner landscape, many countries have moved to embrace the concept of institutional profiling as a way to encourage institutions to differentiate in addition to celebrate the different strengths of different institutions. From a national and institutional perspective, the data collected, provides a way to monitor and benchmark trends in educational provision, fields of study, student participation, and the financial and human resource-base.⁹¹

The US *Carnegie Classification of Institutions of Higher Education* (CCIHE), devised in 1973 and substantially revised in 2005 with minor changes in 2015, provides a typology or framework to “describe, characterize, and categorize colleges and universities” according to institutional mission.⁹² U-Map was developed as a European classification or profiling project to highlight the diversity of the European higher education landscape according to teaching and learning, student cohort, research, knowledge exchange, internationalisation, and regional engagement.⁹³ Profiling has been taken up and developed in many jurisdictions, including Ireland⁹⁴, Denmark, Finland, Germany, Hong Kong, New Zealand, Norway, the Netherlands, and Australia.⁹⁵

The role of the University Grants Committee (UGC) in Hong Kong is to help develop an “interlocking” HE system, whereby the whole HE sector is viewed as one force, with each institution fulfilling a unique role, based on its strengths. It plays a proactive role in strategic planning and policy development to advise and steer the HE sector in satisfying the diverse needs of stakeholders. The *Performance and Role Related Funding Scheme* (PRFS) was implemented to encourage greater role differentiation, to aid institutions to find ways to further improve and encourage performance, and to strengthen accountability. It ties together funding allocation, performance, and performance against role.

Ireland and Scotland both have negotiated performance agreements, which involve a conversation between the agency (HEA and SFC, respectively) with the institutions around national objectives and institutional targets in what is called a “strategic dialogue”. In the Irish case, the government has set out national objectives for the system, which it expects both the HEA and individual institutions to meet; each institution then enters into a compact with the HEA.⁹⁶ The mission-based performance compacts provide the basis for how performance will be measured, as appropriate to the institutional mission, and a proportion of funding will, in future, be contingent upon

performance.⁹⁷ A performance report is published biennially based on the outcomes of the strategic dialogue process, in which performance is discussed in terms of national objectives.⁹⁸ New Zealand has a similar process; the Tertiary Education Commission (TEC) sets out what it expects to fund in a Plan Guidance document, and subsequently agrees with individual TEOs what they will achieve over the three-year Plan period. Each institution must then develop a three-year plan showing how it will focus on the TEC's priority areas, and have this plan approved by the TEC. Australia introduced mission-based compacts in 2012.

Ontario is another interesting example. The legislated mandate of the Higher Education Quality Council of Ontario (HEQCO) is to evaluate the postsecondary education sector and to report on the results of that assessment. Colleges and universities operate within the remit of strategic mandate agreements, and according to particular performance indicators.⁹⁹ The intention is to situate Ontario's performance within the context of a mix of international and Canadian indicators across four domains: quality, access, productivity and social impact. The intention is to shift discussion in Canada away from "how much money is spent on higher education" to "how the money is spent and what outcomes are being achieved."¹⁰⁰

From the experience of jurisdictions using performance funding or performance agreements, we learn:

- The broad use of performance funding or performance agreements is linked to growing recognition of the necessity to ensure the educational system delivers what learners and society requires and expects;
- The advantages of the process are that it necessitates government setting out its policy objectives for the system over the medium term, and provides the mechanisms to shape the system in ways which meet those objectives;
- The advantages of performance agreements are they involve the government or its agency in a dialogue with institutions around targets aligned with national objectives and institutional mission;
- The advantages of institutional profiling are that it provides a mechanism to differentiate institutional missions for the benefit of government, institutions, students and stakeholders, and to celebrate this diversity;
- The process of performance agreements encourages and supports strategic leadership capacity and capability throughout the institutions.

4.5 Summation

Taken together, these experiences and lessons lead to consideration of the following reform directions:

- Adoption of a post-compulsory system perspective which can ensure a strategic, coordinated and coherent approach to educational provision for all learners and society;
- Establishment of a new post-compulsory intermediary body with the legislative authority to undertake and implement system planning and coordination functions;
- Better alignment between national policy priorities, institutional funding and mission, and performance and productivity whilst respecting institutional autonomy.

5. Conclusions

5.1 The case for reform

The recent decade has seen considerable legislative reform of Welsh post-compulsory education.¹⁰¹ Most recently, John McCormick and colleagues were asked to “conduct a review of higher education (HE) governance in Wales”, publishing their report in 2011. It noted that higher education faced some considerable challenges:

- The need to maximize income and financial effectiveness in the face of increasing budgetary pressures;
- The need to maintain academic and research excellence in an environment of changing demographic, student demand and rising expectations;
- The need to address issues of institutional size and capacity, particularly in the face of increasing global and UK competitiveness;
- The need to invest in, and continuously improve upon, the student experience and opportunities for learner employability;
- The need to build a culture of innovation, dynamism and continuous improvement if the sector is to maximize its potential contribution to economic growth and social improvement.¹⁰²

These challenges are identified also in this report. In addition, other matters of serious concern – such as, poor connectivity between/across different sectors of the post-compulsory education system, insufficient attention to learning outcomes and learner pathways throughout one’s working life, inadequate accountability, and poor alignment between education and other societal goals – have all been mentioned in other reports to the Welsh government.¹⁰³

But other challenges are also evident, reflecting changes in the way in which national societal objectives now necessitate HE being viewed as part of a broader post-secondary eco-system. Proposed changes to the architecture of governance, and related matters, within England, will create a more challenging environment for Welsh post-compulsory education, in which the more laissez-faire market approach being pursued by England may be especially problematic for Welsh universities.

These developments provide an opportunity for Wales to review its own system architecture, and to make decisions and exercise authority under the terms of devolution, which might better reflect its own situation, societal values, and future requirements. In doing so, however, one must be conscious not only of the legacy of reform to-date, including the complementary review of HE funding and finance arrangements in Wales, in addition to the numerous over-lapping components especially for higher education (e.g. common qualifications and quality framework,

student admissions, and research and research assessment), which bind the devolved systems together.

With this in mind, it is worth noting the significant challenges and choices facing Wales:

- The need to develop a national framework setting out future ambitions, goals and priorities for the post-compulsory system looking forward to 2030, cognizant of the fact that the “shape” of the system will need to continue to evolve in response to new needs and challenges;
- The need to create greater coherence across the educational system, and particularly the post-compulsory sector inclusive of 6th form, further education, universities, work-based learning and adult and community education;
- The need to better align the post-compulsory system with the future social, cultural and economic needs of Wales, including closer engagement with key stakeholders;
- The need to better associate funding to strengthen institutional profiles and missions within a differentiated and diversified post-compulsory system, in a manner that ensures it continues to meet the nation’s needs;
- The need to develop more coherent learning and career pathways and opportunities, for all ages, gender and talent, encouraging and facilitating greater mobility and flexibility across and through different educational settings, from secondary school and 6th form through FE and HE, work-based and adult learning;
- The need to strengthen collaboration and build critical mass across education and research in order to underpin and boost coherence and critical mass, quality and competitiveness;
- The need to encourage entrepreneurship and enterprise, and attract and retain capital and talent within Wales;
- The need to review the school leaving age in light of the fact that 21st century employment opportunities require people to have higher level skills and competences;
- The need to respect and support institutional autonomy through strengthened strategic leadership capacity and capability;
- The need to establish appropriate governance structures, with the breadth of expertise, which can lead, support, monitor and evaluate post-secondary actions and outcomes against objectives.

These factors make the case for reform irresistible if Wales is to develop a sustainable world-class post-compulsory education system which meets the needs of learners of all ages and talents, and the needs of a society and economy which exists in an

increasingly more competitive UK, Europe and global environment – a situation which in itself presents both opportunities and challenges. There is a necessity to see the proposed recommendations in this report within a longer-term perspective, to look forward and anticipate what is required over the next 10-15 years, and to put in place the necessary building-blocks. Thus, this report suggests a framework towards 2030 over which to build a world-class post-secondary education system for Wales.

5.2 Guiding principles

This report draws on the experience of and lessons learned from the reference jurisdictions cited in this report, and the evolving international literature on educational/higher education policy, with particular reference to the governance of systems of education replacing a liberal-market approach which tends to over-emphasize institutional self-interest. Accordingly, the key principles underpinning the approach taken in this report are as follows:

- System-view – build a coherent educational eco-system for Wales, which meets the needs of Welsh society and economy, now and in the future;
- Learning for Life – based on the fact people are living longer and healthier, and democratic society depends upon active, engaged, responsible citizens;
- Societal Contribution – education contributes to society and the economy through its graduates, new knowledge and innovation, all of which are vital for personal and societal success and sustainability;
- Competition and Diversity – strong competitive and diverse institutions, working collaboratively and responsibly, to enhance excellence, strengthen competitiveness and build critical mass in a global environment;
- Learner Focused – placing the needs of learners of all ages, gender and talent, throughout their active lives, at the centre of the educational system, enabling and facilitating changing opportunities and life-circumstances over time;
- Institutional Autonomy – respect for institutional autonomy within an overarching framework of a system-approach to educational provision and delivery, and strengthened institutional governance, responsibility and accountability.

6. Recommendations and other matters

6.1 Recommendations

The following recommendations are put forward in order to provide the necessary building blocks for a sustainable, coherent and competitive post-compulsory education system for Wales.

New legislation will be required. This should be undertaken as expeditiously and efficiently as possible to avoid any unnecessary delay, policy impasse, and disruption and distraction to the post-compulsory system.

1. Develop an overarching vision for the post-compulsory education system for Wales based upon stronger links between education policy, providers and provision, and social and economic goals to ensure the needs of Wales are future-proofed as far as is practicable. To achieve this:
 - Develop a master plan for the future development of a strategically co-ordinated and coherent post-compulsory system, across education, research, scholarship and engagement;
 - Identify a limited number of high level strategic goals to guide the system and individual institutions, and which are sustainable over the longer term;
 - Promote greater institutional specialisation and profiling as a way to orient FEIs and universities as “anchor institutions” within their regions and thus strengthen Wales’ social and economic competitiveness and environmental sustainability;
 - Reinforce collaboration and partnerships – between universities, FEIs and universities, and between all post-compulsory institutions and local/regional councils, etc. – across teaching and research in order to strengthen capacity and capability, and build critical mass;
 - Strengthen and support educational institutions as magnets to attract and retain talent, including graduates from Welsh universities.
2. Establish a single new authority – to be called the *Tertiary Education Authority* (henceforth TEA) – as the single regulatory, oversight and co-ordinating authority for the post-compulsory sector.^{††} To achieve this:
 - Establish a new integrated authority (to replace HEFCW) with the organisational capacity, capability and structure to steer, oversee and

^{††} Further details about the TEA are presented in Appendix B.

monitor systemic change and on-going improvement across the whole post-compulsory sector (detailed recommendations will be provided separately);

- The TEA will work with further education institutions and universities to meet and respond to national objectives and priorities, and taking a holistic perspective, ensure the creation of an integrated and coherent educational system;
 - The TEA will retain authority and autonomy to reward research, especially that which contributes to the Welsh economy;
 - The TEA will be responsible for monitoring governance practice across the system, the respective responsibilities of FEIs and universities, and the mechanisms to ensure good governance practice and full accountability for the public funding allocated to the sector;
 - The TEA will be responsible for ensuring quality across the post-compulsory sector.
- Establish a TEA Governing Board comprised of no more than 12 people with the appropriate balance of skills, experience and independence to enable it to discharge its respective duties and responsibilities effectively;
 - At least 2 people should be international experts and/or have substantial international experience beyond the UK;
 - Representation should include enterprise and civil society.
 - Determine clear delineated roles and functions for the Executive and the TEA Board, between the TEA and the Welsh Government, and between the TEA and the institutions;
 - Establish a service level agreement (SLA) between the Welsh Government and TEA setting out clear responsibilities for the TEA with respect to an agreed programme of work and expected outcomes;
 - Appoint a CEO with appropriate senior level experience, preferably internationally, to lead and manage the TEA;
3. Place the needs of learners at the centre of the educational system, by establishing clear and flexible learning and career pathways. To achieve this:
- Adopt a holistic approach to post-compulsory education, from 16 years onwards, which values and rewards “parity of esteem” between vocational and academic pathways, whether full-time or part-time, on-campus or off-campus;

- Ensure that quality and excellence are at the centre of programme planning and delivery;
 - Ensure greater participation and access by all ages, gender and talent, and continuously through the life-cycle;
 - Improve connections between qualifications and the labour market by focusing on and strengthening vocational and career streams and pathways within and across different educational providers, and with and between different parts of the labour market;
 - Emphasis should be placed on longer-term sustainable employability and career success rather than first destination employment;
 - Continue to widen access and participation, introducing measures to overcome hidden biases with respect to gender, ethnicity, race and socio-economic status, and at key transition points in the education life-cycle, e.g. 16-18 years, post-25 years, older mature learner/workers, and women post-childbirth/child-care;
 - Put in place the necessary support mechanisms and career pathways to ensure a continuing pipeline of research talent, at masters and doctoral level, necessary to both attract and retain talent in Wales, and drive innovation;
 - Improve the quality of publicly available information and advice about all learning and career pathways, vocational and academic, and about all institutions, from an early age, in order to underpin informed student choice.
- 4. Civic engagement should be embedded as a core mission and become an institution wide-commitment for **all** post-compulsory institutions. To achieve this:
 - All institutions should address the full range of responsibilities towards society, including local communities, business and enterprise and third sector, at the local, regional, national and international level, as appropriate to their differentiated roles and profiles;
 - Ensure that pursuit of globally-competitive education and research excellence is balanced with social and economic responsibilities for sustainable regional growth.
- 5. Create a better balance between supply-led and demand-led education and research provision shifting away from a market-demand driven system to a mix of regulation and competition-based funding. To achieve this:
 - Establish a performance framework which recognises the full breadth of education's contribution across all disciplines/fields of study linked to national social and economic objectives;

- Consideration to be given to funding adjustments based on factors such as educational level, discipline, research, regional contribution, collaboration, articulation pathways across institutions, etc.;
 - Strengthen and celebrate institutional diversity through better institutional profiling;
 - Strengthen institutional accountability by linking funding to performance and learning outcomes, through the use of performance agreements and compacts;
 - Continue to strengthen institutional governance and leadership whilst respecting institutional autonomy.
6. Create the appropriate policies, processes and practices to encourage better long-term and joined-up thinking about the educational needs and requirements for Wales, now and into the future. To achieve this:
- Strengthen evidence-based capacity and capability required for strategic policymaking in order to provide objective analysis and advice to the Welsh Government, educational institutions, business and employers, wider societal groups, etc.
 - Improve data collection and analysis to underpin decision-making, accountability, and public understanding of the contribution of education to society and the economy;
 - Establish the means for on-going benchmarking of educational practices and system performance with appropriate national and institutional peers for the post-compulsory sector in order to continually enhance outcomes for individuals and society;
 - Promote secondments between and across the sector – between the ministry, TEA and institutions – in order to enhance knowledge sharing and expertise;
 - Establish an Educational Forum, bringing together key actors from across all levels of education provision, from pre-school to adult and LLL, along with key societal stakeholders, in order to develop a “whole of education” policy and approach to educational planning to ensure sustainable and successful societal outcomes.

6.2 Implementation matters requiring further consideration

In framing these recommendations, further consideration should be given to the following matters:

- *Optimum configuration of the new TEA:* The modalities around moving from the current governance arrangements to one in which the FE and HE sectors are integrated into a single regulatory intermediary organisation will require further attention as to the optimum configuration and the process by which this can occur. This will require attention to how current responsibilities, for matters inter alia strategic development, quality, financial monitoring, student appeals, pay and conditions, research and innovation, public engagement, leadership development, etc., currently dealt with differently for each sector, will be dealt with under the new arrangements.
- *Inclusion of 6th Form:* Consideration should be given as to whether 6th form education, currently within the remit of post-secondary education, should be included within the TEA or reside within the Department of Education and Skills as part of the schools' agenda. This should be included as part of a wider review of the school leaving age in recognition that personal and societal success in the 21st century requires a higher level of skills and competences;
- *Strategic Review of Research:* The governance of research is not included within the recommendations of this report, albeit it is clear from the interviews, reports and issues arising in the rest of the UK and internationally, that this is an issue requiring immediate attention.¹⁰⁴ Many of the issues raised with respect to the lack of coherence, collaboration, critical mass, and competitive pressures around funding and international benchmarking – that pertain to educational provision – are relevant to research. Higher education plays a major role in society and economy through the quality of its graduates and the production of new knowledge. But, it's not simply the level of investment that matters; quality in all its manifestations is a significant factor. Given the strategic importance of research, there is a need for a targeted evaluation of research capacity and capability than was possible in this review;
- *Relations between the Government and the Intermediary Organisation:* The traditional communications channel between the government and HEFCW is the annual grants letter which sets out the policy imperatives for the forthcoming year and associated funding. Moving forward, in order to fully encapsulate the complex set of issues and the balance of responsibilities, a Service Level Agreement (SLA) between the Welsh Government and the TEA should be established. This would provide the formal framework of the government-to-intermediary agency relationship, and set out TEA responsibilities with respect to an agreed programme of work and expected outcomes, and accountability to the Minister.

7. Appendix A: Terms of reference

Review of the oversight of post-compulsory education in Wales, with special reference to the future role and function of the Higher Education Funding Council for Wales (HEFCW)

A. To review, analyse and document the current arrangements for the oversight of post-compulsory education in Wales, including:

- funding
- governance
- quality assurance / standards of education and training, and
- management of risk.

B. To advise on the effectiveness of current arrangements for the oversight of post-compulsory education in Wales judged by reference to other UK nations, relevant international comparators and research evidence.

C. To make recommendations for the future oversight of post-compulsory education in Wales with particular reference to the role of the Higher Education Funding Council for Wales and its interface with Estyn.

D. To indicate whether there may be a need for legislation and new or reformed institutional arrangements to take forward future arrangements proposed in the light of this evaluation.

8. Appendix B: Tertiary Education Authority (TEA)

8.1 Role and responsibilities of the TEA

The Tertiary Education Authority (TEA) should be established as the single integrated regulatory, oversight and co-ordinating authority for the whole post-compulsory sector in Wales. Its role is to provide strategic leadership and pro-active steering of the system in order to bring about a more integrated and coherent post-compulsory system, with diverse and complementary providers, which balances responsiveness to national social, cultural and economic objectives with the principles of institutional autonomy and academic freedom.

The TEA should replace HEFCW, and have the organisational capacity, capability and structure to steer, oversee and monitor systemic change across the whole post-compulsory sector, enhance and promote quality in teaching and research for all learners and society, and meet Welsh Government priorities for Welsh society and economy.

The TEA will be a unified authority bringing post-compulsory education together in a single organisation; it should not be an umbrella organisation with parallel sub-agencies.

The TEA should have the following functions across teaching and learning; research and innovation; and civic and regional engagement (alphabetical order):

- allocating resources;
- assuring and assessing quality;
- monitoring, evaluating and managing performance and risk;
- regulation of the system and accreditation of institutions (public and private);
- strategic planning, co-ordinating and steering;
- strategic policy advice.

Adopting such responsibilities will enable the TEA to develop and uphold a macro-level role and perspective across the post-secondary system, ensuring it is capable of delivering holistically for Wales, while preserving institutional autonomy. This includes responsibility for FE and HE, work-based learning, and adult and community learning. Further consideration should be given to whether 6th form education should reside within the TEA or continue to reside within the Department of Education and Skills as part of the schools' agenda.

While the TEA has overall responsibility for the post-compulsory system, individual institutions are responsible for ensuring that they deliver on the requisite outcomes and impacts required by society.

The TEA should be responsible for allocating resources, within agreed policy parameters, and for negotiating institutional profiles and responsibilities, and determining which activities should be funded. It should also be responsible for

assuring quality across education, research and engagement, and for ensuring the mechanisms are in place to ensure good governance practice and full accountability for the public funding allocated to the sector. While risk management at institutional level is a responsibility of the institution, the TEA has a responsibility to ensure that such systems are in place and are operating effectively, in line with its responsibility to maintain a risk register for the sector on behalf of the Welsh Government.

The TEA should work with other agencies with direct and indirect responsibilities for post-compulsory education, and ensure clarity of respective responsibilities and that effective co-ordination occurs between them with respect to meeting national objectives for post-compulsory education and research. This includes liaising, as appropriate, with agencies and colleagues across the UK-wide system and ensuring that the Welsh system is comparable in terms of quality, performance and productivity across the UK and internationally.

The TEA should play a key role with respect to encouraging and facilitating greater collaboration and co-operation between institutions within different parts of the post-compulsory system, as well as with key stakeholders beyond the educational system. It should also play a key role in developing and facilitating an “all-of-education” perspective.

The TEA has a responsibility to take a strategic, longer-term and coherent perspective on post-compulsory education, and to anticipate developments in education and research, and their implications for and on Welsh society and the economy. Therefore, it should retain a sophisticated awareness of international trends and a capacity to collect, manage and analyse both qualitative and quantitative data from the system and individual institutions, as well as to benchmark performance internationally.

The TEA should be accountable to the Minister for Education and Skills for the performance of its functions on the basis of a service-level agreement (SLA) between the TEA and the Welsh Government. The TEA has a responsibility to ensure that the appropriate systems are in place and are operating effectively to enable the system to deliver on national objectives. While the TEA will implement government policy, and provide formal and confidential advice to government, as requested, it must also operate with an appropriate level of independence.

8.2 Structure and organisation of the TEA

The *Tertiary Education Authority* should be established as a new Welsh Government sponsored body. This will require amending legislation to ensure the TEA has the appropriate powers and duties to carry out all its functions to the highest standards of governance.

8.2.1 TEA Governing Board

The TEA should have a Governing Board and Executive, with clear division of powers and responsibilities, with the former having a strategic function and the latter having day-to-day responsibility for running the TEA.

Similar delineation of roles and responsibilities should pertain to the TEA and the Welsh Government. A service level agreement (SLA) between the Welsh Government and TEA setting out clear responsibilities for the TEA with respect to an agreed programme of work and expected outcomes; provide clarity on strategic and operational aspects of the organisations' relationship; a framework for delivery of services; and structured arrangements for communications (including public communications), reporting and liaison.

The role of the TEA Governing Board is to provide strategic leadership to the TEA within a framework of national objectives and to review management performance. All members of the board should act ethically and in its best interests, and avoid conflict of interest.

The TEA Governing Board should be comprised of no more than 12 people with the appropriate balance of skills, experience, knowledge and independence to enable it to discharge its respective duties and responsibilities effectively. Given the breadth of the post-compulsory system and range of responsibilities, careful consideration needs to be given to the composition of members of the board.

At least 2 members of the board should have international experience and/or be from outside the UK in order to bring in broader experiences. Expertise in finance, risk and public policy would be helpful; international academics who are members of the Academic Advisory Board may be considered as being members of the main TEA Governing Board.

The Chief Executive Officer (CEO) of the TEA should be an ex-officio member of the Board.

8.2.2 TEA Academic Advisory Board

Individuals employed directly by the funded institutions should not be members of the Board to avoid conflict of interest. However, to ensure that this valuable resource of institutional knowledge and experience is available to the TEA Governing Board, an Academic Advisory Board should be established.

The Advisory Board should include no more than 12 academics and administrators, with the appropriate balance of skills, experience and knowledge across all disciplines, and fields of study. There should be at least two international members from beyond the UK.

8.2.3 TEA executive

Given the breadth of the post-compulsory system and range of responsibilities (across teaching and learning; research and innovation; civic and regional engagement), the structure, organization and operations of the TEA should reflect this breadth of expertise and understanding of the distinctive roles and needs of the diverse parts of the system.

A CEO should be appointed with the appropriate senior level experience, preferably internationally, to lead and manage the TEA. Accordingly, careful consideration needs to be given to the appointment process for the CEO, and subsequently to the appointment of his/her team, to ensure the appropriate balance of skills, experience and knowledge to carry out all the broad range of functions.

Consideration should be given to the length of term of office.

9. Appendix C: International experiences of reference jurisdictions

9.1 United Kingdom and Republic of Ireland

9.1.1 England

Higher education in England is a unitary system of universities, the majority of which are public institutions. Transfer of administrative responsibility for HE occurred in 1992, with England, Scotland and Wales each receiving their own funding council. The Further and Higher Education Act 1992 ended the binary divide between universities and polytechnics, and created a unitary structure through the transformation of 35 polytechnic institutions to become universities. FE in England includes any study after secondary education which is not part of HE, such as apprenticeships, 14-19 education, and training for work. FE has an academic (A-Levels, International Baccalaureate), vocational and technical component, and can also provide a pathway to HE. It includes three types of technical and applied qualifications for 16-19 year olds, from basic literacy and numeracy courses up to higher national diplomas (HNDs).

The 1992 Act also established the Higher Education Funding Council for England (HEFCE), as a non-departmental public body reporting to the Department of Business, Innovation and Skills (BIS). Similar to the SFC and HEFCW, HEFCE is subject to terms and conditions set by the Government in its annual Remit Letter. It informs, develops, and implements Government policy. “There is no overall control of the system, and indeed the system is split both horizontally (between different government departments) and vertically (between different layers which have different funding responsibilities).”¹⁰⁵

HEFCE succeeded the Universities Funding Council. In terms of FE, the Further and Higher Education Act 1992 removed colleges from local Government control, and established the Further Education Funding Council for England (FEFCE), which was later replaced by the Learning and Skills Council in 2000, which in turn was dissolved in 2010. FE in England was then brought within the auspices of the Young People’s Learning Agency for England (YPLA), which was subsequently dissolved in 2012. FE is now the responsibility of the Education Funding Agency (EFA), which is an executive agency of the Department for Education and it funds the education and training of 16 to 18 year-olds in sixth forms in schools and in FE colleges (which include sixth form colleges).¹⁰⁶ The Skills Funding Agency (SFA) is an executive agency of the Department for Business, Innovation and Skills (BIS) and it funds the education and training of young people and adults (19+) in FE colleges (which include sixth form colleges), private training organizations and among employers (including apprenticeships). It funds a small amount of higher-level qualifications.

In 2012 the Government introduced changes to how HE is funded. The majority of universities in England are financed by the Government (although there is a small private sector), and are also funded directly by student fees. As of 2015-16 the total Government funding for HE in England comes via three routes¹⁰⁷: (i) tuition fee loans and maintenance grants and loans to students, (ii) grants to universities and colleges from HEFCE, and (iii) grants to HEIs and students from other public bodies. Introduction of the tuition fee and loan system, via the Student Loan Company, changed the role of HEFCE from being a direct funder of HEIs to being the principal regulator in England.

The Quality Assurance Agency (QAA) is the independent body with responsibility for monitoring and advising on standards and quality in UK HE. Academic standards in HE are established and maintained by HEIs themselves using an range of quality assurance approaches and structures. QAA describes the list of qualifications awarded by HEIs in England, Wales, and Northern Ireland in the Framework for Higher Education Qualifications (FHEQ), which is also compatible with the Qualifications Framework for the European Higher Education Area (QF-EHEA), in line with the Bologna process.

Recent years have seen significant changes in English HE. The Government's recent green paper, *Fulfilling our Potential: Teaching Excellence, Social Mobility and Student Choice* (2015),¹⁰⁸ proposes to transfer HEFCE's functions to other bodies, including a new arms-length public body Office for Students (OfS) with responsibility for: "i) operating the entry gateway; ii) assuring baseline quality; iii) running the TEF [Teaching Excellence Framework]; iv) collecting and providing information; v) widening access and success for disadvantaged students; vi) allocating grant funding (depending on which of the two options described in paras 16 and 17 is adopted); vii) ensuring student protection; viii) promoting the student interest; ix) ensuring value for money for students and the taxpayer; and, x) assuring financial sustainability, management and good governance."¹⁰⁹ Responsibility for quality-related research funding (QR) could be transferred to a new super research council as proposed in *Ensuring a Successful UK Research Endeavour*.¹¹⁰

9.1.2 Northern Ireland

The Department for Employment and Learning¹¹¹ (DEL, initially known as the Department of Higher and Further Education, Training and Employment (DHFETE) until 2001), a body of the Northern Ireland Executive, is responsible for FE and HE. DEL provides funding to the three universities (the Open University, Queen's University Belfast, and the University of Ulster) and their constituent university colleges and campuses. DEL also funds the six regional FE colleges. In contrast to the other countries in the United Kingdom, the department funds universities directly, and there is no buffer organisation between HEIs and FEIs on the one hand, and Government on the other. DEL fulfils the role of both funding council and Government

department. FE colleges are non-departmental public bodies, with management responsibility residing in each individual college's governing body. In contrast, 16-19 year olds are looked after by DEL except for those students in 6th Form which are looked after Department of Education. Effectively this student cohort is looked after by the two departments

As the administrative branch of the Northern Ireland Assembly, FE and HE are just two of the Executive's devolved responsibilities. Following the Independent Review of Economic Policy in 2009,¹¹² it was suggested that DEL would be abolished, with its activities and responsibilities divided between the Department of Education (DE) and the Department of Enterprise, Trade, and Investment (DETI). This was approved in 2012,¹¹³ but as of December 2015, DEL remains in operation. DEL reports directly to the Minister for Employment and Learning.

HEIs are autonomous institutions, with responsibility for how they make use of funding, but in recent years these allocations have been made in the context of specific aims, such as: enhancing research, supporting long-term sustainability, increasing participation and widening access, increasing responsiveness to business and the economy, etc. As well as funding HEIs, DEL is responsible for student funding (loans, grants, postgraduate awards, and maintenance allowances).

DEL has statutory responsibility for assessing quality of the HEIs it funds by engaging with the Quality Assurance Agency (QAA). Similar to QAA's activities in the rest of the United Kingdom, QAA are responsible for reviewing the quality of all publicly funded HEIs and FEIs. DEL funds QAA to review HE provision in Northern Ireland using the Higher Education Review (HER) method.¹¹⁴ DEL is currently working on a single QA framework for all institutions providing HE courses by 2016. Assessing the quality of FE colleges below HE qualification levels in relation to teaching and learning are the responsibility of DE's education and training inspectorate, rather than being under the purview of DEL.

Through its HE policy branch DEL develops, communicates and evaluates HE policy for Northern Ireland, in consultation with HEIs as well as other regions and bodies in the United Kingdom and Ireland.¹¹⁵ The policy areas it addresses include teaching and learning, student support and alternative providers, teaching funding, student numbers, and other information relating to HE. DEL also collects and disseminates statistics and other data relating to HE, to ensure that data for prospective students and other stakeholders regarding HEIs and courses is of high quality, timely, and accurate. In July 2015, DEL launched a consultation document for the development of a new FE strategy for Northern Ireland.¹¹⁶

9.1.3 Scotland

Scotland has 19 HEIs, 14 of which are campus-based universities, and five other HEIs with degree awarding powers (one distance-learning university, an educational

partnership institution based in the Highlands and Islands, one art school, a conservatoire and an agricultural college). With the Further and Higher Education Act 1992, Scotland gained authority over its own education system, which is funded by the Scottish Government. Scotland also has 25 FE colleges, many of which are mergers of previous FE colleges. As well as this, 13 FE colleges became affiliated in 2001, and were subsequently federated as constituent colleges of the University of the Highlands and Islands upon it being granted university status in 2011.¹¹⁷

Tertiary education is under authority of the Scottish Funding Council (SFC), a non-departmental public body of the Scottish Government, which was established with the Further and Higher Education (Scotland) Act 2005.¹¹⁸ This act merged the previous separate funding councils, the Scottish Further Education Funding Council and the Scottish Higher Education Funding Council. The merger of funding councils was part of a wider goal of strategic coordination and coherence across third level education as a whole system, putting FE and HE under the purview of a single body. The merger was also intended to introduce parity of esteem between the two sectors.

The SFC's primary role is the distribution of funds to colleges and universities, distributing funding to individual institutions for teaching, research and associated activities. It provides advice to Scottish ministers on the needs of HE and FE in policy and funding terms. The SFC also implements Government policies, and with the introduction in 2012-2013 of "outcome agreements" with colleges and universities, focus has been put on achieving improved outcomes, in line with the Scottish Government's economic strategy.¹¹⁹

Scottish universities are funded directly by the Scottish Government through the SFC. Universities have full autonomy in how they allocate this money internally. Beginning 2008, the SFC replaced its Main Quality Research Grant and Research Development Foundation Grant with the Research Excellence Grant (REG) 2009-10, using the results of the RAE. Under a dual support system, UK research councils provide grants for specific projects and programmes, while SFC provides block grant funding for universities to carry out research of their own choosing.¹²⁰

There are no student fees for Scottish students or those ordinarily resident in the European Union studying their first undergraduate degree. Students from other UK countries are charged tuition fees. Student fees for Scottish and EU students are paid directly to colleges and universities by Student Awards Agency Scotland (SAAS).¹²¹ SAAS also provides data to the Student Loans Company (SLC), which is a non-profit government-owned organisation set up in 1989 to provide loans and grants to students in universities and colleges in the UK. The Scottish Government pays tuition fees across the board for FE and HE, irrespective of whether the course is full-time, part-time, or distance learning.

As for England, Northern Ireland and Wales, QAA Scotland (which is a part of QAA and has devolved responsibility for QA in Scotland) describes the list of qualifications awarded by HEIs in the Framework for Higher Education Qualifications (FHEQ), which

is also compatible with the Qualifications Framework for the European Higher Education Area (QF-EHEA), in line with the Bologna process.¹²² The QAA Scotland's approach has been developed with the Universities Quality Working Group (UQWG), other national bodies, such as the Scottish Credit and Qualifications Framework and Education Scotland. QAA Scotland has the same responsibilities as QAA, but with the added feature of what are termed "enhancement themes", which were developed in 2003 and are coordinated by UQWG and other stakeholder organisations including QAA Scotland¹²³. The intention behind the enhancement themes is to improve students' learning experiences, rather than simply addressing compliance issues for HEIs. The most recent enhancement theme is "student transitions" which will run for three academic years.

In Scotland, responsibility for HE policy resides both north and south of the border. The clearest policy overlap is in terms of research, with Scotland being party to both the RAE and REF. Devolution has given significant power to the Scottish Government to make its own policy decisions. One significant recent development in this respect is the Higher Education Governance (Scotland) Bill, introduced in June 2015. This proposes making changes to the governance of the country's universities, *inter alia*, arrangements for the appointment of rectors and the composition of governing and academic boards.

9.1.4 Republic of Ireland

The Irish public HE system is comprised of seven universities, fourteen institutes of technology (IoTs), and seven colleges of education – the latter are in the process of being merged with universities as part of wider restructuring of the higher education sector.¹²⁴ The Department of Education and Skills (DES) is the Government department responsible for all aspects of education and training in Ireland.¹²⁵ Other agencies, such as Science Foundation Ireland, Enterprise Ireland, and the Industrial Development Authority have a role vis-à-vis research under the purview of the Department of Enterprise, Jobs and Innovation. DES coordinates HE through the Higher Education Authority (HEA).¹²⁶

The HEA was established in 1968 as an intermediary organization between universities and the state, and is the statutory planning and development body for HE and research. While it did not originally have oversight of the institutes of technology (IoTs), it took over this function from the DES in 2004. The HEA reports to the Minister for Education and Skills, and exercises central oversight of the HE system. The HEA has a policy development function, and a data analytics and knowledge management function, both of which it exercises in respect of advising the government.

FE in Ireland occurs after completion of second level education, generally at 18 years, and has not considered separate to the HE system. As such, it is not designated to the HEA, but instead is administered directly by 16 education and training boards (ETBs) and SOLAS, which is the FE and training authority. The ETBs were established via the

Education and Training Boards Act (2013), which replaced the previous 33 vocational education committees (VECs). SOLAS was established in 2013 as a management body via the Further Education and Training Act, replacing FÁS which was a service provider. SOLAS is intended to lead the change management process of integrating FEIs with programmes, as well as coordinate and manage the funding and performance of these programmes, and to lead the modernization of such programmes, including expansion of apprenticeship, in line with labour market, labour activation, and LLL needs.¹²⁷

Exchequer funding for HE is by way of a recurrent grant funding model (RGAM), allocated through the HEA, with three main elements: an annual recurrent grant allocated to each public HEI through set formulae based on student numbers and their subject areas; a small amount of performance related funding (phased in from 2014); and targeted/strategic funding supporting national priorities and which may be allocated to HEIs on a competitive basis. Students also pay a student contribution charge. In the future, targets will be negotiated and set through the Strategic Dialogue process for each institution according to its mission. A government-appointed working group is currently looking at the long-term funding requirements for the Irish HE sector.¹²⁸ It is likely that an income-contingent loan scheme will be recommended, alongside an extended grants programme.

Quality and Qualifications Ireland (QQI) is an external agency, whose board is appointed by the Minister for Education and Skills, and it is responsible for ensuring the effectiveness of Irish HEIs' internal quality assurance arrangements through external monitoring and reviews.¹²⁹ QQI administers the national framework of qualifications (NFQ). QQI is also responsible for quality assurance in FE and HE, and it publishes the outcomes from the external reviews which it conducts, of both of these sectors.

In 2011, the *National Strategy for Higher Education to 2030*¹³⁰ was published as a roadmap for the future of the sector: a more flexible system, with a greater choice of provision and modes of learning for an increasingly diverse cohort of students; improvements in the quality of the student experience, the quality of teaching and learning and the relevance of learning outcomes; and ensuring that HE connects more effectively with wider social, economic and enterprise needs through its staff, the quality of its graduates, the relevance of its programmes, the quality of its research and its ability to translate that into high value jobs and real benefits for society. Emphasis was placed on realignment of the sector with national priorities, the formation of regional clusters, the introduction of performance compacts and strategic dialogue, and proposals for technological universities. The HEA was given responsibility for leading the reconfiguration of the HE system following the recommendations made in the National Strategy.

In 2014 a *Further Education and Training Strategy 2014-2019* was published, after the establishment of the boards and organization for FE in 2013. This report similarly aligned the FE system with the reform agenda in HE, seeing FE as being central to

providing skills for economic and employment growth, as well as other functions such as driving social inclusion and reduction of the danger of unemployment.

9.2 Other jurisdictions

9.2.1 Alberta, Canada

In Canada, responsibility for further and higher education lies at the province and territory level. Alberta's legislature has the authority for its sector, which comprises 26 publicly funded post-secondary institutions, and a private sector.¹³¹ The public sector is categorised by the Alberta government across six types of institutions, namely: comprehensive academic and research institutions, baccalaureate and applied studies institutions, polytechnic institutions, comprehensive community institutions, independent academic institutions, and specialised arts and culture institutions.¹³² These six types of institution (which might be categorised more broadly as universities, colleges, and technical institutes in other countries) have clear mandates¹³³ on their respective roles, in terms of direction of programming, region and client group served according to the *Roles and Mandates Policy Framework*, set out in 2007.¹³⁴ The institutions offer a range of 17 qualifications from certificate to doctoral study, according to their mandate.¹³⁵ There are also a number of training providers that provide apprenticeships and occupational training, which combine on-the-job training with training in an institution.¹³⁶

The provincial government, through the Ministry of Advanced Education (MOAE) has responsibility for post-secondary education, through the Post-secondary Learning Act (PSLA) 2004, which combined and updated four separate pieces of legislation which used to govern Alberta's publicly funded institutions.¹³⁷ The ministry's role is to provide oversight and leadership, facilitate partnerships, and work with post-secondary stakeholders.

HE is governed through the concept of Campus Alberta, which was created in 2002 (and formally advanced in 2004 with the PSLA) by the provincial government to formalize and encourage collaboration and cooperation between Alberta's 26 publicly funded institutions. This partnership sets out a number of arrangements, such as: flexible transfer between institutions (administered through TransferAlberta), colleges and community organizations working together to assess and meet local learning needs, online learning offered by the 26 publicly funded institutions through eCampusAlberta, a common industry-developed provincial curriculum that allows apprentices to take any period of technical training at any Alberta post-secondary institution, and coordinated applications to any of Alberta's public post-secondary institutions and electronic transfer of academic transcripts (all through ApplyAlberta).¹³⁸ In addition, there is the Alberta Apprenticeship and Industry Training Board, which oversees the apprenticeship and industry training system by providing

advice and recommendations to the Minister on all matters related to the training and certification of persons in the various designated trades and occupations, as well as looking to the needs of the Alberta labour market

Alberta's post-secondary system is funded through the MOAE, under the PSLA. The province's 26 publicly-funded institutions can be allocated different kinds of funding, according to their mandate, and also according to their status as either public or independent institutions. These funds are: Access to the Future Fund, capital projects, operating grants, research support, and resources for post-secondary institutions. Institutions may also generate revenue for themselves via tuition and other student fees, and other streams such as sponsored research funding from provincial and federal agencies and private industry, philanthropy etc.¹³⁹ Tuition fees are part of Alberta's shared cost principle, made up of financial assistance through repayable and non-repayable loans. Though Alberta's institutions may generate funds from student tuition, this is regulated through the PSLA's tuition fees regulation which sets the levels at which such fees may be charged.

The Campus Alberta Quality Council (CAQC),¹⁴⁰ established in 2004 through the PSLA, is an arms-length QA agency that makes recommendations to the Minister on applications from institutions wishing to offer new degree programs in Alberta under the terms of the PSLA and its Programs of Study Regulation. Excluding degrees in divinity, all degrees offered in Alberta must be approved by the Minister.

9.2.2 Australia

Australia's HE sector is made up of 172 registered providers.¹⁴¹ Of these, there are 37 public Australian universities, three private Australian universities, one specialised private university, and two overseas universities, all of which are self-accrediting authorities (SAA). The 129 remaining institutions are non-SAA (also known as non-university HE providers or NUHEP¹⁴²), private institutions.

FE is grouped under the heading of VET, provided for by government-owned Technical and Further Education institutes (TAFE) and private colleges, while some universities may also offer VET courses. VET covers courses from various certificates and diplomas to English language courses. VET courses can often lead into HE courses such as bachelor degrees, as VET courses at the certificate IV, diploma and advanced diploma level can provide students with a pathway into the HE sector. As well as this, VET courses can also provide credit towards some HE courses, so that students who graduate with a diploma may receive up to two or three semesters of credit towards a related bachelor degree.

Governance for HE in Australia is shared between the Australian Government, the State and Territory Governments, and the institutions themselves. Institutions also have a relationship with the Tertiary Education Quality and Standards Agency (TEQSA), and have reporting requirements to Auditors-General in their jurisdictions. In

addition, institutions report to two main federal ministries and have direct relationships with the Department of Health and Ageing as well as interactions with several other ministries. VET is provided through a network of the eight state and territory governments and the Australian Government, along with industry, public and private training providers.¹⁴³

VET is a State-managed system, with COAG, the meeting of state and territory ministers, having broad oversight but with no decision making powers so States are free to follow decisions made there or not; Victoria and Western Australia have not signed up to the current regulatory arrangements, for example. In other words, it is managed and funded at the State or territory level and that the federal government provides some conditional and often targeted funding based on agreements that require states to act in certain ways.

The Australian Government is the majority funder of HE, through grant payments and student loans. Since 2012 public universities have been able to offer unlimited numbers of students in Commonwealth-supported bachelor degree places (CSPs), except for medicine, through an income contingent loan scheme.

TEQSA is the national body for HE regulation and quality assurance, for both public and private universities, Australian branches of overseas universities, and other SAA and non-SAA HE providers,¹⁴⁴ replacing the Australian Universities Quality Agency in 2011.¹⁴⁵ It registers and evaluates the performance of HE providers against the Higher Education Standards Framework “Threshold Standards”.¹⁴⁶ The Australian Qualifications Framework (AQF), introduced in 1995, is the national policy for regulated qualifications in the Australian education and training system. One of the key objectives of the AQF is to facilitate pathways to and through formal qualifications, across schools, VET and HE.¹⁴⁷ Quality assurance for VET is overseen by the Australian Skills and Quality Agency (ASQA), the national regulator.¹⁴⁸ ASQA takes a risk-based approach to regulation, which means that regulatory action is targeted at poor performers, and those providers that pose the greatest risk to the quality of Australia's VET sector.¹⁴⁹

Prior to 1988, Australia had a Commonwealth Tertiary Education Commission (CTEC), evolved from the Australian Universities Commission, and incorporated both universities and TAFE within its remit. CTEC was abolished in 1988 by the then Minister for Employment, Education and Training, John Dawkins, and replaced by an advisory board which reported directly to the Minister. CTEC had planning and funding powers within a budget that was provided by the Government, and could carry out periodic assessments or reviews of the system, or aspects of it (Engineering, Medicine, Law), to see whether they were meeting current and anticipated needs; it could ensure that reports led to changes in places where required.

9.2.3 Finland

The Finnish system is typified by a long history of lifelong learning and a wide array of education opportunities in adult education and training, as well as within the open university and continuing education sector. Until the 1990s, the Finnish university system was exclusive and difficult to access. During the second half of the 20th Century, vocational education developed rapidly. The early 1990s saw the launch of the development of a non-university sector of HE which aimed at raising the level of education and upgrading vocational post-secondary education into HE degrees. In 1992, the first polytechnics (*ammattikorkeakoulu* - institutions of vocational HE) were established by combining educational institutions, which had previously provided vocational post-secondary education, and by upgrading their education to meet the standards of HE.

The Vocational Qualifications Act of 1994 created a new system of competence-based qualifications, where people may take vocational qualifications by demonstrating their vocational skills in competence-based examinations irrespective of how they have acquired their skills. Adult education and training can be provided by a wide range of institutions including schools, general and vocational adult education schools and centres, folk high schools, universities and polytechnics, summer universities or in the workplace as in-service training. There is a relatively large number of adult education institutions compared with the population.

The HE system is described as a dual or binary system of universities and polytechnics. There are 14 universities (both multidisciplinary and specialized)¹⁵⁰ and 24 universities of applied sciences or polytechnics.¹⁵¹ The mission of universities is to conduct scientific research and provide instruction and postgraduate education based on this, while polytechnics provide training in response to labour market needs,; the latter also conduct R&D which supports education, and promotes regional development in particular. Finland also has a system of VET, which has the goals of improving skills in the workforce, responding to skills needs in the labour market, and supporting LLL. This vocational education sector comprises both initial vocational training and also further and continuing training. The vocational qualification has been designed to respond to labour market needs.¹⁵²

There is no intermediary organization for either HE or FE, as both sectors are overseen directly by the state. While all universities are either independent corporations under public law or foundations under the Foundations Act, the Ministry of Education and Culture (MoEC) oversees matters that are within the Government's remit. Similarly, polytechnics are municipal or private institutions, which are authorised by the government. The government and local authorities share the cost of polytechnics. VET is the responsibility of MoEC, but is financed by local authorities.

Over recent years, a series of new legislative reforms for the universities (2010) and for the universities of applied sciences (2015) have been introduced with the intention of steering the system towards greater effectiveness and enhanced efficiency.¹⁵³

Additional actions have been taken to strengthen the Finnish research and innovation system through enhanced co-operation between universities and research institutes, development of research consortia, and the establishment of the Strategic Research Council as an investment funding instrument. The Government's involvement in HE governance takes the form of development plans for education and for academic research and R&D, which are agreed every four years. In turn, universities are governed by performance agreements which are the result of negotiations between each university and the MoEC, which set operational and qualitative targets and determine the resources required.¹⁵⁴ The agreement also provides for the monitoring and evaluation of target attainment and the development of activities.¹⁵⁵

FINEEC, the Finnish Education Evaluation Centre, was established on 1 May 2014 by merging FINHEEC (Finnish Higher Education Evaluation Council), the Finnish Education Evaluation Council and the evaluation of education undertaken by the Ministry of Education and Culture. The Finnish Education Evaluation Centre (FINEEC) is the national quality assurance agency responsible for evaluations of HE in Finland, and is a full member of the European Association for Quality Assurance in Higher Education (ENQA) and is included in the European Quality Assurance Register for Higher Education (EQAR). One of the main principles of the FINEEC's audits is the autonomy of HEIs, as set out in the Finnish Universities Act and Polytechnics Act; the HEIs are responsible for the quality and continuous development of their education and other operations.¹⁵⁶ In VET, QA takes the form of steering through information, support and funding.

Over recent years, and as a result of more emphasis on strategic planning and system coherence, there has been noticeable collaboration between HEIs. Most notably, the universities are beginning to work together to agree on concentrations across a small set of study fields which may result in some study fields being available at only three universities rather than everywhere. There are also several examples of collaboration between universities and universities of applied sciences (for example, in Lappeenranta, Rovaniemi and Tampere regions). These collaborations – which have arisen on a voluntary basis – provide opportunities for students to take educational courses drawn from both institutions, to strengthen research expertise and develop new collaborations, and to make a stronger regional impact.

9.2.4 Hong Kong Special Administrative Region

Higher education in Hong Kong SAR includes all forms of postsecondary education, and comprises 20 degree-awarding HEIs, including eight public institutions funded through the University Grants Committee (UGC), and eleven “self-financing” institutions. There is also the publicly-funded Hong Kong Academy for Performing Arts and the Hong Kong Institute of Vocational Education, which was formed in 1999 by a merger of 9 technical institutes.¹⁵⁷ There are also a number of institutions that provide sub-degree qualifications which are locally credited, though some of these institutions

overlap with the those funded through the public purse. The Vocational Training Council (VTC) through its member institutions offers pre-employment and in-service VET programmes for people of different education levels, with qualifications up to bachelor's degree level. Various post-secondary education institutions also offer more than 250 higher diploma programmes, of which at least 60% of the curriculum is devoted to specialized content in specific disciplines, professions or vocational skills.¹⁵⁸

The Education Bureau is responsible for all levels of education, from primary to post-secondary, and is responsible for formulating, developing and reviewing policies, programmes and legislation, as well as overseeing the effective implementation of educational programmes. For post-secondary education, there is a Deputy Secretary for Further and Higher Education with specific responsibility for that sector.¹⁵⁹ The Bureau also monitors the UGC, the Student Financial Assistance Agency, the Hong Kong Examinations and Assessment Authority, the Hong Kong Council for Accreditation of Academic and Vocational Qualifications and the Vocational Training Council.¹⁶⁰

The UGC, established in 1965, is a non-statutory advisory committee responsible for advising the Government on the development and funding needs of HEIs, and with principles and practices based on the British model. The latter have been adapted over the years to suit the needs of Hong Kong. In 1972, the Committee was retitled the University and Polytechnic Grants Committee (UPGC), to reflect the inclusion of the then Hong Kong Polytechnic (now The Hong Kong Polytechnic University) within its purview, but following the adoption of university titles by the two polytechnics and the Hong Kong Baptist College, the Committee reverted to its previous title of University Grants Committee in 1994.¹⁶¹ It has neither statutory nor executive powers; HEIs have their own governance structures, and substantial freedom in the control of curricula and academic standards, the selection of staff and students, initiation and acceptance of research, and the internal allocation of resources.¹⁶²

The main function of the UGC is to oversee the deployment of funds for the strategic development of the HE sector; it places a strong emphasis on maintaining institutional diversity. Specifically, it determines grant recommendations in the light of indications of the level of funding that can be made available, overall student number targets by level of study and year to meet community needs as agreed with the Government. It also provides HEIs with developmental and academic advice, having regard to international standards and practice. It also advises both institutions and the Government on campus development plans and proposals made by institutions, with a view to supporting their academic and overall development.¹⁶³

All qualifications offered listed on the Qualifications Register (QR) are quality assured and recognized under the Qualifications Framework (QF). The QF, as set up by the Education Bureau, is a seven-level hierarchy designed to order and support qualifications in the academic, vocational and continuing education sectors.¹⁶⁴ The Hong Kong Council for Accreditation of Academic and Vocational Qualifications

(HKCAAVQ), in its statutory role as the Accreditation Authority, is entrusted to implement the quality assurance mechanism to underpin the QF development.¹⁶⁵

In March 2002, the UGC published the Sutherland Report, a review of HE in Hong Kong, covering institutional governance among other aspects.¹⁶⁶ As part of its recommendations, it proposed the establishment of a Further Education Council.

9.2.5 Israel

Higher education in Israel consists of six research-intensive universities, one research institute, and one open university. As well as these, there are also 20 teacher-training colleges, 20 academic colleges, and a private sector unsupported by the state.¹⁶⁷ Regional colleges, for which universities are academically responsible, provide educational opportunities for students far from the country's universities, which are on the whole located in the centre of the country. These other non-university HEIs only offer qualifications up to undergraduate level. Non-university HE is available at post-secondary institutions in some non-academic programs of study, in areas such as technology, practical engineering, administration, and other subjects.¹⁶⁸ There are also adult education courses sponsored by the Ministry of Education (MOE) for needs ranging from learning the Hebrew language and upgrading basic educational skills to promoting family well-being and expanding general knowledge. Hebrew language instruction on many levels is intended to help immigrants and other groups to integrate into the mainstream of Israeli life. FE operates under the heading of Technical Vocational Education and Training (TVET), and is governed directly by the Ministry of Industry, Trade, and Labour (MOITL) since 1953, in schools separate to those under the MOE which were originally concerned with apprenticeships in the labour force.

HE is the responsibility of the Council for Higher Education (CHE), a statutory corporation which is an independent body between Government and HEIs, with responsibility for all issues connected with HE. These include setting policy while ensuring the independence of the HE system, the development and preservation of quality, while recognizing and maintaining the diverse characteristics of HEIs and the student population in Israel.

Two factors are reflected in the law which established the CHE: (i) autonomy of HEIs to conduct their academic and administrative affairs is safeguarded, within the framework of their budgets; and (ii) a requirement that at least two-thirds of CHE Council members will be selected because of their personal standing in the field of HE.¹⁶⁹ CHE financing of HEIs is provided directly by Government but is handled by the CHE Planning and Budgeting Committee (PBC). Current direct allocations to institutions of HE are divided into three main categories: block grant allocations, earmarked allocations and matching allocations. Four principles underpin the budgeting model: out-based funding, objective parameters and timely and reliable data, transparency and stability, and global sum, block grant which allows HEIs to allocate its funds according to its own priorities.¹⁷⁰ Israeli students pay student fees.¹⁷¹

In 2003, CHE established a QA system, in addition to the examinations undertaken prior to accreditation of new institutions or new units. This system, has three intentions, namely: (i) improving the quality of HE; (ii) strengthening the awareness of the QA process and developing internal mechanisms in HEIs to continually evaluate academic quality; and (iii) ensuring the integration of the Israeli academic system within the global academic systems.¹⁷² CHE carries out these periodic assessments of quality in a chosen number of fields of study, in all relevant institutions at the same time. CHE is a member of a number of international QA organisations.¹⁷³

9.2.6 New Zealand

New Zealand has what it refers to as a tertiary education sector with tertiary education organisations (TEOs), rather than separate HE and FE systems. It has eight universities, three of which were founded in the eighteenth century, and the other five founded after World War II; there are 18 institutes of technology and polytechnics, colleges of education, and three wānanga.¹⁷⁴ The wānanga are Māori polytechnics, with qualifications up to the doctoral level (depending on the institution). Two of these institutions are quite small, and one is very large (38,000+ students). Wānanga are regarded as a pillar of New Zealand's HE system; state owned and entirely run by Māori, they have had a very positive impact on Māori educational attainment rates.¹⁷⁵ There is also a significant number of private TEOs. FE is primarily offered as technical and vocational qualifications by the institutes of technology and polytechnics, with curricula based on practical and industry-related knowledge, and work experience often an integral element.

Tertiary education is overseen on behalf of the Government by the Tertiary Education Commission (TEC), established by the Education Act in 1989.¹⁷⁶ The TEC has independent statutory powers related to the approval of Crown funding for tertiary education institutions; in addition, it implements Government policy when directed by the Minister for Tertiary Education, Skills and Employment, and monitors the performance of the sector.¹⁷⁷ The TEC funds the tertiary education sector via Government voted funding, and with funding decisions guided by the Tertiary Education Strategy to ensure that TEOs deliver on the Government's policy priorities. On the whole TEOs are funded through an investment plan, though some funds are disbursed to TEOs through funding letters (i.e., these TEOs are exempt from a plan).¹⁷⁸ The TEC has separate funds for different purposes: teaching and learning, literacy and numeracy and English for speakers of other languages, adult and community education, industry, and research capability.¹⁷⁹ New Zealand students pay student fees, from undergraduate to postgraduate level.¹⁸⁰

Quality assurance in New Zealand is undertaken by a number of organizations. The Vice Chancellors Committee (NZVCC) is responsible for quality assurance in universities and for university programmes. The New Zealand Qualifications Authority (NZQA) is responsible for quality assurance of degree programmes in all institutes of

technology, wānanga and private training enterprises. Institutes of Technology and Polytechnics of New Zealand (ITPNZ) is responsible for overseeing and approving all local qualifications offered at polytechnics. The Association of Colleges of Education in New Zealand (ACENZ) is responsible for approving and overseeing qualifications offered at Colleges of Education. All these organisations work to a unified framework, the New Zealand Qualifications Framework (NZQF), established in July 2010 as a single framework for all qualifications. The NZQF is consistent with other qualifications frameworks around the world.¹⁸¹

The TEC previously had a policy advice role; however, in 2010, it was clarified that the Ministry of Education was the principal advisor to the Government on tertiary education policy, and as such the TEC's role is now to advise on the implications and implementation of policy. The most recent policy development is the *Tertiary Education Strategy 2014-2019*, which sets out the Government's long-term strategic plans for the entire tertiary sector, with a view to social, environmental, and economic outcomes. The strategy highlights six priorities: delivering skills for industry, getting at-risk young people into a career, boosting the achievement of Māori and Pasifika, improving adult literacy and numeracy, strengthening research-based institutions, and growing international linkages. There is a clear focus on improving performance (such as with previously introduced performance-based funding, as well as educational performance indicators for TEOs), across the board of the entire tertiary sector.¹⁸²

9.2.7 Ontario, Canada

Similar to Alberta, responsibility for HE and FE lies at the province and territory level. Ontario's legislature has the authority for its sector, which comprises publicly-funded post-secondary institutions, and a private sector, and this is overseen by the Ministry of Training, Colleges and Universities (MTCU). Ontario's post-secondary education system is a binary one, with universities and colleges. Ontario has 20 publicly universities, of which the University of Toronto is the oldest and largest.¹⁸³ Ontario's college sector was founded in the late 1960s, with a view to offering "a comprehensive program of career-oriented, post-secondary education and training to assist individuals in finding and keeping employment, to meet the needs of employers and the changing work environment and to support the economic and social development of their local and diverse communities",¹⁸⁴ and today comprises 24 publicly-funded colleges.¹⁸⁵ There is also a private university and career college sector.

The MTCU has responsibility for: developing policy directions for universities and colleges of applied arts and technology, planning and administering policies related to basic and applied research in this sector, authorizing universities to grant degrees, distributing funds allocated by the provincial legislature to colleges and universities, providing financial-assistance programs for postsecondary school students, and registering private career colleges. FE is administered by Employment Ontario,¹⁸⁶ which is operated by the MCTU. Employment Ontario is responsible for areas of FE,

such as: delivering employment and training services to the public across the province; developing policy directions for employment and training; setting standards for occupational training, particularly for trades under the Trades Qualification and Apprenticeship Act; managing provincial programs to support workplace training and workplace preparation, including apprenticeship, career and employment preparation, and adult literacy and basic skills; and undertaking labour market research and planning.¹⁸⁷

Funding for universities in Ontario comes from a variety of sources, the largest of which in terms of total revenue is student tuition (standing at 38% in 2013-14), with MTCU funds second, followed by, *inter alia*, Federal Government funds, and other Ontario ministry sources.¹⁸⁸ If talking about operating revenue, then MTCU's funding is the biggest slice.¹⁸⁹ The current MTCU funding model consists of three main components: the core model, which is enrolment based; performance funding, which is based on KPIs; and special purpose and other grants.¹⁹⁰

Policy recommendations and data collection for Ontario's post-secondary institutions are overseen by the Higher Education Quality Council of Ontario (HEQCO), which was created in 2005. HEQCO, an agency of the Government of Ontario, has responsibility for evidence-based research into the continued improvement of the postsecondary education system in Ontario. Policymaking, however, is the responsibility of MTCU, as informed by recommendations from HEQCO. The most recent report, *Ontario's Differentiation Policy Framework for Postsecondary Education* (2013), identifies specific priorities relating to: social and economic development, a "high quality educational experience", financial sustainability and accountability, access for all qualified learners, world-class research and innovation, and collaboration and pathways for students.¹⁹¹

As part of its mandate, HEQCO evaluates the postsecondary sector and provides policy recommendations to the Minister of Training, Colleges and Universities to enhance the access, quality and accountability of Ontario's colleges and universities.¹⁹² The Ontario Qualifications Framework is a 13 level qualification framework, from certificate to doctoral level, and includes all non-religious postsecondary certificate, diploma and degree programs offered in Ontario. This includes apprenticeship certificates, qualifications awarded by private career colleges, the qualifications awarded by public colleges, and degrees offered by public universities and institutions authorized by MTCU to award degrees.¹⁹³

10. Appendix D: Programme of evidence taking

10.1 Framework for evidence taking

The following information was provided to each interviewee prior to and/or during evidence gathering sessions.

Questions and discussion will follow the Terms of Reference and focus on the following broad thematic areas. Specific issues for different organisations and sectors (HE and FE), as well as further issues, will arise during the discussion.

- *Observations on future trends and landscape of Welsh HE and FE, including:*
 - *societal and labour market supply and demand,*
 - *institutional diversity and competitiveness, including public and private/for profit providers;*
 - *implications of new funding arrangements;*
 - *future-proofing education and research requirements, etc.*
- *Observations on current governance/regulatory framework and arrangements, including:*
 - *education and training, research, funding, duty-of-care to students, widening access, staff (academic and administration), and quality assurance;*
 - *relationship between HE and FE including apprenticeship;*
 - *differences if any between public and private providers;*
 - *recent changes in regulatory environment and framework, esp. vis-à-vis new funding arrangements;*
 - *responsibilities with regard to, inter alia, setting policy and identifying targets; strategic planning and future development.*
- *Observations on the role of the Higher Education Funding Council for Wales including:*
 - *matters of autonomy and relationships between HEFCW, HEIs and Ministry;*
 - *ToR, and (balance of) responsibilities with respect to development and oversight of the HE sector in Wales;*
 - *strategic and operational aspects of the organisations' relationships;*

- *arrangements for communications, reporting and liaison with other organisations, including Service Level Agreements between HEFCW, QAA and ESTYN;*
- *student consumer protection;*
- *regulatory environment for staff (academic or support)*
- *membership and appointment process.*
- *Observations on the relations between Welsh HE, including HEFCW and existing English legal structures, including HEFCE*
 - *what works?*
 - *legislative issues and possible reforms;*
 - *implications of change.*
- *Observations on 'good practice' internationally*
 - *what works where and why?*
- *Observations on possible recommendations*

10.2 Schedule of evidence taking

NAME	DATE
REVIEW OF HIGHER EDUCATION GOVERNANCE IN SCOTLAND Ferdinand von Prondzynski, Chairperson of Review	Friday 10 September 2015
HEFCE Chris Millward, Director (Policy)	Friday 25 September 2015
NIACE CYMRU <ul style="list-style-type: none"> ● Cerys Furlong, Director for Wales ● Learn Direct, Dereth Wood ● Director of Learning, Policy & Strategy ● Careers Wales, Richard Spear, CEO 	Monday 2 November 2015
Welsh Government <ul style="list-style-type: none"> ● James Price, Deputy Permanent Secretary 	Monday 2 November 2015
QAA <ul style="list-style-type: none"> ● Ian Kimber, Director of Quality Assurance ● Dr Julian Ellis, Head of Wales & Concerns 	Monday 2 November 2015
WELSH GOVERNMENT <ul style="list-style-type: none"> ● Brett Pugh, Director, School Standards & Workforce Group 	Tuesday 3 November 2015
WELSH GOVERNMENT <ul style="list-style-type: none"> ● Steve Vincent, Deputy Director, Schools Management & Effectiveness 	Tuesday 3 November 2015
UNIVERSITIES WALES <ul style="list-style-type: none"> ● Professor Colin Riordan, Chairperson 	Tuesday 3 November 2015
OPEN UNIVERSITY	Tuesday 3 November 2015

<ul style="list-style-type: none"> • Rob Humphreys, Director 	
UNIVERSITIES WALES <ul style="list-style-type: none"> • Amanda Wilkinson, Director • Lisa Newberry, Assistant Director 	Tuesday 3 November 2015
NATIONAL UNION OF STUDENTS (NUS) <ul style="list-style-type: none"> • Beth Button, President • Graham Henry, Policy and Public Affairs Manager 	Wednesday 4 November 2015
MEETING WITH UNIONS <ul style="list-style-type: none"> • Lisa Edwards – Policy & Communications officer • Margaret Phelan – Wales Regional Officer, UCU 	Wednesday 4 November 2015
ESTYN <ul style="list-style-type: none"> • Meilyr Rowlands HMCI • Simon Brown, Strategic Director • Liz Miles, Acting Assistant Director 	Wednesday 4 November 2015
HIGHER EDUCATION FUNDING COUNCIL FOR WALES Council Workshop	Thursday 5 November 2015
FEDERATION OF SMALL BUSINESSES (FSB) <ul style="list-style-type: none"> • Rachel Bowen, Head of Policy • Rhodri Evans, Press/Media CONFEDERATION OF BRITISH INDUSTRY (CBI) <ul style="list-style-type: none"> • Leighton Jenkins, Assistant Director/Head of Policy 	Friday 6 November 2015
Education and secondary school representatives <ul style="list-style-type: none"> • Martyn Silezin • Justin O'Sullivan • James Harris • Sian Farquharson 	Friday 6 November 2015
HIGHER EDUCATION AUTHORITY (HEA), IRELAND <ul style="list-style-type: none"> • Tom Boland, CEO • Andrew Brownlee, Head of System Funding 	Monday, 30 November 2015
LEADERSHIP FOUNDATION FOR HIGHER EDUCATION <ul style="list-style-type: none"> • Louise Bright, Associate Director LFHE Wales 	Wednesday 2 December 2015
WELSH GOVERNMENT <ul style="list-style-type: none"> • Andrew Clark, Deputy Director, Further Education and Apprenticeships Division 	Wednesday 2 December 2015
COLLEGESWALES/COLLEGAUCYMRU <ul style="list-style-type: none"> • Greg Walker, Interim CEO • Iestyn Davies, new CEO 	Wednesday 2 December 2015
WELSH GOVERNMENT <ul style="list-style-type: none"> • Dr Rachel Garside-Jones, Head of Skills Policy Engagement 	Wednesday 2 December 2015
COLLEGE PRINCIPALS <ul style="list-style-type: none"> • Barry Liles (Coleg Sir Gar) • Judith Evans (Cymoedd) • Jacqui Weatherburn (Coleg Ceredigion) • Andy Johns, Assistant Principal (St David's Catholic 6th Form College) • Mark Jones (Gower College) • Jonathan Martin (Merthyr College) • Sharon Lusher (Pembrokeshire College) • Glyn Jones (Grwp Llandrillo Menai) • Mark Dacey (NPTC Group) 	Wednesday 2 December 2015

GARETH REES, CARDIFF UNIVERSITY Research Professor Wales Institute of Social and Economic Research, Data and Methods (WISERD)	Wednesday 2 December 2015
UNIVERSITY VICE CHANCELLORS <ul style="list-style-type: none"> • Professor Elizabeth Treasure, Deputy VC Cardiff University • Professor Richard Davies (University of Swansea) • Professor Graham Upton (University of Glyndwr) • Professor Julie Lydon (University of South Wales) • Ms Jane Davidson (University of Wales Trinity Saint David) • Professor Tony Chapman (Cardiff Met University) • Professor John Hughes (University of Bangor) • Prof April McMahon (University of Aberystwyth) • Rob Humphreys (Open University) • Amanda Wilkinson (Universities Wales) • Lisa Newberry (Universities Wales) 	Thursday 3 December 2015
DAVID JONES Principal Coleg Cambria	Thursday 3 December 2015
HIGHER EDUCATION FUNDING COUNCIL FOR WALES (HEFCW) <ul style="list-style-type: none"> • David Blaney, CEO • Celia Hunt, Director of Strategic Development • Bethan Owen, Director of Institutional Engagement • David Allen, Chairperson 	Thursday 3 December 2015
HIGHER EDUCATION FUNDING COUNCIL FOR ENGLAND (HEFCE) Madeleine Atkins, CEO	Friday 4 December 2015
SIR IAN DIAMOND Chairperson, Review of Higher Education Funding and Student Finance Arrangements, Wales	Friday 4 December 2015
WELSH LANGUAGE COMMISSION <ul style="list-style-type: none"> • Meri Huws, Welsh Commissioner • Lowri Williams, Senior Infrastructure Policy Officer 	Wednesday 6 January 2016
COLEG CENDLAETHOL CYMRU <ul style="list-style-type: none"> • Ioan Matthews, Chief Executive • Dafydd Trystan, Registrar 	Wednesday 6 January 2016
DEPARTMENT OF EMPLOYMENT & LEARNING, NORTHERN IRELAND (DELNI) <ul style="list-style-type: none"> • Sian Kerr, Director of Higher Education, Department for Employment and Learning 	Wednesday 6 January 2016
SCOTTISH FUNDING COUNCIL <ul style="list-style-type: none"> • Laurence Howells, CEO 	Wednesday 6 January 2016
ChUW (CHAIRS OF UNIVERSITIES WALES) <ul style="list-style-type: none"> • Randolph Thomas, Chairperson 	Tuesday, 26 January 2016
CHIEF SCIENTIFIC ADVISER <ul style="list-style-type: none"> • Julie Williams 	Wednesday, 27 January 2016

11. Appendix E: Submissions

11.1 Letter seeking submissions

The following letter was circulated by the Department of Education and Skills seeking submissions.

October 2015

You will be aware that the Minister for Education and Skills announced in July that he had invited Professor Ellen Hazelkorn to conduct a review of the regulation and oversight of post-compulsory education and training in Wales. A copy of the Terms of Reference for the Review is attached.

The Minister's Written Statement to the Assembly stated that effective regulation and oversight are essential elements of a sound education system and crucial to the good reputation of our system in Wales. Increasingly, funding pressures and other challenges are leading our education and training providers to broaden the range of services they offer which in turn has led to a blurring of the lines between the historic and traditional boundaries that exist between FE, HE and ACL. Oversight activity needs to keep pace with this diversification and, with a number of other significant policy reviews and regulatory changes currently underway, now is an appropriate time for us to consider the effectiveness of the current arrangements and the scope for a better alignment of the arrangements for oversight activity in and between the various institutions and bodies involved in post-compulsory education and training in Wales.

Prof Hazelkorn is Policy Adviser to the Higher Education Authority and Director of the Higher Education Research Unit at Dublin Institute of Technology. She holds a number of international roles and works as a specialist adviser with international organisations and institutions and as a member of various government and international review teams and boards. She has wide-ranging expertise across the fields of higher education and higher education policy including governance, leadership and management issues and has a particular interest and expertise in national and international systems of evaluation, rankings and regulation.

Prof Hazelkorn will be commencing her review in October and will report to the Minister in the spring. She is very keen to engage with a broad range of stakeholders to ensure the review captures the views of a wide range of interests. She will be in Wales during the first week of November and early December and is scheduling meetings with a number of individuals and stakeholder groups. She will also be visiting partner organisations in Scotland, Northern Ireland and England.

We are assisting Prof Hazelkorn with her stakeholder engagement programme which includes group sessions with the schools, FE, HE, third sector organisations and trade unions and professional bodies. She is also arranging one to one meetings with a

number of key organisations. If you would like to meet with Prof Hazelkorn and have not already been invited to attend a meeting, please contact ... the Welsh Government Higher Education Division. Alternatively, if you would like to make a written submission to Prof Hazelkorn please send your comments to her at the following address: ...

Written submissions should be received by Friday 27 November.

The Minister very much welcomes your co-operation and participation in this review which will enable Prof Hazelkorn to provide a report that is based on sound and comprehensive advice based on evidence that is well-informed by the views of those who are most likely to be affected by it.

11.2 Submissions received (alphabetical order)

- Chairs of Universities Wales
- Coleg Cymraeg Cenedlaethol
- ColegauCymru/Colleges Wales
- HEFCW – The Higher Education Funding Council for Wales
- The Learned Society of Wales
- UCAC - Welsh National Union of Teachers
- Universities Wales

Notes

¹ UNESCO (2011) *International Standard Classification of Education, ISCED 2011*. Montreal, Canada: UNESCO Institute for Statistics, p44.

<http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>

² OECD (2013) "What are the social benefits of education", Paris: Organisation of Economic Co-operation and Development. [http://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B010%20\(eng\)--v9%20FINAL%20bis.pdf](http://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B010%20(eng)--v9%20FINAL%20bis.pdf)

³ Marginson, S. & van der Wende, M. (2007) *Globalisation and higher education*. OECD Education Working Papers No. 8. Paris: Organisation of Economic Co-operation and Development; CERl (2009) *Higher Education to 2030*, vols. 1 and 2. Paris: Organisation of Economic Co-operation and Development; Altbach, P.G., Reisberg, L. & Rumbley, L.E. (2009) *Trends in Global Higher Education: Tracking an Academic Revolution. A Report Prepared for the UNESCO 2009 World Conference on Higher Education*. Paris: UNESCO; Vincent-Lancrin, S. & Kärkkäinen, K. (2009) "Globalisation and Higher Education: What Might the Future Bring?", *IMHE Info*. Paris: Organisation of Economic Co-operation and Development, <http://www.oecd.org/dataoecd/42/39/44302672.pdf>; British Council (2012) *The shape of things to come: higher education global trends and emerging opportunities to 2020*, Going Global 2012. British Council: London.

http://www.britishcouncil.org/sites/britishcouncil.uk2/files/the_shape_of_things_to_come_-_higher_education_global_trends_and_emerging_opportunities_to_2020.pdf; J. Kubler & Sayers, N. (2010) *Higher Education Futures: Key Themes and Implications for Leadership and Management*, Series 2: No. 4.1. London: Association of Commonwealth Universities & Leadership Foundation for Higher Education. http://www.lfhe.ac.uk/filemanager/root/site_assets/research_resources/research/series_2/S2-4.1%20Kubler%20&%20Sayers%20-%20Higher%20Education%20Futures.pdf

⁴ Welsh Government (2012) *Understanding Wales' Future*. <http://gov.wales/statistics-and-research/understanding-wales-future/?lang=en>; Waite, D. (2015) "City profile: Cardiff and the shift to city-regionalism", *Cities*, 48, 21–30. <http://doi.org/10.1016/j.cities>.

⁵ H. Lewis (2013) "Statement on the Review of Higher Education Funding and Student Finance Arrangements in Wales." Cardiff: Welsh Government.

<http://gov.wales/about/cabinet/cabinetstatements/2014/hefinance/?lang=en>

⁶ HE Review Team (2015) *Review of Higher Education Funding and Student Finance Arrangements in Wales. Interim Report*. Cardiff: Welsh Government Skills, Higher Education and Lifelong Learning Directorate. <http://gov.wales/docs/dcells/publications/151215-review-of-higher-education-funding-and-student-finance-arrangements-in-wales-interim-report-en.pdf>

⁷ For a list of legislation see <http://law.gov.wales/publicservices/education/?tab=key-legislation&lang=en>

⁸ Stats Wales (2015) "Further Education, Work-based Learning and Community Learning in Wales, 2014/15 (provisional figures)." Cardiff: Welsh Government.

<http://gov.wales/docs/statistics/2015/151125-further-education-work-based-learning-community-learning-2014-15-provisional-en.pdf>

⁹ Rees, G., Taylor, C., Davies, R., Drinkwater, S., Evans, C., & Wright, C. (2015) *Access to Higher Education in Wales. A Report to the Higher Education Funding Council for Wales*. Cardiff, WISERD, p12. http://wiserd.ac.uk/files/4014/4257/0990/WISERD_-_Access_to_Higher_Education_F1.pdf

¹⁰ Welsh Government (2015, 20 October) "National Population Projections."

<http://gov.wales/statistics-and-research/national-population-projections/?lang=en>

¹¹ Stats Wales, "Destination of Welsh domiciled qualifiers by employment status, gender and location of study." Cardiff: Welsh Government.

<https://statswales.wales.gov.uk/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Higher-Education/Destination-of-Leavers/welshdomiciledqualifiers-by-employmentstatus-locationofstudy>

¹² HEFCW (2011) *Future Structure of Universities in Wales. Confidential advice to the Minister for Education and Skills*. Cardiff: Higher Education Funding Council for Wales.

<http://gov.wales/docs/dcells/consultation/110711futureofunihefcwen.pdf>

¹³ National Assembly for Wales (2013) *Further Education structure in Wales*. Cardiff: National Assembly for Wales Commission.

<http://www.assembly.wales/Research%20Documents/Further%20Education%20structure%20in%20Wales%20-%20Research%20paper-22042013-245583/13-025-English.pdf>

¹⁴ G. Moodie (2009) "Australia: The Emergence of Dual Sector Universities", in N. Garrod & B. Macfarlane (eds.) *Challenges Boundaries. Managing the Integration of Post-Secondary Education*. New York and London: Routledge, 59-76.

¹⁵ Changes in 2012-13 only apply to England. Secretary of State for BIS (2011) *Higher Education: Students at the Heart of the System*, White Paper for England. London: Department for Business, Innovation and Skills.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31384/11-944-higher-education-students-at-heart-of-system.pdf

¹⁶ National Assembly for Wales (2013) *Further Education Structure in Wales*. Cardiff.

¹⁷ See also Eurydice (2015) "Welsh Education." Brussels: European Commission.

<https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/United-Kingdom-Wales:Overview>

¹⁸ BIS (2015) *Fulfilling Our Potential: Teaching Excellence, Social Mobility and Student Choice*. London: Department for Business, Innovation and Skills.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/474227/BIS-15-623-fulfilling-our-potential-teaching-excellence-social-mobility-and-student-choice.pdf

¹⁹ Nurse, P. (2015) *Ensuring a successful UK research endeavour*, London: Department for Business, Innovation and Skills.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/478125/BIS-15-625-ensuring-a-successful-UK-research-endeavour.pdf

²⁰ The Welsh Assembly (2002) *A Winning Wales. The National Economic Development Strategy of the Welsh Assembly Government*. Cardiff: Welsh Government, pp348-349.

http://www.blaenau-gwent.gov.uk/documents/wales_docs/W2.pdf

²¹ Cole, A. (2006) *Beyond Devolution and Decentralisation: Building Regional Capacity in Wales and Brittany*. Manchester: Manchester University Press; Jones, R., Goodwin, M.,

Jones, M., & Pett, K. (2005) "Filling in' the state: Economic governance and the evolution of

devolution in Wales”, *Environment and Planning C: Government and Policy*, 23, 337–360.
<http://doi.org/10.1068/c39m>

²² McCormick, J. et al. (2011) *Achievement and accountability Report of the independent review of higher education governance in Wales*. Cardiff: Welsh Government.

²³ Welsh Government (n.d.) “Learning Pathways, 14-19”.

<http://gov.wales/topics/educationandskills/pathways/?lang=en>

²⁴ Welsh Government (2014) *Qualified for Life. An education improvement plan for 3 to 19-year olds in Wales*. Cardiff: Welsh Government.

<http://gov.wales/topics/educationandskills/allsectorpolicies/qualified-for-life-an-educational-improvement-plan/?lang=en>

²⁵ Donaldson, G. (2015) *Successful Futures. Independent Review of Curriculum and Assessment Arrangements in Wales*. Cardiff: Welsh Government.

²⁶ Furlong, J. (2015) *Teaching Tomorrow’s Teachers. Options for the future of initial teacher education in Wales*, Oxford: Department of Education, University of Oxford.

<http://gov.wales/docs/dcells/publications/150309-teaching-tomorrows-teachers-final.pdf>

²⁷ Jones, R., & Fowler, C. (2007) “Where Is Wales? Narrating the Territories and Borders of the Welsh Linguistic Nation”, *Regional Studies* 42(1)89-101.

<http://doi.org/10.1080/00343400600928343>

²⁸ Gore, T., Fothergill, S., Hollywood, E., Lindsay, C., Morgan, K., Powell, R., & Upton, S. (2007) *Coalfields and neighbouring cities: economic regeneration, labour markets and governance*. Universities of Leeds, Sheffield & York: Joseph Rowntree Foundation, White Rose University Consortium, p25.

http://eprints.whiterose.ac.uk/72694/1/FINAL_coalfields_regeneration_economy.pdf

²⁹ Davies, A., & Rosser, D. (2013) *Wales: Towards a RIS3 Strategy*. Cardiff: Welsh Government.

³⁰ Gore et al. (2007) *Op. Cit.*, p56; Welsh Government (2012) *Understanding Wales’ Future*. Cardiff: Welsh Government. <http://gov.wales/statistics-and-research/understanding-wales-future/?lang=en>;

³¹ Kelly, U., McNicoll, I. & White, J. (2015) *The Economic Impact of Cardiff University*.

Viewforth Consulting Ltd. See also Lane, J.E. and Johnstone, D.B. (eds.) *Universities and Colleges as Economic Drivers. Measuring Higher Education’s Role in Economic Development*.

Albany: State University of New York Press and Goddard, J. and Kempton, L. (2011) *Connecting Universities to Regional Growth: A Practical Guide*, Brussels: EU Regional Policy, Smart Specialisation Platform.

http://ec.europa.eu/regional_policy/sources/docgener/presenta/universities2011/universities2011_en.pdf

³² Waite, D. (2015) “City profile: Cardiff and the shift to city-regionalism”, *Cities*, 48, 21–30, p23.

³³ The Government of Wales Act 1998, later superseded by the Government of Wales Act 2006, established the Welsh Assembly, and given some power previously held at Westminster.

³⁴ Trench, A. (2008) *Devolution and higher education: impact and future trends*. London: University UK, p16.

-
- ³⁵ Evans, G. (2015) *A Class Apart: Learning the Lessons of Education in Post-Devolution Wales*, Cardiff: Welsh Academic Press; Andrews, L. (2014) *Ministering to Education*, Swansea: Parthian Books.
- ³⁶ HE Review Team (2015) *Op. Cit.*, pp70-111.
- ³⁷ Kelly, U., McNicoll, I. & White, J. (2015) *The Economic Impact of Higher Education in Wales*. Cardiff: Universities Wales. <http://www.uniswales.ac.uk/wp/media/The-Economic-Impact-of-Higher-Education-in-Wales.pdf>
- ³⁸ See Bristow, G., Pill, M., Davies, R., & Drinkwater, S. (2011) *Stay, Leave or Return? Understanding Welsh Graduate Mobility. WISERD/SKOPE Paper*. Cardiff: Cardiff University. http://www.cardiff.ac.uk/socsi/research/researchcentres/skope/publications/WISERD_WPS_005.pdf
- ³⁹ CollegesWales/Colegaucymru (2016) *Skills for a Prosperous Nation. A Manifesto for the 2016 Assembly Election*. Cardiff.
- ⁴⁰ Welsh Government (2014) "Regional Skills Partnerships to support local opportunities and needs." <http://gov.wales/newsroom/educationandskills/2014/141011regionalskillspartnershipsskills/?lang=en>
- ⁴¹ Nurse, P. (2015) *Ensuring a successful UK research endeavour*, London: Department for Business, Innovation and Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/478125/BIS-15-625-ensuring-a-successful-UK-research-endeavour.pdf
- ⁴² HEFCW (2015) *Corporate Strategy 2013-14 – 2015-16*. Cardiff: Higher Education Funding Council for Wales. http://www.hefcw.ac.uk/documents/publications/corporate_documents/corporate_strategy_2013-14-2015-16.pdf
- ⁴³ Brill, L., Cowie, L., Folkman, P., Froud, J., Johal, S., Leaver, A., Moran, M. & Williams, K. (2015). *What Wales Could Be*. Centre for Cultural Change (CRESC), University of Manchester for the Federation of Small Business, Wales.
- ⁴⁴ Population data for: UK countries (Office for National Statistics data, 2014, https://www.google.ie/webhp?sourceid=chrome-instant&ion=1&espv=2&es_th=1&ie=UTF-8#q=oced%20population&es_th=1); Republic of Ireland, Australia, Finland, Israel, New Zealand (OECD data, 2014 (2013 for Israel), http://stats.oecd.org/Index.aspx?DatasetCode=POP_FIVE_HIST#); Hong Kong SAR (Hong Kong SAR Government, 2014, <http://www.gov.hk/en/about/abouthk/factsheets/docs/population.pdf>); Alberta and Ontario (Statistics Canada, 2015, <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo02a-eng.htm>). Enrolment data for: UK Countries (All HE data from HESA, 2013/14, <https://www.hesa.ac.uk/sfr210> ; FE data for England from BIS, 2014/15, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/486852/SFR_commentary_November_2015_ofqual_update.pdf, p.31; FE data for Northern Ireland from DEL, 2014/15, <https://www.delni.gov.uk/sites/default/files/publications/del/Further%20Education%20Activity%20in%20Northern%20Ireland%20201011%20to%20201415%20bulletin.pdf>; FE data for Scotland from SFC, 2013/14,

https://stats.sfc.ac.uk/SASProxy/SASStoredProcess/do?_program=%2Fifact%2Ffive%2Fgen_sumpg&_region=&_databas=16); Republic of Ireland, Australia, Finland, Israel, New Zealand (UNESCO, 2013, <http://data.uis.unesco.org/?queryid=142#>); Alberta and Ontario (Statistics Canada, 2013/14, <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/educ71a-eng.htm>).

⁴⁵ For example, DELNI states: "While it is our intention to direct users to Further Education activity information elsewhere in the UK, users should be aware that Further Education activity information in other administrations are not always measured in a comparable manner to those in Northern Ireland due to differing counting rules." See [Contextual info regarding FE Sector](#), <https://www.delni.gov.uk/sites/default/files/publications/del/Further%20Education%20Activity%20in%20Northern%20Ireland%20201011%20to%20201415%20bulletin.pdf>

⁴⁶ This refers to students studying in Welsh institutions; however not all Welsh domiciled students study in Wales; e.g. see Stats Wales, "Higher education enrolments at Welsh HEIs by domicile, level and mode." Cardiff: Welsh Government. <https://statswales.wales.gov.uk/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Higher-Education/Students/Enrolments-at-Welsh-HEIs/HigherEducationEnrolments-by-Domicile-Level-Mode>

⁴⁷ Van Vught, F.A. (ed.) (1989) *Governmental Strategies and Innovation in Higher Education*, Higher Education Policy Series. London: Jessica Kingsley Publishers, p21.

⁴⁸ Meek, V.L. (2002) "Changing Patterns in Modes of Co-ordination of Higher Education," In: J. Enders & O. Fulton (eds.) *Higher Education in a Globalising World, International Trends and Mutual Observations. A Festschrift in Honour of Ulrich Tiechler*. Dordrecht: Kluwer Academic Publishers, pp53-71. See also Goedegebuure, L., F. Kaiser, P. Maassen & E. de Weert, "Higher Education Policy in International Perspective: An Overview", In: Kaiser, F., P. Maassen, Meek, V.L., van Vught, F.A., de Weert, E. & Goedegebuure, L. (eds.) (1994) *Higher Education Policy: An International Comparative Perspective*, Oxford: International Association of Universities and Pergamon Press, pp1-12.

⁴⁹ Clark, B. R. (1983) *The Higher Education System: Academic Organization in Cross-national Perspective*. London: University of California Press.

⁵⁰ Luescher-Mamashela, T.M. (2012) "Student representation in university decision making: good reasons, a new lens?", *Studies in Higher Education*, 38(10), pp1442-1456; Klemencic, M. (2015) "Student involvement in quality enhancement", In: Huisman, J., de Boer, H., Dill, D. & Souto-Otero, M. (eds.) *The Handbook of Higher Education Policy and Governance*. Basingstoke: Palgrave MacMillian, pp526-543.

⁵¹ Goedegebuure, L., Kaiser, F., Maassen P. & de Weert, E. (1994) "Higher Education Policy in International Perspective: An Overview", In: Kaiser, F., Maassen, P., Meek, V. L., van Vught, F.A., de Weert, E. & Goedegebuure, L. (eds.) (1994) *Higher Education Policy: An International Comparative Perspective*. Oxford: International Association of Universities and Pergamon Press, pp8-9

⁵² Trick, D. (2015) *The Role of Intermediary Bodies in Enhancing Quality and Sustainability in Higher Education*. Toronto: Higher Education Quality Council of Ontario; McGuinness, Jr., A. C. (2014, 29 September) "System Regulation and Governance: Ireland and the International Context", Background Paper prepared for Symposium, "21st Century Universities:

Performance and Sustainability”, Irish Universities Association, Dublin, Ireland. Boulder, Colorado: National Center for Higher Education Management Systems (NCHEMS); Kaiser, F., Maassen, P., Meek, V. L., van Vught, F.A., de Weert, E., & Goedegebuure, L. (eds.) (1994) *Higher Education Policy: An International Comparative Perspective*. Oxford: International Association of Universities and Pergamon Press; Locke, W. (2007, 7 August) “Intermediary Bodies in UK Higher Education Governance, with particular reference to Universities UK”, In: *A Comparative Study on the Functions of University Associations and Professional Bodies in Higher Education Governance*, 2007, Tohoku University, Tokyo, Japan.

http://oro.open.ac.uk/11795/1/William_Locke_%282007%29_Intermediary_Bodies_in_UK_HE_Governance_with_particular_reference_to_UUK.pdf

⁵³ Bowen, F. M., Bracco, K. R., Callan, P. M., Finney, J. E., Richardson Jr., R. C., & Trombley, W. (1997) *State Structures for the Governance of Higher Education: A Comparative Study*. San Jose: California Higher Education Policy Center, p12.

⁵⁴ Trick, D. (2015) *The Role of Intermediary Bodies in Enhancing Quality and Sustainability in Higher Education*. Toronto: Higher Education Quality Council of Ontario, p4; see also Shattock, M. (2006) *Good Governance in Higher Education*. Berkshire: Open University Press.

⁵⁵ Esterman, T. (2015) “Experiences on Governance of Universities from Abroad,” (2015) Presentation to Royal Academy of Ireland, Dublin, “Does Ireland Need a Minister for Education.” Brussels: European University Association; see also RIA (2015) *Does Ireland Need a Minister for Higher Education and Research?* Dublin: Royal Irish Academy.

⁵⁶ Department of Education and Skills (2011) *National Strategy for Higher Education to 2030. Report of the Strategy Group*. Dublin: Department of Education and Skills, pp88-90.

⁵⁷ HEA (2015) “Governance Framework for the Higher Education System.” Dublin: Higher Education Authority, unpublished.

⁵⁸ HEA (2014) *Higher Education System Performance, First Report 2014-2016*, Report of the Higher Education Authority to the Minister for Education and Skills. Dublin: Higher Education Authority.

⁵⁹ See: BIS (2015) *Fulfilling Out Potential: Teaching Excellence, Social Mobility and Student Choice*. London: Department for Business, Innovation and Skills.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/474227/BIS-15-623-fulfilling-our-potential-teaching-excellence-social-mobility-and-student-choice.pdf

⁶⁰ Trick (2015) *Op. Cit.*, p35.

⁶¹ Rees, G., Taylor, C., Davies, R., Drinkwater, S., Evans, C., & Wright, C. (2015) *Access to Higher Education in Wales. A Report to the Higher Education Funding Council for Wales*, Cardiff, [http://wiserd.ac.uk/files/4014/4257/0990/WISERD -](http://wiserd.ac.uk/files/4014/4257/0990/WISERD_-_Access_to_Higher_Education_F1.pdf)

[_Access to Higher Education F1.pdf](http://wiserd.ac.uk/files/4014/4257/0990/WISERD_-_Access_to_Higher_Education_F1.pdf), p17; Marginson, S. (2016) “The worldwide trend to high participation higher education:

Dynamics of social stratification in inclusive systems”, *Higher Education*, forthcoming;

Marginson, S. (2016) “Higher education and growing inequality”, *Academic Matters. Journal of Higher Education*, pp1–5, <http://www.academicmatters.ca/2016/01/higher-education-and-growing-inequality/>

⁶² Birnbaum, R. (1983) *Maintaining Diversity in Higher Education*. San Francisco: Jossey-Bass.

-
- ⁶³ Trow, M. (1974) "Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies Since World War II", reprinted in M. Burrage (ed.) (2010) *Martin Trow. Twentieth-Century Higher Education: From Elite to Mass to Universal*. Baltimore: Johns Hopkins University Press, pp556-610.
- ⁶⁴ UNESCO (2011) *International Standard Classification of Education. ISCED 2011*. Montreal, Canada: UNESCO Institute for Statistics, <http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>
- ⁶⁵ Wheelahan, L., Arkoudis, S., Moodie, G., Fredman, N., & Bexley, E. (2012) *Shaken not stirred? The development of one tertiary education sector in Australia*, Monograph Series 08/2012. Adelaide, Australia: National Centre for Vocational Education Research (NCVER), p10-18.
- ⁶⁶ AGE Platform (2007) *Lifelong Learning - A Tool for All Ages*, leaflet. http://www.age-platform.eu/images/stories/EN/AGE_leaflet_lifelong_learning.pdf
- ⁶⁷ Wheelan, L., Buchanan, J. & Yu, S. (2015) *Linking qualification and the labour market through capabilities and vocational streams*. Adelaide: National Centre for Vocational Education Research (NCVER).
- ⁶⁸ Hall, P. A. & Soskice, D. (2001) "An Introduction to Varieties of Capitalism", *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press, pp1-68; Wheelahan, L. & Moodie, G. (2005) "Separate post-compulsory education sectors within a liberal market economy: interesting models generated by the Australian anomaly", In: Osbourne, M. & Gallacher, J. (eds.) *A Contested Landscape. International Perspectives on Diversity in Mass Higher Education*. Leicester: National Institute Continuing Education.
- ⁶⁹ Wheelahan, L., Arkoudis, S., Moodie, G., Fredman, N., & Bexley, E. (2012) *Shaken not stirred? The development of one tertiary education sector in Australia*, Monograph Series 08/2012. Adelaide: National Centre for Vocational Education Research (NCVER); see also Moodie, G. (2008) "From Vocational to Higher Education. An International Perspective." Maidenhead: SRHE and the Open University, esp. pp4-10.
- ⁷⁰ Teichler, U. (2004) "Changing Structures of the Higher Education Systems: The Increasing Complexity of Underlying Forces", UNESCO Forum Occasional Paper Series, Paper No. 6, UNESCO: Paris, <http://unesdoc.unesco.org/images/0014/001467/146736e.pdf>
- ⁷¹ Salmi, J. (2014) "World-class universities or systems?" *Wonkhe*, 9 July, <http://www.wonkhe.com/2014/07/09/world-class-universities-or-systems/>
- ⁷² Wolf, A. (2015, June) *Issues and ideas: Heading for the precipice: Can further and higher education funding policies be sustained?* 49. London: Kings College London, Policy Institute. <https://www.kcl.ac.uk/sspp/policy-institute/publications/Issuesandideas-alison-wolf-digital.pdf>
- ⁷³ Meek, V. L. (2002) "Changing Patterns in Modes of Co-ordination of Higher Education," In: Enders, J. & Fulton, O. (eds.) *Higher Education in a Globalising World, International Trends and Mutual Observations. A Festschrift in Honour of Ulrich Tiechler*, Dordrecht: Kluwer Academic Publishers, p67.
- ⁷⁴ TCU, "The Changing post-secondary landscape", Ottawa, Ministry of Training, Colleges and Universities, <https://www.tcu.gov.on.ca/pepg/srdc/summary.html>

⁷⁵ OECD (2015, 24-25 June) *Benchmarking Higher Education System Performance: Steps Towards a Conceptual Framework*, Paper prepared for the Education Policy Committee. Paris: Organisation of Economic Cooperation and Development.

⁷⁶ UGC (2004) "Hong Kong Higher Education to Make a Difference to Move with the Times." Hong Kong: University Grants Committee.
http://www.ugc.edu.hk/eng/doc/ugc/publication/report/policy_document_e.pdf; see also Davis, G. (2015, 23 September) "Hong Kong shows how to build a world-class university system", *The Australian*.

⁷⁷ See Lane, J.E. & Johnstone, D. B. (eds.) *Higher Education Systems 3.0. Harnessing Systemness, Delivering Performance*. Albany, New York: SUNY Press; McGuinness, Jr., A. C. (2014, 29 September) "System Regulation and Governance: Ireland and the International Context", Background Paper prepared for Symposium, "21st Century Universities: Performance and Sustainability", Irish Universities Association, Dublin, Ireland. Boulder, Colorado: National Center for Higher Education Management Systems (NCHEMS).

⁷⁸ Zimpher, N.L. (2013) "Systemness. Unpacking the Value of Higher Education Systems", In: Lane, J.E. & Johnstone, D. B. (eds.) *Higher Education Systems 3.0. Harnessing Systemness, Delivering Performance*. Albany, New York: SUNY Press, p13; Scott, P. (2014, 2 September) "Is it time to restructure our universities?" *The Guardian*.

http://www.theguardian.com/education/2014/sep/02/is-time-restructure-universities?CMP=twt_gu

⁷⁹ Keep, E. (2015, 11 November) "The relationship(s) between the formal skills system, employers and the labour market – a game of 'snap' with cards that are sometimes invisible", Presentation to HEA Forward Look 4, "Skills, Employability and the Post-Secondary Sector: What is the Role for Higher Education?", Dublin.

⁸⁰ TEAC (2000) *Shaping a Shared Vision. Initial Report of the Tertiary Education Advisory Commission*. Wellington, NZ: Tertiary Education Advisory Commission, p9.

<http://www.beehive.govt.nz/feature/initial-report-tertiary-education-advisory-commission-218>

⁸¹ TEAC (2001) *Shaping the System. Second Report of the Tertiary Education Advisory Commission*. Wellington, NZ: Tertiary Education Advisory Commission, pp.viii-ix.

<http://www.beehive.govt.nz/feature/shaping-system-second-report-tertiary-education-advisory-commission-1557>

⁸² Hazelkorn, E. (2015) *Rankings and the Reshaping of Higher Education. The Battle for World-class Excellence*. Basingstoke: Palgrave Macmillan. See chapter 2.

⁸³ Adelman, C. (2009) *The Bologna Process for U.S. Eyes: Re-learning Higher Education in the Age of Convergence*. Washington, D.C., Institute of Higher Education Policy.

<http://www.ihep.org/assets/files/EYESFINAL.pdf>

⁸⁴ Pearson (2012) *The Learning Curve. Lessons in Country Performance in Education, 2012 Report*. London: Pearson, p11, <http://thelearningcurve.pearson.com/>

⁸⁵ Dougherty, K.J. and Reddy, V. (2011) *The Impacts of State Performance Funding Systems on Higher Education Institutions: Research Literature Review and Policy Recommendations*, CCRC Working Paper No. 37. New York: Community College Research Centre (CCRC), Teachers College, Columbia University; Miao, K. (2012) *Performance-based Funding of Higher Education. A Detailed Look at Best Practices in 6 States*. Washington, D.C.: Center for American Progress.

⁸⁶ de Boer, H., Jongbloed, B., Benneworth, P., Cremonini, L., Kolster, R., Kottmann, A., Lemmens-Krug, K., & Vossensteyn, H. (2015) *Performance-based funding and performance agreements in fourteen higher education Systems. Report for the Dutch Ministry of Education, Culture and Science*. Enschede, Netherlands: Centre for Higher Education Policy Studies (CHEPS), Universiteit Twente, p2; see also Benneworth, P., de Boer, H., Cremonini, L., Jongbloed, B., Leisyte, L., Vossensteyn, H. & de Weert, E. (2011) *Quality-related funding, performance agreements and profiling in higher education*. Enschede, Netherlands: Centre for Higher Education Policy Studies (CHEPS), Universiteit Twente.

⁸⁷ de Boer, H., et al., Ibid. p3.

⁸⁸ See also Netherlands Higher Education and Research Review Committee (2012) "Work Method and Assessment Framework", The Hague: Ministry of Education, Culture and Science.

⁸⁹ California Master Plan, see <http://www.ucop.edu/acadinit/mastplan/mpsummary.htm>

⁹⁰ McGuinness, A.C. (2013) "The History and Evolution of Higher Education Systems in the United States", in J.E. Lane & Johnstone, D.B. (eds.) *Higher education Systems 3.0. Harnessing Systemness, Delivering Performance*. Albany: SUNY Press, pp45-71.

⁹¹ HEA (2013, 2015) *Towards a Performance Evaluation Framework: Institutional and Sectoral Profiles*, Dublin: Higher Education Authority. <http://www.heai.ie/en/news/hea-publishes-detailed-profiles-higher-education-institutions>

⁹² Carnegie Classification of Institutions of Higher Education (2016) <http://carnegieclassifications.iu.edu>; McCormick, A. C., & Zhao, C.-M. (2005, September,) "Rethinking and Reframing the Carnegie Classification", *Change*, p51–57.

⁹³ J. Bartelse & Van Vught, F.A (2009) "The European higher education classification: Objectives and concepts", In: Van Vught, F. A. (ed.) *Mapping the higher education landscape. Towards a European classification of higher education*. Dordrecht: Springer, pp57-70.

⁹⁴ HEA (2015) *Higher Education System Performance. Institutional and Sectoral Profiles 2012/2013*. Dublin: Higher Education Authority.

⁹⁵ Benneworth, P., de Boer, H., Cremonini, L., Jongbloed, B., Leisyte, L., Vossensteyn, H. & de Weert, E. (2011) *Quality-related funding, performance agreements and profiling in higher education*. Enschede, Netherlands: Centre for Higher Education Policy Studies (CHEPS), Universiteit Twente; see also Hazelkorn, E. (2012) "European 'transparency instruments': Driving the Modernisation of European Higher Education", In: Curaj, A., Scott, P., Vlăsceanu, L. & Wilson, L. (eds.) *European Higher Education at the crossroads: between the Bologna Process and national reforms*, Volume 1, Dordrecht: Springer, pp339-360; Hazelkorn, E. (2012) "Everyone wants to be like Harvard' – or do they? Cherishing all Missions Equally", In: Curaj, A., Scott, P., Vlăsceanu, L. & Wilson, L. (eds.) *European Higher Education at the crossroads: between the Bologna Process and national reforms*, Volume 2, Dordrecht: Springer, pp837-862.

⁹⁶ HEA, "Strategic Dialogue Process." Dublin: Higher Education Authority. <http://www.heai.ie/en/policy/national-strategy/strategic-dialogue>

⁹⁷ HEA (2014) *Higher Education System Performance. First Report, 2014-2016. Report of the Higher Education Authority to the Minister for Education and Skills*. Dublin: Higher Education Authority.

http://www.heai.ie/sites/default/files/final_volume_i_system_report_with_cover_letter_.pdf

-
- ⁹⁸ DES (2013) *Higher Education System Performance Framework, 2014-2016*. Dublin: Department of Education and Skills. <https://www.education.ie/en/The-Education-System/Higher-Education/HEA-Higher-Education-System-performance-Framework-2014-2016.pdf>
- ⁹⁹ HEQCO (2013) *Performance Indicators: A report on where we are and where we are going*. Toronto: Higher Education Quality Council of Ontario, http://www.heqco.ca/SiteCollectionDocuments/Performance_Indicators_ENG.PDF
- ¹⁰⁰ Weingarten, H., Hicks, M., Jonker, L., Smith, C. & Arnold, H. (2015) *Canadian Postsecondary Performance: Impact 2015*. Toronto: Higher Education Quality Council of Ontario. http://www.heqco.ca/SiteCollectionDocuments/HEQCO_Canadian_Postsecondary_Performance_Impact2015.pdf; Hicks, M. (2015) *Design Questions: Funding Models for Ontario*. Toronto: Higher Education Quality Council of Ontario.
- ¹⁰¹ See: <http://law.gov.wales/publicservices/education/?tab=key-legislation&lang=en>
- ¹⁰² McCormick, J. (2011) *Achievement and accountability: Report of the independent review of higher education governance in Wales*. Cardiff: Welsh Assembly Government, Department for Children, Education, Lifelong Learning and Skills, pp4-5, <http://gov.wales/docs/dcells/publications/110317hegovreviewen.pdf>
- ¹⁰³ For example: *Achievement and Accountability* (2011); *Qualified for Life* (2014); *Successful Futures* (2015), *Teaching Tomorrow's Teachers* (2015).
- ¹⁰⁴ See Elsevier (2013) *International Comparative Performance of the Welsh Research Base*. Report prepared for HEW, the Higher Education Funding Council for Wales, and the Welsh Government, Cardiff.
- ¹⁰⁵ Benneworth, et al. (2011) *Op. Cit.*, p54.
- ¹⁰⁶ The school leaving age in England is 16; but students must, until 18 years, stay in full time education, start an apprenticeship or traineeship, or work/volunteer for 20 hours or more a week while in part-time education or training. <https://www.gov.uk/know-when-you-can-leave-school>
- ¹⁰⁷ HEFCE (2015) *Guide to Funding 2015-2016*. Bristol: Higher Education Funding Council for England. http://www.hefce.ac.uk/media/HEFCE,2014/Content/Pubs/2015/201504/2015_04.pdf
- ¹⁰⁸ BIS (2015) *Fulfilling Our Potential: Teaching Excellence, Social Mobility and Student Choice*. London: Department for Business, Innovation and Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/474227/BIS-15-623-fulfilling-our-potential-teaching-excellence-social-mobility-and-student-choice.pdf
- ¹⁰⁹ BIS (2015) *Op. cit.*, p.58.
- ¹¹⁰ Nurse, P. (2015) *Ensuring a successful UK research endeavour*. London: Department for Business, Innovation and Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/478125/BIS-15-625-ensuring-a-successful-UK-research-endeavour.pdf
- ¹¹¹ DEL (n.d.) "Higher education finance and governance", Belfast: Department of Education and Learning. <https://www.delni.gov.uk/articles/higher-education-finance-and-governance>
- ¹¹² DETI (2009) *Independent Review of Economic Policy*. Belfast: Department of Enterprise, Trade and Investment. <https://www.detini.gov.uk/sites/default/files/publications/deti/irep-report.pdf>

-
- ¹¹³ NIE (2012) “Press release: JUSTICE 2012 – STORMONT CASTLE PROPOSALS”. Belfast: Northern Ireland Executive. <http://www.northernireland.gov.uk/index/media-centre/news-departments/news-ofmdfm/news-releases-archive-ofmdfm-jan-2012/news-ofmdfm-10112-justice-2012-stormont.htm>
- ¹¹⁴ DEL (n.d.) “Higher Education quality assurance”, Belfast: Department of Education and Learning. <https://www.delni.gov.uk/articles/higher-education-quality-assurance>
- ¹¹⁵ DEL (n.d.) “Higher Education Policy”. Belfast: Department of Education and Learning. <https://www.delni.gov.uk/articles/higher-education-policy>
- ¹¹⁶ DEL (2015) *Skills to Succeed: Consultation document on the development of a new Further Education Strategy for Northern Ireland*. Belfast: Department of Employment and Learning. <https://www.delni.gov.uk/sites/default/files/consultations/del/new-further-education-strategy-consultation.pdf>
- ¹¹⁷ SFC (n.d.) “About Us: Who We Fund.” Edinburgh: Scottish Funding Council. http://www.sfc.ac.uk/aboutus/council_funded_institutions/WhoWeFund.aspx
- ¹¹⁸ <http://www.sfc.ac.uk/>
- ¹¹⁹ SFC (n.d.) “About Us: Who We Fund.” Edinburgh: Scottish Funding Council. <http://www.sfc.ac.uk/aboutus/aboutus.aspx>
- ¹²⁰ SFC (n.d.) “Funding.” Edinburgh: Scottish Funding Council. <http://www.sfc.ac.uk/funding/funding.aspx>
- ¹²¹ <http://www.saas.gov.uk/>
- ¹²² QAA (n.d.) “About Us: Scotland”. <http://www.qaa.ac.uk/about-us/scotland>
- ¹²³ QAA (n.d.) “Enhancement Themes: About Enhancement Themes”. <http://www.enhancementthemes.ac.uk/enhancement-themes>
- ¹²⁴ HEA, “New Landscape for Higher Education”, Dublin: Higher Education Authority. <http://www.heai.ie/ga/node/738>
- ¹²⁵ <http://www.education.ie/en/>
- ¹²⁶ <http://www.heai.ie/>
- ¹²⁷ <http://www.solas.ie/>; SOLAS (2014) *Further Education and Training Strategy 2014-2019*. Dublin: Department of Education and Skills and SOLA, <http://solas.ie/docs/FETStrategy2014-2019.pdf>
- ¹²⁸ DES (2014) *Expert Group on Future Funding for Higher Education: Terms of Reference*. Dublin: Department of Education and Skills. <https://www.education.ie/en/The-Education-System/Higher-Education/Higher-Education-Expert-Group-on-Future-Funding-for-Higher-Education.pdf>
- ¹²⁹ <http://www.qqi.ie/>
- ¹³⁰ DES (2011) *National Strategy for Higher Education to 2030*. Dublin: Department of Education and Skills. <https://www.education.ie/en/The-Education-System/Higher-Education/Higher-Education-Expert-Group-on-Future-Funding-for-Higher-Education.pdf>
- ¹³¹ AAE – Alberta Advanced Education (n.d.) “Publicly Funded Institutions”, <http://eae.alberta.ca/post-secondary/institutions/public.aspx>
- ¹³² AAE – Alberta Advanced Education (n.d.) “Institutional Arrangement under the Six Sector Model”, <http://eae.alberta.ca/media/155107/sixsectormodel.pdf>
- ¹³³ AAE – Alberta Advanced Education (n.d.) “Post-Secondary Institution Mandates”, <http://eae.alberta.ca/post-secondary/institutions/public/mandates.aspx>

-
- ¹³⁴ AAET - Alberta Advanced Education and Technology (2007) *Roles and Mandates Policy Framework for Alberta's Publicly Funded Advanced Education System*, Edmonton, AAET, <http://eae.alberta.ca/media/133783/rmpf.pdf>
- ¹³⁵ AAE – Alberta Advanced Education (n.d.) “Credentials and Programs Offered in Alberta”, <http://advancededucation.alberta.ca/post-secondary/credentials/definitions.aspx>
- ¹³⁶ AAE – Alberta Advanced Education (n.d.) “Apprenticeship and Industry Training: Training Locations”, <http://tradesecrets.alberta.ca/technical-training-centre/training-locations/>
- ¹³⁷ AAE – Alberta Advanced Education (n.d.) “Post-secondary Learning Act (PSLA)”, <http://eae.alberta.ca/ministry/legislation/psla.aspx>
- ¹³⁸ AAE – Alberta Advanced Education (n.d.) “Alberta’s Adult Learning System”, <http://eae.alberta.ca/post-secondary/campusalberta.aspx>
- ¹³⁹ AAE – Alberta Advanced Education (n.d.) “Funding and Supports to Institutions”, <http://eae.alberta.ca/post-secondary/funding/supportsinstitutions.aspx>
- ¹⁴⁰ <http://www.caqc.gov.ab.ca/>
- ¹⁴¹ TEQSA (2016) “National register of higher education providers”, <http://www.teqsa.gov.au/national-register>
- ¹⁴² Further detail on these institutions available in the following report: Group of Eight Australia (2014) *Backgrounder: Private Higher Education Providers in Australia*, https://go8.edu.au/sites/default/files/docs/publications/backgrounder_-_private_higher_education_providers_in_australia_final.pdf
- ¹⁴³ ASQA (n.d.) “Australia’s VET sector”, <http://www.asqa.gov.au/about/australias-vet-sector/australias-vet-sector.html>
- ¹⁴⁴ TEQSA (n.d.) “About TEQSA”, <http://www.teqsa.gov.au/about>
- ¹⁴⁵ TEQSA (n.d.) “About TEQSA”, <http://www.teqsa.gov.au/about>
- ¹⁴⁶ Commonwealth of Australia (2011) *Higher Education Standards Framework (Threshold Standards) 2011*, <https://www.comlaw.gov.au/Details/F2013C00169>
- ¹⁴⁷ AQF (n.d.) “What is the AQF”. <http://www.aqf.edu.au/aqf/about/what-is-the-aqf/>
- ¹⁴⁸ ASQA (n.d.) “Agency overview”. <http://www.asqa.gov.au/about/agency-overview/agency-overview.html>
- ¹⁴⁹ ASQA (n.d.) “How does ASQA regulate”, <http://www.asqa.gov.au/about/how-does-asqa-regulate/how-does-asqa-regulate.html>
- ¹⁵⁰ Ministry of Education and Culture – MEC (n.d.) “Universities”, <http://www.minedu.fi/OPM/Koulutus/yliopistokoulutus/yliopistot/?lang=fi>
- ¹⁵¹ Ministry of Education and Culture – MEC (n.d.) “Polytechnics”, <http://www.minedu.fi/OPM/Koulutus/ammattikorkeakoulutus/ammattikorkeakoulut/>
- ¹⁵² Ministry of Education and Culture – MEC (n.d.) “Vocational education and training in Finland”, http://www.minedu.fi/OPM/Koulutus/ammattillinen_koulutus/?lang=en
- ¹⁵³ Ministry of Education and Culture (n.d.) “Finnish acts and decrees concerning education”, http://www.minedu.fi/OPM/Koulutus/koulutuspolitiikka/lait_ja_ohjeet/?lang=en; Melin, G. et al. (2015) *Towards a future proof system for higher education and research in Finland*, Technopolis; Hazelkorn, E. et al. (2015) “Report of the International Panel” in Melin, G., *Towards a future proof system for higher education and research in Finland*. Helsinki: Ministry of Education and Culture, pp77-101. <http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2015/liitteet/okm11.pdf?lang=en>; John

-
- Davies, Thomas Weko, Lillemor Kim, and Erik Thulstrup (2009) *Finland OECD Reviews of Tertiary Education*. Paris: Organisation of Economic Co-operation and Development.
<https://search.oecd.org/education/skills-beyond-school/37474463.pdf>
- ¹⁵⁴ Ministry of Education and Culture – MEC (n.d.) “Financing the training”,
<http://www.minedu.fi/OPM/Koulutus/koulutuspolitiikka/rahoitus/?lang=fi>
- ¹⁵⁵ Ministry of Education and Culture – MEC (n.d.) “Administration and finance”,
http://www.minedu.fi/OPM/Koulutus/yliopistokoulutus/hallinto_ohjaus_ja_rahoitus/?lang=en
- ¹⁵⁶ University of Tampere (n.d.) “The Quality Assurance of Finnish Higher Education”,
http://www.uta.fi/laatujaarjestelma/en/in_Finland.html
- ¹⁵⁷ Education Bureau of HKSAR (n.d.) “Institutions”, <http://www.edb.gov.hk/en/edu-system/postsecondary/local-higher-edu/institutions/>
- ¹⁵⁸ Study HK (n.d.) “Hong Kong Education System”, <http://studyinhongkong.edu.hk/en/hong-kong-education/education-system.php>
- ¹⁵⁹ Education Bureau of HKSAR (n.d.) “Deputy Secretary for Education (1) and his staff”,
<http://www.edb.gov.hk/en/about-edb/info/organisation/ds1/index.html>
- ¹⁶⁰ Education Bureau of HKSAR (n.d.) “Our Work”, <http://www.edb.gov.hk/en/about-edb/info/our-work/index.html>
- ¹⁶¹ UGC (n.d.) “Overview: Brief History”,
<http://www.ugc.edu.hk/eng/ugc/about/overview/history.htm>
- ¹⁶² UGC (n.d.) “Overview: Roles and Functions”,
<http://www.ugc.edu.hk/eng/ugc/about/overview/roles.htm>
- ¹⁶³ UGC (n.d.) Ibid.
- ¹⁶⁴ <http://www.hkqf.gov.hk/>
- ¹⁶⁵ <http://www.hkcaavq.edu.hk/>
- ¹⁶⁶ Sutherland, S.R. (2002) *Higher Education in Hong Kong: Report of the University Grants Committee*. Hong Kong: University Grants Committee.
<http://www.ugc.edu.hk/eng/doc/ugc/publication/report/her/herreport.pdf>
- ¹⁶⁷ National Erasmus+ Office Israel (n.d.) “Higher Education in Israel”.
<http://www.erasmusplus.org.il/general-info>
- ¹⁶⁸ Israel Ministry of Foreign Affairs (2003) “Spotlight on Israel: Higher Education”.
<http://mfa.gov.il/MFA/AboutIsrael/Education/Pages/Higher%20Education.aspx>
- ¹⁶⁹ CHE (n.d.) “The Council for Higher Education”. Jerusalem: Council for Higher Education.
<http://che.org.il/en/?p=4537>
- ¹⁷⁰ CHE (2014) “The Israeli Higher Education System: The PBC Funding Model.” Jerusalem: Council for Higher Education, unpublished presentation.
- ¹⁷¹ EACEA (2012) *Higher Education in Israel*. Brussels: Education, Audiovisual and Culture Executive Agency, European Commission.
http://eacea.ec.europa.eu/tempus/participating_countries/overview/israel_tempus_country_fiche_final.pdf
- ¹⁷² CHE (n.d.) “The Quality Assessment Division”, http://che.org.il/en/?page_id=4114
- ¹⁷³ CHE (n.d.) “International Relations”, http://che.org.il/en/?page_id=4183
- ¹⁷⁴ TEC (n.d.) “About us”. <http://www.tec.govt.nz/About-us/>
- ¹⁷⁵ Usher, A. (2015) “Better Know a Higher Ed System: New Zealand”, *HESA Blog*.
<http://higherstrategy.com/better-know-a-higher-ed-system-new-zealand/>

-
- ¹⁷⁶ <http://www.tec.govt.nz>
- ¹⁷⁷ TEC (n.d.) “About us: Who we are”, <http://www.tec.govt.nz/About-us/Who-we-are/>
- ¹⁷⁸ TEC (n.d.) “Funding”, <http://www.tec.govt.nz/Funding/>
- ¹⁷⁹ TEC (n.d.) “Our current funds”, <http://www.tec.govt.nz/Funding/Our-current-funds/>
- ¹⁸⁰ StudyLink (n.d.) “Student Loan at a glance”, <http://www.studylink.govt.nz/student-loan/>
- ¹⁸¹ NZQF (n.d.) “New Zealand Qualifications Framework - Te Taura Here Tohu Mātauranga o Aotearoa”, <http://www.nzqa.govt.nz/studying-in-new-zealand/understand-nz-quals/nzqf/>
- ¹⁸² Ministry of Education (2015) “Tertiary Education Strategy 2014 – 2019”, <http://www.education.govt.nz/further-education/policies-and-strategies/tertiary-education-strategy/>
- ¹⁸³ MTCU (2015) “Ontario Universities.” Toronto: Ministry of Training, Colleges and Universities. <http://www.ontario.ca/page/ontario-universities>
- ¹⁸⁴ MTCU (n.d.) “Ontario Colleges of Applied Arts and Technology Act, 2002, S.O. 2002, c. 8, Sched. F.” Toronto: Ministry of Training, Colleges and Universities. <http://www.ontario.ca/laws/statute/02o08f>
- ¹⁸⁵ MTCU (2015) “Ontario Colleges”, Toronto: Ministry of Training, Colleges and Universities. <http://www.ontario.ca/page/ontario-colleges>
- ¹⁸⁶ <http://www.tcu.gov.on.ca/eng/employmentontario/index.html>
- ¹⁸⁷ MTCU (n.d.) “Role of the Ministry.” Toronto: Ministry of Training, Colleges and Universities. <http://www.tcu.gov.on.ca/eng/about/role.html>
- ¹⁸⁸ HEQCO (2015) “The Ontario Funding Model in Context.” Toronto: Higher Education Quality Council of Ontario. <http://www.heqco.ca/SiteCollectionDocuments/Contextual%20Background%20to%20the%20Ontario%20University%20Funding%20Formula-English.pdf>
- ¹⁸⁹ MTCU (2015) *Focus on Outcomes, Centre on Students: Perspectives on Evolving Ontario’s University Funding Model - Final Consultation Report*. Toronto: Ministry of Training, Colleges and Universities. http://www.tcu.gov.on.ca/pepg/audiences/universities/uff/UniversityFundingFormulaConsultationReport_2015.pdf
- ¹⁹⁰ MTCU (2015) *Focus on Outcomes, Centre on Students: Perspectives on Evolving Ontario’s University Funding Model - Final Consultation Report*. Toronto: Ministry of Training, Colleges and Universities. http://www.tcu.gov.on.ca/pepg/audiences/universities/uff/UniversityFundingFormulaConsultationReport_2015.pdf
- ¹⁹¹ MTCU (2013) *Ontario’s Differentiation Policy Framework for Postsecondary Education*. Toronto: Ministry of Training, Colleges and Universities. http://www.tcu.gov.on.ca/pepg/publications/PolicyFramework_PostSec.pdf
- ¹⁹² HEQCO (n.d.) “About Us”, Toronto: Higher Education Quality Council of Ontario. <http://www.heqco.ca/en-ca/About%20Us/Pages/Home.aspx>
- ¹⁹³ MTCU (n.d.) “Ontario Qualifications Framework (OQF)”, Toronto: Ministry of Training, Colleges and Universities. <http://www.tcu.gov.on.ca/pepg/programs/oqf/>