







INTERNATIONAL EXAMPLES OF OUTCOME AGREEMENTS: CASE STUDIES

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About UKCES

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1. Introduction

The UK Commission for Employment and Skills and Association of Colleges have produced a paper looking at the use of outcome agreements in the delivery of skills provision in England. As part of this, five international case studies were produced. The objective was to provide some detailed analysis of the way in which outcomes-based models have been developed and implemented in selected countries.

The five examples selected were:

- The Vocational Education and Training (VET) Investment Framework in Queensland, Australia;
- The Canada-Ontario Job Fund Agreement in **Ontario, Canada**;
- The Investment Plan Process overseen by the Tertiary Education Commission in New Zealand;
- The outcomes-based funding systems for postsecondary education in Ohio, United States of America;
 and
- The outcomes-based funding system for postsecondary education in Tennessee, United States of America.

In four of the cases (Tennessee, Ohio, Queensland, Ontario), skills provision and funding has been devolved to 'regional' level for considerable time. The starting point for outcomes funding and local accountability is therefore different to England, and this has been considered in the production of the report and translatability of the learning from the case studies.

The examples demonstrate that the use of outcomes can play different roles. In some examples they are part of the funding arrangement with an individual institution, but in others they are used more broadly to monitor programme effectiveness and to influence programme design.

The examples studied are all relatively new. This means that whilst there is much to learn from the processes undertaken to develop and implement the models in each case, there is less data available about their impact.

In terms of the outcomes used, these are relatively consistent across the different geographies. They typically focus on employment outcomes, progression and customer satisfaction. In some cases, these are tweaked or targeted at specific groups.

The case studies demonstrate the importance of engaging with employers in ensuring the success of the new approach, and consulting with providers is important to obtain buy-in. This is especially the case if the reform to the system is quite a radical departure from the previous model.

Each case study is structured according to the following headings:

- **Background and chronology** the background to the outcome agreement model and the timeline in its development;
- The model the elements of the model, an overview of what outcomes are being measured and the way in which they are being measured;
- **Progress to date** the progress that has been made in implementation to date, including an overview of the current position;
- **Involvement and accountability** the key stakeholder organisations and bodies involved and how accountability is incorporated into the model; and
- **Lessons** key lessons that can be learned from development and implementation as well as an overview of the impact of the models on skills outcomes.

The case studies were developed using desk-based research as well as telephone interviews with experts in four of the five territories.

Australia: Queensland

Introduction

This case study relates to the ongoing Vocational Education and Training (VET) reforms in Australia. It focuses on recent developments at State-level in Queensland. The Queensland Government has introduced an outcomes-based VET Investment Framework and a new industry-led, independent advisory body (the Ministerial Industry Commission) to, among other things, inform the levels of public funding for priority FE provision.

The Current Situation

Background and chronology

The long-term trend in Queensland has been towards developing the private training market and providing greater autonomy to public training institutes (notably the Technical and Further Education (TAFE) Colleges). The size of the competitive training budget open to both public and private training providers increased gradually during the 1990s and early 2000s. The 32 TAFE Colleges in Queensland were rationalised into 16 TAFE Institutes to provide sufficient scale for local autonomy and to 'engage more meaningfully with local stakeholders'. This mirrored developments elsewhere in Australia.

Reforms were explicitly driven by a desire to tackle skills mismatches and meet industry needs. The shift towards competitive training funds during this period led to budget deficits among some public training providers. As a consequence, the pace of reform slowed during the late 1990s to give the TAFE Institutes time to adapt. Nevertheless, the reforms contributed to a 40% increase in the number of VET students from 1995 to 2005². From the early 2000s, new approaches were trialled to better involve industry and to better connect skills training to employers' in-house skills development practices (e.g. skills formation strategies – see below).

While the VET reform process is longstanding in Queensland (and indeed in all Australian States), in recent years it has been influenced by pressures on public funding and a focus on ensuring effectiveness. This has contributed to a more explicit focus on performance management and the setting of outcome targets, not just in the training and employment field, but across public service provision in Queensland.

Much of the debate has focused on the further reform of the TAFE. From 2005 to 2012, expenditure on *public* providers increased by nearly 50% while student numbers declined. In contrast, increases in *private* provider expenditure were matched by increasing student numbers³.

In December 2010, Skills Queensland was formally established as a statutory body 'responsible for aligning Queensland's skills system with the needs of employers, individuals, industry and the community; to alleviate skills shortages; and better position Queensland to address future skill needs'4. It took on responsibilities for industry engagement previously held by the Department of Education, Training and Employment (DETE) in Queensland. Skills Queensland turned out to be an interim solution. There were subsequent calls for a statutory and genuinely independent skills commission (reporting directly to the Minister) with a clearer mandate, stronger industry leadership and a role that went beyond identifying priorities for funding to determining 'relative training investment allocations for those priorities, and purchase from, and monitor performance of, VET providers accordingly'6.

In 2012, the Queensland Skills and Training Taskforce was established to advise government on the next stage of VET reform. The Taskforce report in late 2012 identified a series of recommendations, mostly endorsed by the Queensland Government. The 'four fundamental components' of the Taskforce recommendations were:

- A new industry-led Queensland Skills Commission
- · A fully contestable and demand driven funding model
- · A new TAFE Queensland that is 'fit for purpose' in the emerging VET and economic context
- Reform of Queensland's apprenticeship system to remove barriers and red tape⁶.

These ideas were taken forward by the Queensland Government as part of a five-year action plan published in June 2013 ('Great Skills - Real Opportunities'). This led to the set-up of the Ministerial Industry Commission, also in 2013, to replace Skills Queensland and provide direct industry input into decisions about training investment.

The action plan heralded the launch of a fully-contestable training market from July 2014. It also articulated an ambition for 'long-term partnerships with providers', including guaranteed funding arrangements with 'preferred training providers, giving certainty for providers and their students through longer term agreements focused on outcomes". It aimed to provide certainty for providers through the publication of annual VET investment plans setting out priorities for investment. The outcomes set out in the annual VET investment plan (at 'plan level') align to a set of 'portfolio objectives' for public service reform, for which DETE is ultimately accountable.

The model

Outcomes are set at state level in the context of performance measures and service standards for DETE. They sit within an over-arching strategy of moving towards being customer-centred. This is encapsulated in the DETE 2014-2018 strategic plan:

"We are creating a culture of increased autonomy with clear accountabilities by:

- clearly aligning functions to ensure services are focused on customer outcomes
- using review, support and early intervention at the individual, service provider and system level
- providing clear and timely information to support innovation and decision making." (DETE Strategic Plan 2014-18)

The training and employment ambitions set out in the plan relate to 'working in partnership with industry to create a new era for training', including improved student choice, increased contestability in funding and improved employment outcomes⁸.

The annual Queensland State Budget translates this strategy into a set of outcome targets. These have remained fairly stable in recent years. Each government department sets out a service delivery statement including relevant outcome targets. The DETE service delivery statement is further elaborated in the annual VET Investment Plan (2014-2015). It sets out 'intended impact' alongside investment priorities defined by industry through the Ministerial Industry Commission. The intended impacts in this regard are a set of measurable outcomes drawn directly from the service delivery statement (see Figure 1.1).

The outcomes are broadly-based in that they relate to impacts on the Queensland population as a whole. They include qualification levels among the population and employment rates for graduates (including VET graduates). There is an explicit rationale for how the VET plan/strategy will support the achievement of these outcomes, even though VET clearly only forms a contribution to the wider outcomes. The VET investment plan sets out a budget per training programme – as well as priority qualifications as advised by the Ministerial Industry Commission.

Figure 1.1 VET outcomes in the annual investment plan

Service standards	2014 – 15 target	Anticipated impact (1–3 years)		
VET outcomes				
Proportion of Queenslanders with higher-level qualifications	58%	Participation levels and completion rates improve for certificate III level and above qualifications through skills market		
Proportion of graduates in employment or further study	87%	Outcomes improve through alignment with jobs and provider performance management		
Cost and satisfaction				
Proportion of graduates satisfied with the overall quality of their training	89%	Satisfaction levels improve through greater choice for students		
Proportion of employers satisfied with graduates of nationally accredited training	85%	Satisfaction levels improve as employers increase engagement with skills market		

Source: Queensland Government 2014-15 Annual VET Investment Plan

Progress to date

The current reform programme has been underway since 2012. Queensland has moved from the publication of the five-year VET reform strategy in June 2013 to having fully-contestable funding from July 2014 (although some transition funding for the TAFE remains part of budget).

There has been a downward pressure on overall public investment. The annual Queensland Training and Employment budget has reduced from A\$1.32m in 2012-139 to A\$1.06m in 2014-1510. This accounts for around two-thirds of the overall budget for training, with national programmes contributing a further third.

The Ministerial Industry Commission is still a relatively new body, but has undertaken local consultation and labour market analysis to inform the 2014-2015 VET investment plan. It has been able to build on previous employer engagement activities, as well as taking on responsibilities from its predecessor, Skills Queensland. The Commission's Annual Skills Priority Report was published in March 2014¹¹ and provided the basis for extensive consultation with employers to reflect on the labour market data and inform the investment plan by determining the qualifications that would receive the highest public funding rates.

Involvement and accountability

"Accountability" is a common theme across Queensland skills reviews, strategies and plans. It is central to the wider management of public services in Queensland – as set out in DETE's Performance Improvement and Accountability Framework. The Framework outlines how increased 'empowerment and autonomy' throughout the education and training system brings the need for a clear accountability system to ensure that investments and actions lead to positive outcomes. The Framework includes a Value Chain (a generic graphic setting out the performance improvement cycle), a 'benefits map' setting out the objectives, inputs, services, outputs and outcomes for each part of the system and key performance indicators.

Overall accountability for the achievement of targets remains with DETE, although its driving ambition is towards greater local and employer ownership (creating the market for training and employment). The performance framework shows how accountability is devolved through the system – from the ministry at the centre, through sub-regions (especially in terms of apprenticeships) to providers. Figure 1.2 below sets out the Key Performance

Indicator (KPI) cascade within the DETE Framework. It shows training and employment provision alongside mainstream education, as well as highlighting which measures are accountable at which level. This Framework incorporates the measures included in the annual VET investment plan.

At the provider level, over 2,900 training organisations are registered to deliver VET in Queensland. Queensland's current VET investment strategy is based on developing an effective training market, which in turn influences providers/provision. Outcome measures are set, in effect, to monitor the effectiveness of the market. Providers are driven by the funding approach (contestability) not the outcomes. The five-year action plan also commits the ministry to developing long-term partnerships with providers based on outcomes.

Industry leadership is embedded in the system through the role of the Ministerial Industry Commission. Its function is primarily advisory, but it has hosted a series of industry round tables and local forums (70+ industry representatives attended the inaugural forum in Brisbane at the end of February 2014). Queensland has had a relatively long history of industry involvement in skills planning since the establishment of Skills Formation Strategies in 2002 to better connect the skills agenda to employer training practices – 'a process characterised by strong industry-led involvement, multi-stakeholder co-ordination at the state, regional and local level, and flexible provision'. Although, Skills Formation Strategies were ultimately considered to be a 'local experiment', partly because their impact was difficult to measure, it highlights the relatively established history of industry engagement, responsiveness and collective action in Australia.

Lessons

The Queensland experience encompasses both:

- · a strong push towards measuring outcomes (linking government ambitions at state and policy levels),
- and stakeholder involvement in the skills system (especially industry involvement).

Much of the language underpinning skills reform mirrors debates in England. There are some contextual differences:

- There are no direct comparators to the TAFE model in England, where general FE colleges have been more autonomous for longer.
- There is a strong 'regional' dimension to skills policy in Australia (at state level), including an established institutional landscape to underpin elements such as employer/community involvement.

The focus on outcomes is linked to the State government's performance management and accountability framework. By including a clear structure/hierarchy of indicators, measures and accountabilities, this is able to encompass both considerations of efficiency and cost-effectiveness, as well as outcomes relating to the qualifications and skills of the Queensland population.

Canada: Ontario

Introduction

This case study focuses on the Canada-Ontario Job Fund Agreement, a deal signed between the province and the federal government to deliver employer-led training through what is known as the Job Grant programme.

The Current Situation

Background and chronology

The Canadian Government nationally invests over C\$13.5 billion each year in skills training¹². This investment has three main components:

Core funding for post-secondary education, including colleges and universities, which includes funding for student grants and loans (worth over C\$10 billion in 2013-14):

• Funding for post-secondary education is by federal transfer. From 1995 to 2004, the transfer took the form of a single lump sum payment (the Canada Health and Social Transfer) encompassing health, education and welfare payments. Provincial governments retained considerable autonomy to determine how funding would be distributed across these diverse policy areas. This led to differences in the level of subsidy (and consequent tuition fees) for post-secondary education in each province and a highly-decentralised system. Subsequently, the Canada Social Transfer covered all of the previous policy areas except for health.

Labour market programmes to support unemployed people generally, as well as specific target groups, such as people with disabilities (worth C\$2.7 billion in 2013-14):

- There are/were three main labour market training programmes: Labour Market Development Agreements; Labour Market Agreements; and Labour Market Agreements for Persons with Disabilities. These also involve a federal transfer to the provinces/territories based on a set of bilateral agreements. The Agreements were first introduced in 1996 based on 'an explicit decision by the federal government to step back from direct involvement in the delivery and management of labour market training^{7/3}.
- Most of the funding (C\$1.95 billion¹⁴) goes to Labour Market Development Agreements targeting training support for benefit claimants. Labour Market Agreements, introduced in 2007, provided complementary training funding for unemployment people not eligible for Employment Insurance benefits and employed people with low skills. The Labour Market Agreement for Persons with Disabilities provides additional targeted funding.

Separate targeted investment has provided support for skills training for other groups, including young people (through the Youth Employment Strategy), aboriginal peoples and older workers.

The six-year Labour Market Agreements expired in March 2014 and were replaced by Job Fund Agreements¹⁵. The Canada Job Grant is the centrepiece of the new agreement and was announced in the 2013 federal budget. It is part of an explicit push from the national government for training that meets the needs of employers / is employer-designed.

The Job Grant provides direct financial support to individual employers who wish to purchase training for their employees. It is available to businesses of all sizes that have a plan to deliver short-term training to existing and new employees. It:

- Provides up to C\$10,000 in government support per person for training costs;
- Requires employers to contribute one-third of the total costs. Additional flexibility is provided for small businesses as an in-kind contribution towards their share of the costs; and
- Requires training to be delivered by an eligible, third-party trainer¹⁶.

The idea was originally mentioned as part of the 2013 federal budget¹⁷. While there was support from the provinces for having employers at the heart of skills funding, there was subsequent discussion about how this new programme fitted within existing provincial approaches to employer involvement. The federal Employment and Social Development Canada (ESDC) Minister argued for a need for a more demonstrable shaping of these programmes by employers.

The model

The Job Grant in Ontario is defined by a set of programme guidelines¹⁸. Performance of the programme is measured according to three dimensions of 'service quality success':

- effectiveness;
- customer service; and
- efficiency.

Each dimension contains a set of measures, many of which are outcomes-focused and relate to the province-wide performance management framework for the Ontario Public Service (the OPS performance management system)¹⁹. As such, the framework is set at provincial level, although its deployment in the context of the Job Grant is aligned to national reporting – reflecting the need for some consistency between the provinces.

Precisely how the measures will be combined was still under development in 2015:

"At maturity, the three dimensions will be balanced and weighted to indicate their value when combined to measure overall service quality". (Canada-Ontario Job Grant Program Guidelines, 2014)

The efficiency dimension relates to basic input measures (number of grants delivered to employers; number of employers accessing the programme; number of individuals accessing the programme, including already-employed and unemployed workers).

The customer service dimension is measured through follow-up with all employers and trainees, based on a feedback rating according to a five-point scale of how likely employers/trainees would be to recommend the Job Grant to others.

The effectiveness dimension combines input and outcome measures. It is divided into three core performance measures:

- The suitability of employers and individuals served by the programme: Input measures used in the first instance to determine receipt of funding and ensure the effective targeting of funding (including evidence of the employer's contribution and commitment to skill training, job creation, job advancement and job quality).
- **Service impact (**what the programme achieves): Outcomes measures relating to employers and individuals see Table 1.1 and Table 1.2 below.
- **Customer value:** Additionality and perceived additional value (whether employers thought the investment was worthwhile and enabled training that would not otherwise have taken place)

The service impact outcome measures are detailed in nature. They depend on comprehensive follow-up (surveys) with employers/individuals at exit – undertaken by service providers managing the programme.

Table 1.1 Service impact for employers (outcome measures)

Indicators of impact (service outcome)	Description
Training impact	Did the skills training meet the workforce needs of the employer? (Scale of 1-5)
Job Performance (incumbent workers only)	Has the employer seen an increase in the trainee's productivity? (Yes/No)
Job performance (unemployed individuals only)	Was the job-matched individual retained by the employer beyond the probationary period? (Yes/No)
Employee retention	How many of the trainees have been retained by the employer?

Source: Canada-Ontario Job Grant Program Guidelines

Table 1.2 Service impact for trainees (outcome measures)

Indicators of impact	Description	
(service outcome)	Description	
Employment status	 The client: Is employed (paid employment with an employer) full-time or part-time Is self-employed Is both employed and in education Is both employed and in training Is employed and a registered apprentice (confirmed by local apprenticeship office) Was employed before and is now in a more suitable job consistent with the individual's career path Is employed in a (regulated or non-regulated) professional occupation or trade consistent with his/her education/training qualifications 	
Training quality	Does the individual feel that they are utilising the skills acquired in training? (Scale of 1-5)	
Credential obtainment	Did the individual obtain any credential as a result of the training?	
Job quality / Advancement	 The individual has experienced an increase post-participation in either: Income Hours worked NOC code (occupational level) In the event that those three indicators have no change, a subjective measure could be used, i.e. participant stating that it is a better job. 	

Source: Canada-Ontario Job Grant Program Guidelines

Progress to date

All provinces and territories had signed a Job Fund Agreement by the end of 2014. Ontario was the first province to sign the agreement, doing so in March 2014²⁰. Ontario started accepting applications for Job Grants from September 2014. The National Forum of Labour Market Ministers reported in November 2014 that a review of the first year of operations would report by December 2015²¹. At this point, the ministers from across the Canadian Provinces were still discussing how best to ensure consistent reporting of programme results

nationally (given that each deal, including performance measures is agreed bilaterally between the Province and federal government).

In Ontario, two additional pilots were launched during 2014 related to the Job Grant. The *Canada-Ontario Job Grant: Customised Training* pilot is exploring the development and delivery of 'firm-specific training solutions'. The *Upskill* pilot targets low- and medium-skilled workers in certain sectors who are considered vulnerable to future unemployment. Applications for the pilots closed in November 2014.

Involvement and accountability

Skills and employment funding in Canada has been devolved to 'regional' (provincial/territorial) level for a long time. While largely devolved, it is centralised at the provincial level. The Ministry of Training, Colleges and Universities (MTCU) in Ontario plays a central role in delivering Job Grants. It verifies employer eligibility for the programme and reviews/make decisions on individual applications based on the individual and employer indicators of suitability. It also supports referral of employers to other services that may help them to meet their workforce needs.

Job Grants are part of a system in which training and employment support services are integrated under the auspices of Employment Ontario, the main employment service, which is operated by MTCU. Employment Ontario is managing delivery of the programme.

In terms of the broader accountabilities for FE and skills provision, another agency under MTCU, the Ontario Student Assistance Program (OSAP), manages loans and grants across further and higher education. The government in Ontario has multi-year agreements with public colleges and universities as part of a push for accountability. These institution-level agreements link to wider systems reforms that have seen increased autonomy for public colleges.

There are 20 public universities (offering undergraduate, graduate and professional programmes), 24 colleges (offering certificate programmes, diplomas, apprenticeships and degrees) and over 400 registered private career colleges (offering vocational training) in Ontario²². It is primarily the career colleges that deliver training under the Job Grants, as they deal with upskilling and retraining rather than first entry further education (the domain of colleges and universities). The role of career colleges has evolved in recent years, especially with regard to access to public funding. Careers Colleges Ontario, the membership body for careers colleges, reports as a major achievement that, from January 2014, careers colleges became eligible for access to the Ontario Tuition Grant, seen as cementing 'their validity within the Ontario post-secondary education framework²³.

Accountability at institutional level has been dealt with in two ways:

- Very localised structures for employers to talk to colleges (Program Advisory Committees), which are involved in ensuring the relevance of programmes of study rather than outcomes setting.
- The desire to provide reliable information to prospective students in order to support decision making, especially within a system where different types of providers (public and private) may be offering the same courses delivered in different ways. There has been work to gather student destination data (at six months and two years post-completion). There have also been moves to publish student loan repayment data, for which institutions are traffic lighted based on repayment rates and which is considered to be a good proxy for employability (i.e. whether learners are earning and earning enough to pay off their loans).

Lessons

- The implementation of Job Grants at regional level treats employers as purchasers. Training providers are delivery agents commissioned by employers in the context of the programme.
- · Canada is an example of a largely devolved system that has tried to bring a degree of national-level co-

- ordination (while respecting the autonomy of the provinces). This has been partly driven by a need for more co-ordinated information about policy impact (e.g. through common monitoring approaches).
- The Ontario example shows that designing a detailed portfolio of outcomes requires systems to be in place to capture information from employers and learners (e.g. through employer and learner surveys).

New Zealand

Introduction

This case study focuses on the funding system for tertiary education, known as the Investment Plan Process used by the New Zealand Tertiary Education Commission.

The Current Situation

Background and chronology

The Tertiary Education Commission (TEC) is the New Zealand Crown agency responsible for allocating almost NZ\$3 billion of funding to tertiary education providers²⁴, known as Tertiary Education Organisations (TEOs). This occurs in the context of the New Zealand government's Tertiary Education Strategy, most recently issued for the period 2014-2019. It sets out the strategic direction for tertiary education in terms of its contribution to the New Zealand government's economic, social and environmental goals. The TEC has responsibility for implementing the strategy through allocation of funding to and monitoring of TEOs.

In the late 2000s, the TEC introduced, through 'Investing in a Plan', a focus on funding that holds providers (TEOs) accountable for public funding. Under this approach, TEOs were given responsibility for ensuring that their use of public funding was aligned to goals set for the strategic direction of the tertiary sector (expressed in the New Zealand's Tertiary Education Strategy).

The TEC worked with individual TEOs to achieve this by developing and agreeing Investment Plans covering the provision of education and training at institutional level²⁵. In addition, the TEC would then work with TEOs to set out a performance framework to assess whether the required outputs and impacts were achieved.

The approach taken before the introduction of 'Investing in a Plan' had been input-focused (e.g. growth in enrolments). The focus of the initial Investment Plans was to enable the TEC to re-focus the tertiary education system on improving quality and achieving higher levels of educational attainment²⁶, as well as shifting TEC investment toward high-priority areas for the New Zealand economy, such as science, technology and mathematics²⁷.

The Investment Plan process has become established in the New Zealand tertiary education system. The Tertiary Education Strategy 2014-2019 sets out a more "outward-looking" vision for tertiary education in New Zealand²⁸. This vision is framed in terms of the direct contribution of tertiary education to economic growth by delivering better outcomes for learners, in employment and earnings, and for communities, in terms of addressing local needs²⁹. The strategy identifies six key priorities for the sector, one of which is "Delivering skills for industry (priority 1)". With this in mind, the TEC is working with TEOs through its funding allocation system to encourage and enable them to engage with employers and local communities with a view to arriving at a system that is responsive to the needs of employers and learners³⁰.

The model

While the most recent Tertiary Education Strategy has shifted the strategic direction of the tertiary education system towards outcomes, the mechanics of funding allocation is similar to previous investment cycles.

In order to receive TEC funding, all TEOs prepare and submit an Investment Plan to the TEC. This Investment Plan is developed with assistance from the TEC and in response to Plan Guidance issued by the TEC at the beginning of each investment cycle. Plan Guidance outlines the TEC expectations of TEOs and indicates the priorities that should be pursued at local or regional level in line with the Tertiary Education Strategy.

An Investment Plan sets out the following³¹:

- The TEO's mission and particular role in tertiary education provision;
- The TEO's proposed outcomes for the coming three years, the reasons for choosing those outcomes and what it will to do to achieve those outcomes;
- The TEO's proposed approach to measuring progress, including information on specific metrics it will use;
- How the TEO intends to measure progress in achieving its strategic direction, including the indicators it will
 use;
- The TEO's previous performance in achieving its goals, including engagement with the local community and employers;
- · The TEO's proposed approach to strategic priorities; and
- A summary of the TEO's proposed activity during the funding period.

These plans are usually developed in consultation with people or organisations identified by the TEO. These are usually stakeholders that the TEO identifies as being important consultees, such as regional development agencies and local employer groups. However, there is no formal guidance as to how this engagement should take place. In addition, the TEC works with TEOs to develop a performance, planning and accountability framework for each TEO to identify key inputs, processes and outputs, as well as how these contribute to intended outcomes. The development of the plan is usually an iterative process as the TEC works with TEOs to help make sure that the Plan reflects and is aligned with TES objectives.

Following submission of the Investment Plan, the TEC then allocates funding to TEOs based on plan alignment with overall national priorities.

As part of the increased focus on outcomes set out in the Tertiary Education Strategy 2014-2019, the TEC set out specific expectations for TEOs to progress towards an outcomes-based framework³², including a need for TEOs to:

- collaborate in developing pathways for learners that lead to positive outcomes (broader than educational attainment);
- build more effective relationships with industry and communities, to explain how the local community's
 needs have been addressed by the TEO's previous delivery and to outline how it intends to identify and
 respond to local and regional employer needs;
- use information and data from national and regional employment market demand and from other sources (e.g. workshops with employers) to plan their provision;
- use outcomes information as part of internal planning to understand and improve on performance and to reflect these in an outcomes framework; and
- provide better information to inform learners' enrolment decisions, with an initial focus on vocational qualifications.

Progress to date

The investment plan approach has started to shift the focus of the tertiary education system from volume of enrolments towards educational attainment and increased quality of provision. For example, 56% of people were studying at degree-level in 2012, compared to 50% in 2007. Similarly, 46% of young people in 2012 were completing a qualification at level 4 or above on the New Zealand Qualifications Framework, compared to 40% in 2007.

In terms of realising the "outward-focused" vision of the most recent Tertiary Education Strategy, much work has been done in terms of identifying the evidence that relates to the outcomes associated with tertiary education. Data has been developed on outcomes and skills supply and demand, such as the Occupational Outlook reports (developed by the Ministry of Business, Innovation and Employment (MBIE)), to make better investment decisions in order to incentivise improved outcomes.

The development of an integrated data set linking employment and earning outcomes to tertiary education outputs will provide information to help identify the outcomes that the TEC may wish to fund in the future³³. It also complements TEC's involvement in the Tertiary Information Future State project – designed to improve the information available to agencies involved in tertiary education in New Zealand.

In addition, the Plan Guidance for 2015/16 commits the TEC to working with other agencies in the tertiary education, skills and employment portfolio, such as the Ministry of Business, Innovation and Employment, to look at how to develop more strategic partnerships with sector and industry bodies to respond to the requirements of the labour market through the tertiary education system.

Involvement and accountability

In producing their individual investment plans, each TEO is responsible for engaging with its local community to ensure that the plan reflects local needs. There are no formal structures for this engagement and the extent of employer consultation varies from TEO to TEO. However, the plan guidance for 2015/16 commits the TEC to assisting TEOs in identifying and sharing best practice in strengthening connections with employers. The plan guidance mandates TEOs to use information and data on national and regional employment market demand, as well as intelligence from employers and local stakeholders.

The investment plan also provides an accountability function. It represents the TEO's commitment to the community and to the TEC in terms of its undertakings. It is, in this way, analogous to an outcome agreement, though not developed or produced in the same way. The TEC also has a team of relationship managers responsible for working with senior management of TEOs to ensure that investment in tertiary education is effective and is aligned with the desired national outcomes.

Each TEO's annual report is set against its investment plan and is used to assess its progress in achieving the agreed impacts and outcomes. In addition, the Auditor-General makes an assessment of the progress that has been made by each TEO in achieving the agreed outcomes, by examining the TEO's annual report.

Lessons

The main lessons from the New Zealand experience are as follows:

- Individual provider-level agreements offer a model for directing the overall strategic direction of postsecondary education towards national strategic goals: By setting a framework that provides context for the aims and objectives of individual providers, a link is created between providers and the overall strategic direction of the system. Ensuring that this link is responsive and dynamic is key to ensuring that local priorities are aligned with national objectives.
- Individual agreements with providers can also be used to encourage local engagement: The New Zealand experience demonstrates that a model where a national body has individual relationships with providers

can be a lever for encouraging providers to engage with local communities and employers. Asking providers to identify outcomes that are based on local priorities provides an incentive to an outcomes-based approach, while also ensuring that the outcomes are locally-focused.

- The use of investment plans that mandate provider engagement with employers can help to ensure that providers are responsive to labour market needs in their locality and region. By making it incumbent on the provider to engage, this can give support the building of a network focused on community needs without requiring the start-up costs of a bottom-up approach.
- Embedding local flexibility in defining outcomes is important. Consulting with providers at a local level to devise the measures and outcomes against which they will measure themselves can add legitimacy in the accountability process.

United States of America: Ohio

Introduction

This case study focuses on the outcomes-based funding system for postsecondary education in Ohio.

The Current Situation

Background and chronology

The Ohio Board of Regents oversees postsecondary education in Ohio. It is responsible for developing policies to maximise the contribution of postsecondary education to state priorities and managing / allocating state funds to Ohio postsecondary institutions (universities, community colleges and technical centres)³⁴.

Ohio has had performance-based/outcome-based funding³⁵ in place as part of its postsecondary education funding system for some time. However, these programmes traditionally only accounted for a relatively small portion of the total state public subsidy for postsecondary institutions. Notwithstanding this, there was evidence that such programmes led to improvement according to the targeted outcomes.

The evidence of the effectiveness of these approaches, coupled with an overarching State goal of improving qualification levels of the Ohio workforce, led to an increased focus on the potential of outcomes-based funding models³⁶. In response, Ohio embarked on reform of its funding system for postsecondary education, with the intention of moving to a model where the majority of state funding for postsecondary instruction would be determined using an outcomes-based approach.

This process began in 2010 with the implementation of an outcomes-based model that allocated 50% of public funding to universities on the basis of their success in achieving higher course completions and degree attainments. A similar model applied to community colleges, but for 5% of overall funding. Performance was assessed against a number of "success points". For 2013, the outcomes-based component was increased to 10% of community college funding. For both types of institution, a "stop loss" was put in place to guarantee a certain percentage of funding in a given year, therein enabling some stability in transition to the new funding model

In 2012, further changes to the funding model were recommended by the Ohio Higher Education Funding Commission (OHEFC), representing senior managers of universities and community colleges. The Commission's

purpose was to facilitate a consultation process with postsecondary institutions to ensure support for the funding model. Its recommendations included significant proposed changes to the proportion of funding allocated to institutions based on outcomes. For universities, it recommended that 80% of funding for undergraduate programmes should be determined by their success in degree completion and course completion, with more weighting attached to the former. Additional weighting was also recommended for STEM degrees, to reflect economic development priorities for the state.

In the case of community colleges, the OHEFC recommended that funding in subsequent years should shift to a model where 25% was linked to success points, 25% based on course completion and 50% based on enrolments, increasing the focus on outcomes. The Commission also recommended that community college leaders develop a formula to link all community college funding to outcomes. They presented their proposals in 2014 for implementation in 2015. An "at-risk student factor" was added to incentivise successful outcomes for underrepresented populations in both universities and community colleges. Abolition of the "stop loss" was also recommended in order to hardwire the outcomes-based approach into the funding model.

Following the report of the OHEFC, the Board of Regents began a consultation process with the technical centres in late 2013 to develop a similar outcomes-based funding model for the technical centres³⁷. This led to an agreed formula for the allocation of outcomes-based funding from 2015 onwards. It resulted in a situation where the majority of funding for postsecondary instruction in Ohio was determined using an outcomes-based model.

A hallmark of the implementation process has been the consultation between the Board of Regents and the postsecondary institutions. From the announcement of the reforms, there was a focus on securing buy-in from institutions into the new model of funding. Consultation processes were important in identifying the outcomes that institutions would use, as well as allowing them to influence the weighting of each outcome.

In addition, the different missions of each type of institution were catered for in the funding model within certain parameters. While each type of institution could influence the type of outcome against which they would be measured, the individual weighting of each outcome could not be changed.

The model

There are different funding models for each of the three types of provider of postsecondary education in Ohio as illustrated in Table 1.3. The range and weighting of outcomes for each institution shows how different institutional missions are reflected. For instance, the focus of universities is on increasing the number of graduates in Ohio. The STEM weighting reflects the higher priority of such degrees and the higher cost attached to them.

The emphasis for community colleges is on increasing transition to further study and enabling wider access to education (success points). The major focus of the technical centres is on employment outcomes, which reflects their labour market focus.

Table 1.3 Outcomes for measurement in Ohio postsecondary education (2015)

	Universities	Community colleges	Technical centres
Outcomes measured and proportion of funding attached to outcome	 Degree completion (50%) Course completion (30%) Doctoral and medical degrees completion (20%) 	 Course completions (50%) Success points³⁸ (25%) Completion metrics³⁹ (25%) 	 Students completing 50% of the programme (20%) Students successfully completing the programme (25%) Job placement or further study (50%) Gaining accepted third party qualification (5%)
Weighting for "at- risk" learners	Yes	Yes	No
Other weights	Extra weights applied for STEM subject degrees	No	No

Sources: Ohio Higher Education Funding Commission Report (2012); Ohio Board of Regents SSI Report (2014); Performance-based funding formula for Ohio Technical Centers (2015)

Progress to date

An evaluation of the funding model for universities and community colleges indicates that institutions are increasing both the number of graduates and course completion levels⁴⁰. Both universities and community colleges have improved their course completion and graduation rates, despite a significant fall in enrolments. This suggests that institutions are becoming more effective at retaining and graduating learners.

The next step for the development of the outcomes-based funding model is to link identified outcomes to regional skills needs. For example, it has been reported that employment outcomes for the technical centres vary across the State according to the economic conditions in individual regions. The Board of Regents has identified a need to include employers in the design of the outcomes funding model to discuss how to incorporate these different economic conditions.

The current design of the model for community colleges does not include measures of learners' job readiness or the role community colleges play in providing workforce training to upskill the Ohio workforce, particularly in high-needs areas⁴¹. The Ohio Association of Community Colleges has suggested that more direct recognition of the role community colleges play in addressing these areas could be incorporated in the model⁴².

Involvement and accountability

A key element of the funding-based reform in Ohio has been the involvement of the postsecondary institutions in the design of the model. The formulas and outcomes identified were developed through consultation with different types of provider to build buy-in to the process. Both the Ohio Association of Community Colleges and the Inter-University Council led processes to engage institutions in finalising the technical details. This included the evaluation, identification and appropriate weighting of the at-risk student factors. The support of the institutions in designing the outcomes has given them a direct stake in achieving them⁴³. Leadership by the Board of Regents was also important in maintaining momentum in the design of the model, even though the process was co-owned with the institutions.

Employers were not directly involved in the design of the model, although it is anticipated that local Workforce

Investment Boards will have a voice in the future. However, in parallel, the Board of Regents has established a "job-training capital improvement facilities fund" to provide job-specific training equipment to institutions. While this fund is open to universities and community colleges, only institutions that have formed an employer partnership are eligible to receive funding. As well as encouraging engagement with local employers, the Board of Regents monitors the process to examine how institutions engage with employers, as well as gathering additional intelligence on local skills needs as a by-product of this engagement.

Accountability is driven by the ongoing monitoring of institutions as part of the funding process and the public transparency that accompanies this. There are no formal structures in place for providers to account for performance to any other body.

Lessons

The following lessons were identified as being important in Ohio:

- Engagement with stakeholders is key to success. The design of the Ohio outcomes-based funding model and the technical details of the funding formulas were informed by extensive and ongoing input from postsecondary institutions. Recommendations at each stage of the reform process were rooted in consultation with the leaders of the institutions. While being driven by the centre, this approach can give the reform process a sense of legitimacy among institutions.
- Flexibility must be allowed across different types of providers. Understanding the different roles played by institutions across postsecondary provider landscape is important in framing their outcomes, but also ensuring that the model works for all providers.
- "Creaming" should be avoided by focusing on under-represented groups. One of the perennial challenges in
 designing outcomes-based funding models is how to design incentives so that more vulnerable or difficult
 to engage people are not forgotten by the outcomes funding model. The inclusion of an "at-risk" weighting
 encourages institutions to engage with underrepresented populations.
- A phased approach should be adopted to implementation. Phasing in a new funding approach can serve to ease the transition to a new model and increase confidence from participating institutions. The "stop loss" provided stability during the transition period as a temporary measure.
- Funding must be predominantly driven by outcomes. Research on previous performance-based funding in Ohio and other US states has shown that, for outcomes-based funding models to be effective, they need to be at the core of the funding model for providers and not just a "bonus payment". By gradually moving the vast majority of funding for institutions to an outcomes-focus, the attention of the institution is shifted towards overall outcomes.
- A broad range of outcomes should be included. While the need to increase the number of graduates in Ohio was one of the main policy drivers of the adoption of outcomes-based funding, the Ohio experience also highlights the importance of having a broad suite of outcomes. In particular, the importance of "milestones" or "intermediate outcomes" should not be disregarded, especially in terms of educational attainment, as they can be important steps to achieving broader outcomes.

United States of America: Tennessee

Introduction

This case study focuses on the recently introduced outcomes-based funding system for postsecondary education (universities and community colleges) in Tennessee.

The Current Situation

Background and chronology

The Tennessee Higher Education Commission (THEC) oversees postsecondary education for the State. It is the coordinating body for the 51 universities, community colleges and colleges of applied technology that provide postsecondary education within Tennessee.

Outcomes-based funding is part of an overall reform of postsecondary education in Tennessee. An objective of this reform is for Tennessee to meet the projected national average in education attainment by 2025. This has been a catalyst for the development of a model that incentivises delivery of outcomes related to this goal.

Like many other US states, postsecondary education in Tennessee has traditionally been funded on the basis of the number of enrolments at institutional level. While performance incentives for institutions were incorporated in the previous funding models in Tennessee, funding was still heavily weighted towards enrolments.

During the 2000s, the THEC considered how to adopt a funding model that was primarily focused on outcomes (such as degree completion and job placement), but which also recognised the distinct missions of different institutions (universities and community colleges). Such a model was designed and implemented following the passage of the Complete College Tennessee Act (CCTA) in 2010⁴⁴. In contrast with similar models in other states, the outcomes-based approach was anticipated to determine all funding for postsecondary institutions. Effectively, this means that there is no enrolment-based funding allocation in Tennessee.

Following the passage of legislation, the THEC embarked on a consultation process to develop the new model, including the formula for allocating funding. The consultation committee included representatives from the institutions and the State government. Consultation with the institutions was considered to be an important way to secure buy-in to the new process. This consultation achieved a consensus among both universities and community colleges in support of the new outcomes-based funding model.

Presidents and chancellors of institutions were asked to suggest which outcomes should be included and how to establish the priority order of the outcomes. This reflected the determination of the consultation committee that institutional mission should be linked to the outcomes-based formula. Therefore, the THEC used this qualitative input from the institutions to complement their quantitative analysis in setting the weights attached to each outcome.

Community colleges, in particular, welcomed the opportunity to be measured on performance in areas where they had comparative strength, including the number of work placement hours and job placement rates. These kinds of measure were not just focused on getting people into jobs, but on upskilling the workforce.

While there was no formal engagement with employers in terms of identifying the outcomes, employers were generally supportive of the overall strategic direction of the reform. Business leaders had expressed concern in the past about the low rate of degree completion and workforce readiness in Tennessee.

The model

Table 1.4 provides an overview of the outcomes that can be measured and used to determine funding for universities and community colleges in Tennessee. It highlights how the outcomes for each type of institution differ. This reflects the consultation process that led to the design of the model. For example, the outcomes for community colleges acknowledge their role in preparing people for the workforce.

Table 1.4 Outcomes measured

	Universities	Community colleges
Outcomes which	Students accumulating 24, 48 and 72	Students accumulating 12hrs
are measured	credit hours	Students accumulating 24hrs
to determine	Students accumulating 48hrs	Students accumulating 36hrs
funding	Students accumulating 72hrs	· Job placements
(measured on the	Transfers out with at least 12 credit hours	Workforce training hours
basis of counts	Bachelor and associate degrees awarded	Dual enrolment students
not rates)	Masters and other specialist degrees	Associate degrees granted
	awarded	Transfers out with 12 credits
	Doctoral and law degrees awarded	Certificates granted
	Research and service expenditures	Awards per full time-equivalent (FTE)
	degrees per full time-equivalent (FTE)	Remedial and developmental success
	Six-year graduation rate	

Source: Tennessee Higher Education Commission (2012)

In applying the formula for funding, all outcomes (apart from graduation rates) are counts rather than rates⁴⁵. For example, when calculating the degrees-based outcome, the number of degrees awarded by the institution is counted as opposed to the proportion of students.

This means that the outcomes model does not rely on an initial cohort – i.e. the institution is not being measured on historic performance or a previous outcome. As such, funding is not determined by the previous year's allocation. There are no state-imposed targets or pre-determined goals and each institution's funding calculation is independent of others. In addition, a 40% premium is added to students in "at risk" categories when performing the calculations⁴⁶.

Every institution has flexibility in determining the weighting applied to each of the outcomes⁴⁷. Each institution is required to suggest the importance of particular outcomes. The weighting is then calculated following consultation with the THEC.

Progress to date

Degree award data from Tennessee suggests a positive overall impact from the reforms, although it remains too early to draw strong conclusions, given the limited time elapsed and the dearth of comparative data available for other states. An evaluation of the new funding model is expected later in 2015 to provide further insight and evidence. Anecdotal evidence from institutions seems to suggest that institutions have changed their behaviour in response to the incentives created by the model.

The model has been phased in over a three-year period. This has been designed to minimise the immediate impact on institutions as they adjust to a new incentive structure. The THEC undertakes annual reviews of the

model to establish whether necessary adjustments are needed and to establish if it is having the desired effect.

While progress has been made in establishing the model, the next stage of development that has been identified relates to future engagement with employers. The focus of the first iteration of the model was on establishing an outcomes-based funding model. The next stage for development of this model relates to how to align the outcomes with the economic development priorities of the State. This includes plans to examine whether and how the outcomes-based funding model can encourage certain disciplines and types of degrees.

Involvement and accountability

The main stakeholders involved in the design of the outcomes-based funding model in Tennessee were the THEC, the institutions themselves and officials from State and local government. There was little formal involvement with employers⁴⁸. However, relationships between community colleges and local businesses are considered to be strong and community colleges were keen that outcomes reflecting this engagement were included in the framework.

In addition, a year after the Complete College Tennessee Act was introduced, a forum of leaders from postsecondary education, business, State government and national policy associations were brought together to review the progress in achieving the goals that had been set for postsecondary education⁴⁹. Among other issues, it discussed how to identify the future skills needs. The THEC is currently looking at ways to formalise links with other state agencies, including the Department of Economic and Community Development.

Institutions are held accountable for their performance through the funding model. Almost every dollar of spend must be earned on the basis of the institution's outcome performance. As such, the THEC is the primary body that holds institutions accountable.

Lessons

The following lessons were identified as being important in the Tennessee context:

- Aligning desired outcomes with State or national priorities is important. This ensures that there is a clear impetus about the need for reform, as well as a link between State priorities and institutional goals.
- 100% outcomes-focused funding provides a measure of transparency for the public funding of postsecondary institutions. By linking the majority of, or all, funding to the achievement of outcomes, the institution is directed away from inputs and to improving its overall performance.
- Securing consensus about the need to change and the rationale for reform from providers can be helpful to implementing a new funding approach. One of the key success factors in implementing of the Tennessee model was the fact that institutions were all involved in identifying the outcomes against which they would be measured.
- Allowing local flexibility is important: While the THEC identified the outcomes for community colleges
 and universities, it granted flexibility to institutions in the priority attached to each outcome. This allowed
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