

UPPER SECONDARY EDUCATION IN NINE JURISDICTIONS OVERVIEW REPORT

Desk study for the National Council for Curriculum and Assessment (NCCA) Sharon O'Donnell January 2018

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Glossary of acronyms¹

Acronym	Meaning
ATAR	Australian Tertiary Admission Rank
DARE	Disability Access Route to Education (Ireland)
DEIS	Delivering Equality of Opportunity in Schools programme (Ireland)
EAL	English as an additional language
GCSE	General Certificate of Secondary Education (England)
HAVO	Upper secondary preparatory pathway for higher professional education (Netherlands)
HE	Higher education
IB	International Baccalaureate
ICT	Information and communications technology
IEP	Individual education plan
IPP	Individual Pathways Plan (Ontario)
LCA	Leaving Certificate Applied (Ireland)
LCVP	Leaving Certificate Vocational Programme (Ireland)
LUI	Learner unique identifier (Queensland)
мво	Upper secondary vocational pathway (Netherlands)
NCCA	National Council for Curriculum and Assessment
NCC	National Core Curriculum (Finland)
NCEA	National Certificate of Educational Achievement (New Zealand)
NEET	Not in education, employment or training
NSN	National Student Number (New Zealand)
NZC	New Zealand Curriculum
NZQA	New Zealand Qualifications Authority
NZQF	New Zealand Qualifications Framework
OECD	Organisation for Economic Co-operation and Development
OP	Overall Position (tertiary entrance rank) (Queensland)
OSR	Ontario Student Record
OST	Ontario Student Transcript
OSSC	Ontario Secondary School Certificate
OSSD	Ontario Secondary School Diploma

¹There is a full glossary of terms and abbreviations for each jurisdiction in the detailed country tables available on http://www.ncca.ie/en/senior-cycle/senior-cycle-developments/international-perspectives

Acronym	Meaning
OSSLC	Ontario Secondary School Literacy Course
OSSLT	Ontario Secondary School Literacy Test
OYAP	Ontario Youth Apprenticeship Program
PE	Physical education
PLAR	Prior Learning Assessment and Recognition (Ontario)
PRU	Pupil referral unit (England)
QCAA	Queensland Curriculum and Assessment Authority
QCE	Queensland Certificate of Education
QCIA	Queensland Certificate of Individual Achievement
QCS	Queensland Core Skills (test)
ROA	Record of Achievement (New Zealand)
RQF	Regulated Qualifications Framework (England)
SAI	Subject achievement indicator (Queensland)
SEN(D)	Special educational needs (and disabilities) (England)
SEP	Senior Education Profile (Queensland)
SET	Senior Education and Training plan (Queensland)
SHSM	Specialist High School Major (Ontario)
SRS	School Results Summary (New Zealand)
TES	Tertiary Entrance Statement (Queensland)
TY	Transition Year (Ireland)
UE	University Entrance (New Zealand)
VET	Vocational education and training
VMBO	Pre-vocational lower secondary route (Netherlands)
VWO	Academic, pre-university upper secondary pathway (Netherlands)

1. Introduction

This desk study for the National Council for Curriculum and Assessment (NCCA) informs a review of senior cycle school education (15- to 18-year-olds) in Ireland. It focuses on the structure, organisation and curriculum and assessment in upper secondary education in nine jurisdictions:

- England
- Finland
- France
- Ireland
- the Netherlands
- New Zealand
- Ontario (Canada)
- Queensland (Australia)
- Sweden.



Information for all jurisdictions with the exception of Ireland was collected between April and July 2017. At the same time, an overview report comparing and contrasting upper secondary education across the initial eight jurisdictions was produced.

Comparable information for Ireland was compiled in December 2017 and this revised overview report was produced in January 2018. The information for the initial eight jurisdictions has not been updated since it was collected in 2017.

The desk study includes this overview report; two-page summary descriptions of upper secondary education in each of the nine jurisdictions, attached as an Appendix to this report; and detailed 'country tables'

published separately². The summaries and country tables provide information on the aim and purpose; the organisation and age range; available pathways; curriculum; assessment and reporting mechanisms; inclusion; and opportunities for flexibility and transfer in upper secondary education. The study is based on published information in the public domain, and the 'References' sections of the individual country tables identify and provide links to all the sources used.

This overview report summarises the key findings from the study and is organised by the thematic areas in the detailed tables and summary descriptions. A concluding section highlights recent or planned reforms of upper secondary education in the eight international jurisdictions of the study. which may be of particular interest to policymakers in Ireland considering reform of the system.

2. Aim and purpose of upper secondary education

Table 1 highlights the aims and purposes of upper secondary education across the nine jurisdictions as identified in key policy documents, strategy documents for education, and/ or curriculum documents.

From this, it is clear that **preparing students for employment** and for the adaptability required by the current and future economy is a priority, alongside ensuring that students leaving upper secondary education have the skills **to continue to learn** and develop throughout their lives, and **to participate actively in society**.

Table 1: Aims and purposes in policy documents

Jurisdiction	Aims and purposes in policy documents
England	The 2016 government White Paper, <i>Educational Excellence Everywhere</i> (Department for Education, 2016) sets out the vision that all children and young people, regardless of their background, ability or needs, should have access to an education which 'allows them to reach their full potential and prepares them to succeed in adult life in modern Britain' (p. 5). It highlights the role of education as a vehicle for social justice and economic growth and in ensuring that all young people are prepared for the world of work . The <i>Post-16 Skills Plan</i> (Department for Business, Innovation and Skills and Department for Education, 2016) aims to establish an upper secondary framework which '[supports] young people and adults to secure a lifetime of sustained skilled employment and meet the needs of [the] growing and rapidly changing economy' (p. 7).
Finland	General upper secondary education is intended to provide students with the knowledge and skills necessary for further study and working life, and to ensure their fundamental right to education regardless of their place of residence, language or financial standing. It aims to produce balanced, rounded members of society who are able to benefit from lifelong learning and self-development, and who take a democratic, responsible and active role as part of a local, national, European and global community. Vocational upper secondary education aims similarly to prepare students for lifelong learning and self-development, at the same time as providing them with the diverse knowledge, skills and competences required for the world of work. The intention is to enable young people to find employment and to be capable of developing their vocational skills throughout their lives so that they can adapt to change.
France	According to the <i>Code de l'Education</i> (Légifrance, 2017), upper secondary education builds on the lower secondary phase, develops students' general cultural awareness and knowledge, and provides them with the foundations for further study and employment . Through the three pathways available (general, technological, and professional), upper secondary education aims to respond to students' individual talents and so enable them to fulfil their potential , at the same time improving qualification levels and reducing drop- out rates.

Ireland	Senior secondary education aims to produce individuals who are resourceful, confident, engaged and active learners. Programmes in this phase emphasise the preparation of students for further education or training, for employment and for their role as participative, enterprising citizens .
	The Action Plan for Education 2016-2019 (Department of Education and Skills [DES], 2016) focuses on increasing subject choice for upper secondary students - important for student motivation and engagement and to equip them with the skills and knowledge to participate in a changing world ; ensuring that curriculum development responds to the changing needs of learners, society and the economy; improving transitions to the next stages of students' lives; creating a greater diversity of learning opportunities beyond school, e.g. by strengthening apprenticeships and traineeships as alternative pathways for some learners; enhancing support for learners to make informed career choices; and creating a focus on entrepreneurship, creativity and innovation to develop the national skills base and meet the challenges of growth in the modern world.
Netherlands	General and vocational upper secondary routes aim to help learners to develop their talents as far as possible within a study pathway which is appropriate to their knowledge and skills, and so be prepared for full participation in society and for employment .
New Zealand	The 2016-2020 education plan <i>Ambitious for New Zealand</i> (New Zealand Government, Ministry of Education [MoE], 2016) sets out the government's intentions to improve student- centred pathways in senior secondary education, and to provide better 'tailoring', so that educational services are responsive to the diverse needs of all students in the context of the future economy and offer better and more relevant pathways through the education system and into the workplace and society . The aim is also to raise the aspirations of all students and to strengthen inclusion with a view to helping achieve the overarching aims for the New Zealand education system of
	creating better life choices and outcomes for New Zealanders; equipping them to thrive in the rapidly developing global environment; helping young people, especially those in hardship, find a better future; enabling everyone to succeed; and creating the foundation for a flourishing society and a strong economy.
Ontario	The programme requirements for education in Ontario (Ontario Ministry of Education, 2016) highlight the aims for secondary education as being to 'provide all students with the fundamental knowledge and skills they will need in any area of endeavour as well as the opportunity to specialize in and/or explore areas related to their postsecondary goals and personal interests'. The requirements also state that the senior secondary years aim to prepare students for their post-secondary destinations , including apprenticeship training, college, community living, university, or the workplace.
	Achieving Excellence—the vision for education (Government of Ontario, 2014) also aims for those leaving high school to be prepared for a competitive, globally connected and technologically engaged world , and for every learner to have the knowledge, skills and characteristics to be successful, economically productive and an actively engaged citizen .

Queensland	Advancing Education (Queensland Government, Department of Education and Training [DET], 2017), the action plan for education in Queensland, focuses on positioning schools to support senior secondary students so that they develop the knowledge, skills and qualities for the jobs of the future . It seeks to strengthen the available pathways; expand the number of vocational education and training (VET) options; and ensure that students have the opportunity to complete Year 12 (age 18) and achieve the Queensland Certificate of Education (QCE) as the stepping stone to enhanced employment prospects and future opportunities. It also aims to 'inspire students to become lifelong learners, global citizens and successful people , confidently able to navigate their future, building on the essentials of literacy and numeracy'.
Sweden	The Education Act (Swedish Parliament, 2010) states that upper secondary provision should build on the knowledge that students have acquired during their compulsory education, providing a solid foundation for professional life and further studies , and presenting students with opportunities for personal development and active participation in society . The curriculum for upper secondary education (Skolverket, 2013) reinforces these aims, highlighting that this phase of education is intended to create the preconditions for students to learn and further their knowledge, supporting them to become responsible individuals who actively participate in and contribute to society and professional contexts, and preparing them for future study and employment.

Linked to these aims and purposes, the nine jurisdictions are also seeking to ensure **increased** qualification levels and/or reduce drop-out rates in upper secondary education. As part of the Delivering **Better Public Services** programme (New Zealand Government, State Services Commission, 2017), the New Zealand government has, for example, included a target to increase the proportion of 18-yearolds with the National Certificate of Educational Achievement (NCEA) Level 2³ (or an equivalent qualification)⁴, The Queensland government is strengthening the pathways available

to students in upper secondary education with a view to ensuring that every school student has the opportunity to complete Year 12 (age 18) and, where possible, achieve the Queensland Certificate of Education (QCE). The NCEA and QCE are senior secondary qualifications which the governments of both jurisdictions regard as essential stepping stones not only to individual success, but to building a productive and competitive economy and society. The Ontario government's goal is for 85% of students to graduate from high school within 5 years of beginning their course (at age 14). Changes introduced to

achieve this aim include helping students to 'customise their learning' through more course options (inside and outside the classroom), and through providing more one-to-one support when students need extra help.

Reforms to upper secondary education in the Netherlands and Sweden have aimed at reducing upper secondary drop-out numbers: in the case of the Netherlands by focusing on modernising and improving the upper secondary vocational pathway and improving the transfer from lower secondary to upper secondary vocational education, and in Sweden,

³On the New Zealand Qualifications Framework (NZQF)

⁴ The specific target is for 85% of 18-year-olds to have achieved NCEA Level 2 (or equivalent) in 2017.

by strengthening the available upper secondary programmes. In Ireland, the Transition Year between lower secondary (junior cycle) and upper secondary (senior cycle) education was introduced in 1994; not only in response to concerns that students were leaving the education system at too early an age, but also to enable students to sample subject areas which were new to them before making key subject choices for their upper secondary education. These decisions can be pivotal for their future career options and motivation to study.

Concluding remarks

Building on the previous phases, upper secondary education aims to enable all students, regardless of their background or need, to achieve their full potential; to prepare them for further, lifelong learning and employment; and produce adaptable, future-focused individuals and responsible, active citizens. These aims are set in a context of increasing education and qualification levels and reducing drop-out rates.

3. Organisation of upper secondary education

Across the nine jurisdictions, the upper secondary phase varies in length from two years (in England, Ontario and Queensland) to a maximum of four years (in the Netherlands), and in the age range of participating students. In **only two of the jurisdictions** (the Nordic countries of Finland and Sweden) **is this phase entirely stand-alone and post-compulsory**. In both France and New Zealand, the first year of the three-year upper secondary cycle is the final year of compulsory phase education. In England, the Netherlands, Ontario and Queensland, there are requirements for compulsory full- or part-time participation until age 17 or 18, or until students have achieved a minimum qualification level. In Ireland, students must stay in education until they reach the age of 16, and the upper secondary phase lasts two or three years depending on whether they follow a Transition Year before embarking on a two-year Leaving Certificate programme. Only in Ontario must all students remain in full-time education until the age of 18. Table 2 summarises the variations.

Jurisdiction	Age range	Compulsory or post-compulsory status
England	16-18 Years 12-13	Compulsory full- or part-time participation
Finland	16-19 Years 10-12	Post-compulsory
France	15-18 Years 10-12	Years 11-12, ages 16-18, post-compulsory
Ireland	15-17/18 Years 10-11/12	Participation is compulsory until age 16. Students in upper secondary (senior cycle) education may spend Year 10 (age 15- 16) in a Transition Year, or move directly to a two-year Leaving Certificate programme
Netherlands	15-17 15-18 16-18/19/20 Years 10-13/14	The duration varies dependent on the pathway, but participation is compulsory until students achieve a minimum level of qualification
New Zealand	15-18 Years 11-13	Years 12-13, ages 16-18, post-compulsory
Ontario	16-18 Years 11-12	Compulsory. Although the senior secondary years are Grades 11 and 12, ages 16-18, all four years of high school (Grades 9-12, ages 14-18) contribute to achievement of the Ontario Secondary School Diploma (OSSD)
Queensland	16-18 Years 11-12	Unless in full-time work, young people must participate in education and training until they have completed Year 12, gained a vocational qualification, or turned 17
Sweden	16-19 Years 10-12	Post-compulsory

Table 2: Variations in upper secondary education

In England, since 2014, young people have been required to remain in fullor part-time education or training until the age of 18. This is with a view to increasing the numbers of young people continuing with their studies and gaining the skills and gualifications needed for sustainable jobs; decreasing the number of young people not in education, employment or training (NEETs); and better preparing young people for higher education (HE) and work. In the Netherlands, since 2007, young people have been expected to participate in education until they obtain a 'basic qualification' for entry into employment and, in Queensland, since 2008, young people aged 16-18 have been required to be 'earning or learning', i.e. in full-time work or in education or training.

The duration of upper secondary programmes can be extended

or reduced in some jurisdictions in response to student need. In Finland, for example, the usual three-year programme can be reduced to two years or increased to four. The three-year programme can be similarly extended in Sweden, and the fouryear Ontario Secondary School Diploma (OSSD) programme can be reduced to three years or extended to five—the latter to allow students to take fewer credit courses each year and explore their interests in other school subjects. In the Netherlands, since 2016, talented students on the academic pre-university (VWO) pathway have been able to complete the programme a year early. In all cases, this is with a view to ensuring that students remain engaged, motivated and/or challenged and, ultimately, successfully complete their course.

In Finland, an optional, additional year between lower and upper secondary education, currently undertaken by around two per cent of students, aims to enable them to be better prepared for the upper secondary phase and prevent them dropping out. There are proposals to introduce a similar year in England, to be known as the 'transition year'. This is intended for 16-year-olds who are not yet ready for an academic or vocational upper secondary programme, and aims to help them develop the knowledge and skills to continue with their education and training. The Transition Year in Ireland also aims to act as a 'bridge' between the lower and upper secondary phases and is taken by around twothirds of students.

Concluding remarks

Senior secondary education begins at age 15 or 16, and although courses usually last for a specific period of time, there is some opportunity for flexibility, i.e. reducing or extending course duration without changing course requirements. Two per cent of students in Finland, and two-thirds of Irish students, take the opportunity of an optional year between the lower and upper secondary phases. These arrangements aim either to ensure that pupils are adequately prepared for entry to upper secondary education or that, once there, they remain engaged and motivated to succeed.

4. Pathways in upper secondary education



Table 3 summarises the range of pathways available to students in upper secondary education across the nine jurisdictions.

Alongside general/ academic courses, all include vocational study

options which, in most of the jurisdictions, can be completed in schools, colleges or through training providers. These study options are provided as vocational pathways and qualifications, technological pathways and qualifications, technical qualifications, applied programmes or qualifications, professional pathways and qualifications, or practical programmes, pathways or courses. In addition, in most jurisdictions, students

of upper secondary age can study towards an apprenticeship.

The availability of a range of pathways, tailored to student need and their aspirations for the future, has developed in response to government initiatives to keep students in education, improve course completion, and ensure students achieve a minimum level of upper secondary learning. The choice of available pathways also aims to help reduce achievement gaps, in particular between socio-economically disadvantaged students and their peers, and for minority ethnic students.

Table 3: Possible pathways

Jurisdiction	Pathway								
England	Study programme [*] comprises academic qualifications (e.g. A Levels)	Study programme [*] comprises vocational qualifications (e.g. Technical Levels)		Study programme* combines academic and vocational qualifications (e.g. A Levels and Applied General Qualifications)		idemic al and ral		renticeship or eeship	
Finland	Upper secondary ge	ry general pathway^			Upper secondary vocational pathway / initial VET^; can be completed via apprenticeship				
France	General pathway comprising three po routes	ssible Technological comprising ei be seven) mai		eight (soon to		Professional (vocational) pathway comprising two possible routes; can be completed via apprenticeship		mprising e routes; pleted via	
Ireland	Transition Year betw lower and upper sec education		Leaving Certificate – those studying general/ academic subjects are on the Leaving Certificate (Established) programme; those studying specific combinations of technical/ vocational and general subjects may access the Leaving Certificate Vocational Programme (LCVP)		Leaving Certificate Applied (LCA)—a cross-curricular pre-vocational programme				
		gh the Le	at age 16 can follow an apprenticeship or traineeship Leaving Certificate is often required for entry to es						
Netherlands	HE preparatory pathway (VWO)		educa	Higher professional education preparatory pathway (HAVO)		Upper secondary vocational pathway (MBO); four possible routes			
New Zealand	The credit-based NCEA recognises learning in academic and practical/vocational subjects (the latter often via 'Vocational Pathways Awards'); students who leave at 16 can complete apprenticeship programmes								
Ontario	The credit-based OSSD recognises learning from a range of academic (university or college preparation), applied (workplace preparation), or open courses. Through the Ontario Youth Apprenticeship Program (OYAP), students can gain credit towards an apprenticeship whilst completing the OSSD								
Queensland	The credit-based QCE recognises learning from the study of general/academic subjects in school; from VET subjects studied in school or through training providers and colleges; and from apprenticeships or traineeships								
Sweden	vocational pre	Six national H preparatory programmes		Five introduc progran	ctory progr		ial natio ramme tions	nal	Apprenticeships

*England: Where students do not study full-time, they must combine part-time study towards a qualification with a minimum of 20 hours per week of work or volunteering.

^Finland: Prior to starting their upper secondary pathway, 2% of students undertake an additional year of study following completion of compulsory education. There are also additional preparatory programmes for upper secondary education for some students (e.g. migrant students; students with special educational needs).

+ Sweden: The programmes last between one and three years and cater for the needs of students not eligible for a national

In all jurisdictions, with the exception of France where headteachers make the final decision, students and their parents determine their upper secondary pathway or, in the case of credit-based pathways such as those in New Zealand, Ontario, and Queensland, decide on the particular courses that will contribute towards the upper secondary qualification. In England, Finland, Ireland, Ontario, Queensland and Sweden, in particular, students receive support and guidance from teachers and, in some instances from external advisors or guidance counsellors, on the range of options available to them. In England, Finland, the Netherlands, Ontario and Queensland all students have specific upper secondary education plans, or study programmes. In Ontario, where all schools are expected to have education and career/life planning programmes in place, from Grade 7 (age 12, in elementary school) onwards, this takes the form of a web-based Individual Pathways Plan (IPP). In Finland, students each have an individual education plan; in England and the Netherlands, they have a study plan or programme; and, in Queensland, where decisions on student pathways for Years 11 and 12 are taken in Year 10, students develop a Senior Education and Training (SET) plan, in consultation with their school and their parents/carers. This aims to help them to think about their education, training and career options after Year 12 (the end of upper secondary education, age 18); make decisions about their learning pathways; set and achieve their learning goals for Years 11 and 12; include flexible and coordinated pathway options in their course of senior study; structure their learning around their abilities, interests and ambitions; and communicate with their parents, teachers and career guidance officers about their learning pathways and postschool plans.

Although initial decision-making for a student's secondary pathway is taken relatively early—at age 12—in the Netherlands (based on his/her aptitude demonstrated in the primary phase), as students on the three secondary pathways study the same subjects during the first two years of lower secondary education (ages 12-14), these two years effectively act as a 'bridge period'. Final decision-making for a student's ongoing secondary career is based on their record in these first two lower secondary years.

In determining their upper secondary pathway, between a quarter to one third of students in France, New Zealand and Sweden select the vocational option, while in Finland the figure appears to be more than half. Table 4 summarises the available statistics.

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Table 4: Key information on numbers of students following available pathways

Jurisdiction	Students in Vocational Pathways	
England	At the end of the 2016 calendar year, 6.9% of 16- to 18-year-olds were following an apprenticeship programme.	
Finland	In 2015, there were 35,262 new entrants to general upper secondary education. In the same year, there were 48,400 new students following an upper secondary vocational education and training course leading to an initial vocational qualification.	
France	In the 2016/17 academic year: 70.6% of students were following a general or technological pathway 29.2% were following a vocational/professional pathway.	
Ireland	 In 2015/16, 40,451 students (around 66%) took a Transition Year (which is not offered in all post-primary/secondary schools). Each year: around 95% of students receive the Leaving Certificate – of which 26% (around 15,000 students), who have followed specified course options and studied two vocational link modules, are Leaving Certificate Vocational Programme (LCVP) students the remaining 5% (around 2,750 students) receive the Leaving Certificate Applied (LCA). 	
Netherlands	Statistics not available.	
New Zealand	29.4% of all school leavers in 2015 achieved the NCEA Level 2 qualification with one or more Vocational Pathway Awards.	
Ontario	Statistics not available.	
Queensland	In December 2016, of the 51,613 students completing Year 12, 48,643 (or 93%) achieved the QCE. 31,353 students received a VET qualification (which may or may not have contributed towards the QCE).	
Sweden	In 2016/17, 47.6% of students in their first year of upper secondary education were in national HE preparatory programmes; 23.4% were on national vocational programmes; and 2% were following introductory programmes.	

Concluding remarks

Across the nine jurisdictions, the senior secondary pathways include vocational routes or options. From the available statistics, where these routes exist, they appear to be attractive to students in most of the jurisdictions. Support for pathway decision-making and planning is important, and recognised in some jurisdictions by the development of formal plans and the involvement of external advisors and counsellors to help identify the most suitable opportunities.

5. Curriculum in upper secondary education

Although the curriculum in upper secondary education is determined by student choice of pathway, the study of some compulsory subjects is usually a requirement for completion of upper secondary courses. These subjects can of course vary by pathway, route within the pathway, and year. Table 5 summarises the minimum requirements across the nine jurisdictions.

Table 5: Upper secondary minimum curriculum requirements

Jurisdiction	Requirements			
England	English and mathematics – but only if not achieved to a satisfactory level by age 16			
Finland	General upper secondary education: Mother tongue and literature Two foreign languages Mathematics Biology Geography Physics Chemistry Philosophy Psychology History Social studies Religion/ethics Health education Art (includes music) and physical education Guidance counselling	Vocational upper secondary education: Competences in communication and interaction Competences in mathematics and natural sciences Social and labour market competences Social and cultural competences ICT Occupational wellbeing Compulsory on-the-job learning		
FranceProfessional baccalauréat, Years 10-12:Moral and civic educationPhysical educationFrenchA modern languageMathematicsHistory and geographyApplied art and cultureHealth and the environmentCompulsory on-the-job learning		General baccalauréat, Years 11-12: Moral and civic education Physical education Two modern languages French (in Year 11 only) Technological baccalauréat, Years 11-12: Moral and civic education Physical education French (Year 11 only) Philosophy (Year 12 only)		

Transition Year (TY):

Ireland

Leaving Certificate Applied (LCA): 44 compulsory modules from: Vocational preparation and guidance English and communication Vocational specialisms (two courses Mathematical applications Introduction to ICT	

	Core subjects (e.g. physical education, information technology, mathematics, English, Irish (Gaeilge), and religious education) New 'taster' subjects (e.g. environmental studies, drama, business studies) TY specific layer (e.g. entrepreneurship, innovation or mental health initiatives; courses in photography, tourism awareness, or psychology) TY calendar layer (one-off activities, e.g. work experience, outdoor pursuits, social outreach, field trips, drama/musical productions)	44 compulsory modules from: Vocational preparation and guidance English and communication Vocational specialisms (two courses) Mathematical applications Introduction to ICT Social education Irish (Gaeilge) Modern European language Arts education (dance, drama, music, visual arts) Leisure and recreation (including physical education) Elective modules	
	Leaving Certificate (Established): Students must study at least five Leaving Certificate subjects, one of which must usually be Irish (Gaeilge)	Leaving Certificate Vocational Programme (LCVP): A minimum of five Leaving Certificate subjects, including Irish (Gaeilge) and two selected from designated vocational subject groupings (VSGs) A recognised course in a modern European language (other than Irish or English) Preparation for the world of work ('link module') Enterprise education ('link module')	
Netherlands	VWO/HAVO: Dutch language and literature English language and literature Social studies Culture and the arts/classics Physical education Second foreign language (HAVO only) General science (HAVO only)	MBO: Literacy skills Numeracy skills Citizenship skills Career management skills Compulsory practical/on-the-job learning	
New Zealand	Literacy and numeracy—successful comple achieve at least 10 credits in each of literacy		
Ontario	All students in the final two years of the OSSD programme, Years 11-12, must have access to a course in at least English, mathematics and science, and must pass a compulsory literacy requirement. 18 compulsory credits (of the 30 required for successful completion of the OSSD) must come from the study of courses in: English Mathematics Science Canadian history Canadian geography The arts Health and physical education French as a second language Career studies Civics Note: these credits may be achieved in any of the years of secondary education, Years 9-12, ages 14-18		

Queensland	Literacy and numeracy—successful completion of the QCE requires students to successfully complete one of a range of literacy and numeracy courses or qualifications
Sweden	National programmes (vocational and HE preparatory): Physical education and health Swedish (or Swedish as a second language) English History Social studies Religious studies Mathematics Science Compulsory work-based learning in national vocational programmes



In England, there are no core compulsory subjects, although the study of English and/ or mathematics in upper secondary study programmes is compulsory where students have not achieved a satisfactory pass in these subjects at age 16 (usually in the General Certificate of Secondary Education (GCSE) qualification). In the remaining jurisdictions, **the study of numeracy/mathematics and of literacy/communication/the home language is a common compulsory feature**, as well as the study of a European language in the LCA and LCVP in Ireland. The vocational upper secondary pathway in Finland, the professional baccalauréat programme in France, the vocational MBO pathway in the Netherlands, and the national vocational programmes in Sweden all **require compulsory** work-based learning. On-the-job learning can also contribute credits towards upper secondary qualifications in New Zealand, Ontario and Queensland, and in Ireland, students following a Transition Year (ages 15-16) may take part in work experience, while those on the LCVP engage in a work experience or work shadowing placement to gain practical experience of the world of work.

In Finland, the National Core Curriculum for general upper secondary education is revised every ten years or so. The most recent revisions (in 2014/15, implemented from 2016/17) aimed particularly to ensure that the curriculum reflects changes and advancements in society and the world of work and, as a result, is futureoriented, meaningful, relevant and motivating for students. Other aims were to support individual approaches to learning; increase and embed the role of technology; and make more use of environments outside of school in learning. Although Finland is the only one of the nine jurisdictions included in this desk study to have a regular programme of curriculum revision, ensuring the 'futures focus' in upper secondary pathways

is evident across the jurisdictions. In Queensland, for example, the revised senior secondary assessment and tertiary entrance systems, which will begin to be introduced in 2019, include updated subject syllabuses for the

reflect the knowledge and skills required for further study and employment in the 21st century. In Ireland, the Action Plan for Education 2017 (DES, 2017) includes a priority of ensuring that curriculum development continues to respond to the changing needs of learners, society and the economy. In France, Ontario, New Zealand and Sweden, subject specialisation increases as students progress through their upper secondary course. In Ontario, for example, Grades 11 and 12 (16- to 18-year-olds) focus on the individual's future pathway, with students selecting subjects to prepare them for college study, university study, or the workplace. In Grades 9 and 10, ages 14-16, they select broader course options to help determine the programme they are best suited to undertake in Grades 11 and 12. In France, study in Years 11 and 12 of three-year upper secondary general and technological baccalauréat courses is more specialist than that in Year 10, where students follow a common curriculum in what is known as the initiation cycle. In New Zealand, when students are planning their NCEA pathway, they are encouraged to take a broad

QCE to ensure that they

range of subjects in Year 11 but to begin to narrow these down in Years 12 and 13, focusing on areas of particular interest for their future study or career.

Forty hours of community involvement (volunteering activities) is a curriculum requirement for completion of the OSSD in Ontario. The aim is for students to develop an awareness and understanding of civic responsibility and of the role they can play and the contributions they can make in supporting and strengthening their communities. In Ireland, the Transition Year for 15to 16-year-olds can involve social outreach projects. The 16-19 study programmes in England are required to allow for non-qualification activity (or meaningful work experience) to develop students' personal skills and/or prepare them for employment, training or further and higher education and, in Queensland, community-based learning programmes can contribute credits towards the QCE.

In Finland, the Netherlands, New Zealand, Ontario and Sweden, there is also some flexibility in vocational upper secondary programmes in particular, for the curriculum to reflect local labour market demands. In the Netherlands, for example, schools and colleges offering upper secondary vocational (MBO) routes have the freedom to set up training courses and learning routes in co-operation with local employers in their respective regions. The intention is to ensure that innovations in industry are incorporated into vocational teaching more quickly, and that students are learning the skills needed to fill the labour market.

Health and wellbeing

education features within the upper secondary curriculum in France, where physical education and/or health is a core component in all courses regardless of individual student specialisation; in Queensland, where all Year 11 and 12 students must receive a programme of learning as part of the school's pastoral care programme; in New Zealand, where resources for wellbeing are provided for schools and link to the young people's mental health strategy (12-19); and in Ontario, where the study of health and physical education counts towards the compulsory curriculum credits for

the OSSD, and where promoting wellbeing is one of the four goals outlined in Achieving Excellence (Government of Ontario, 2014), the Ontario vision for education. The goal is based on the principle that the education system needs to help students to build the knowledge and skills associated with wellbeing so that they can become healthy, active and engaged citizens. The principle behind the vision is that wellbeing in education is fundamental to overall student success as:

- students are better able to learn when they feel safe and welcome, and have the tools and the motivation to make healthy, active choices, whenever they can
- students who have strong relationships and a positive sense of self are most likely to reach their full potential and thrive, and to develop into confident, capable and caring citizens.

While health education and physical education are compulsory components of the general upper secondary programmes in Finland, occupational wellbeing is a compulsory core subject in the national vocational programmes. The overarching curriculum for the upper secondary school in Sweden states that schools should ensure that students have the opportunity to undertake regular physical activity, and to develop their awareness of health, lifestyle and consumer issues (alongside entrepreneurial skills that are valuable in working life, in their further studies and in society, and their social and communicative competence). In Ireland, PE is usually included in Transition Year programmes and 'leisure and recreation', including PE, is a compulsory subject for the Leaving Certificate Applied (LCA). For other Leaving Certificate programmes, a draft framework recommends that schools should offer all pupils a weekly programme of two hours of PE, which may take place in settings outside the school. There are similar requirements for senior cycle social, personal and health education (SPHE) in Ireland, which focuses on issues relating to mental health, gender studies, substance use, relationships and sexuality education, and physical activity and nutrition. In addition, enhancing wellbeing in school communities is a focus of the Action Plan for Education 2017 (DES, 2017).

Of the nine jurisdictions studied, Ireland, Ontario and Sweden explicitly include key skills in the upper secondary curriculum. In Ireland, as the senior cycle curriculum documents for individual Leaving Certificate subjects are being updated, each identifies five key skillsinformation processing; being personally effective; communicating; critical and creative thinking; and working with others, which are embedded within the learning outcomes for each subject syllabus. In Ontario, thinking skills, communication skills and application skills are embedded in the

curriculum expectations for all courses for pupils in Years 9-12 and, in Sweden, the curriculum for upper secondary education includes a number of specific goals which schools are expected to meet for their students. These include gaining the ability to solve problems, developing critical thinking skills, developing the capacity to work with others, and managing their own learning.

In upper secondary education in Queensland, the Queensland Core Skills (QCS) test assesses 49 generic skills present across subjects and grouped in the skills areas 'comprehend and collect', 'structure and sequence', 'analyse, assess and conclude', 'create and present', and 'apply techniques and procedures'. Some of the remaining jurisdictions (England, Finland and the Netherlands, for example) include key skills in some vocational upper secondary programmes. In Finland, the national qualification requirements for upper secondary vocational qualifications, similar to the apprenticeship programmes in England, include the development of key skills such as team working and creative thinking.

Concluding remarks

Although the content of the upper secondary curriculum is determined by a student's choice of pathway, the continued importance of literacy and numeracy is clear. In this phase, links to the environment outside of education are apparent—in particular to the world of work, and the local community and local enterprise—and, as jurisdictions seek to prepare their students to be active, engaged and healthy citizens, in some there is a clear curriculum focus on wellbeing and/or improved physical and mental health, and on the development of the key skills required for lifelong learning and work.

6. Assessment and reporting arrangements



Table 6 summarises the key features of the assessment arrangements for the main upper secondary qualifications or pathways across the nine jurisdictions. It highlights the **role of**

internal assessment,

with the exception of the assessment arrangements for the baccalauréat in France, A Levels in England, and the Leaving Certificate (Established and LCVP) in Ireland, although only in Queensland are upper secondary assessment arrangements currently entirely internal. This will change in 2019-2020 when some external assessment is introduced.

There is generally more scope for internal

assessment of vocational

courses and qualifications than for general/academic courses although, in the Netherlands, recent discussions on the quality of upper secondary vocational (MBO) education have included proposals to introduce compulsory national examinations in Dutch and mathematics, and to standardise examinations in vocational subjects.

In England, assessment for the (vocational) Technical Certificate or Technical Level qualifications must involve some 'meaningful' activity for students involving employers, such as structured work experience or units delivered or co-

delivered by industry practitioners. In Finland similarly, assessment for the vocational upper secondary qualifications must involve 'vocational skills demonstrations' work assignments which must take place in the most authentic setting possible, e.g. during onthe-job-learning/work placement. In New Zealand, a certain number of unit standards, which contribute vocational credits towards achievement of the NCEA, must often be 'sectorrelated standards'. These are standards that require the development of skills from, or direct experience in, an industry setting.

Compulsory assessment

in literacy and/or numeracy is a feature of upper secondary assessment. The study has already noted that, in England, students who have not achieved a satisfactory level of achievement in English and/or mathematics at age 16 must continue to follow a course of assessment in these subjects in the upper secondary phase. In the Netherlands, regardless of the specific subject cluster in which students are enrolled, all must take VWO and HAVO examinations in Dutch, English and mathematics. In Finland, all students taking the matriculation examination must take an examination in the mother tongue (Finnish or Swedish), while in Ireland, a final examination in English and communication, and in Irish, is compulsory for the Leaving Certificate Applied (LCA), and Irish is usually a Leaving Certificate examination subject for students on all other Leaving Certificate courses. In New Zealand, a minimum number of credits towards the NCEA must come from courses in literacy and numeracy, while in Queensland students must complete one of a range of literacy and numeracy courses or qualifications to achieve the QCE. Similarly, in Ontario, a minimum number of credits towards the OSSD must usually come from successful completion of the Ontario Secondary School Literacy Test (OSSLT) (although alternative options are available for some students. See Table 10 'Opportunities for flexibility or transfer').

Jurisdiction	Qualification	Details
England	Academic qualifications: AS and A Levels	Compulsory full- or part-time participation
	Vocational qualifications: Technical Certificates Technical Level qualifications Applied General Qualifications	25% of marks from externally set and marked assessment 30% of marks from externally set and marked assessment 40% of marks from externally set and marked assessment The remaining assessment is planned and overseen by the school or college, i.e. internally set and marked
Finland	General upper secondary pathway: Course assessment	Involves: Internal teacher assessment of course completion, which is recorded on the general upper secondary school leaving certificate
	Matriculation examination	Externally-set examinations, which are teacher marked and externally moderated
	Vocational pathway: Upper secondary vocational qualifications	Locally drawn-up work-based/practical examinations; portfolios; observations; student self-assessment and group assessment against course objectives, assessed by teachers (or workplace instructors)
France	General, technological or professional baccalauréat	Written and/or oral and/or practical examinations, externally set and marked
Ireland	Transition Year (TY)	Ongoing internal (school-based) assessment, e.g. of projects and of oral, aural, practical and written activities (community service or work experience is usually evaluated by providers/hosts)

Table 6: Upper secondary qualifications

Ireland	Leaving Certificate (Established) and Leaving Certificate Vocational Programme (LCVP)	Written and/or oral and/or practical examinations, externally set and marked Practical coursework for some Leaving Certificate subjects, externally assessed
	Leaving Certificate Applied (LCA)	Satisfactory completion of modules (and of four key assignments for each module) and 90% attendance, internally assessed (31% of overall mark) Performance in 7 student tasks, externally assessed (35% of overall mark) Performance in final examinations in 7 subject areas, externally set and marked (34% of overall mark)
Netherlands	Pre-university VWO courses and professional HAVO courses	Involve: External, national (central) examinations School-set and marked examinations*, externally approved Final grades are calculated using the average of marks from the central and school examinations, with both given equal weight
	Vocational MBO courses	Involve: School-set and marked examinations, externally monitored/ approved
New Zealand	Credit-based NCEA Achievement standards test general/ academic NCEA subjects	Involves: National external examinations (or the submission of a portfolio of work for certain subjects) Internally set and marked examinations, externally moderated
	Credit-based NCEA Unit standards test vocational NCEA subjects	Involves: Internally set and marked written and practical assessments (can include presentations or performances, or the production of something), externally moderated
Ontario	Credit-based OSSD	Involves: Completion of externally set and marked literacy test Credits awarded for successful completion of externally set, internally assessed courses (70% of marks are awarded on the basis of assessment conducted throughout the course; 30% on the basis of a final course assessment which may be an examination)
Queensland	Credit-based QCE	Involves: School-based assessment against course requirements, externally moderated
		Note: external assessment will be introduced from 2019, when most QCE subjects will have four summative pieces of assessment, three of which will be school-based (and subject to external endorsement prior to use), and one assessment for each subject will be external.
Sweden	Credit-based national vocational programmes and national HE preparatory programmes	Involves: Externally set and teacher-marked tests in English, mathematics and Swedish The results from these are combined with the results from ongoing internal teacher course assessment Students must also successfully complete a diploma project

* The school-based examinations for the VWO and HAVO certificates generally focus on the skills which are not tested in the central examinations. For example, the central examinations for modern languages focus on reading skills, which allows school examinations to focus on listening, speaking and writing skills.

Where credit-based systems provide the foundation of upper secondary education, requirements vary in terms of the numbers of credits required for successful course completion; the learning hours associated with these credits; and the pass marks required. Table 7 compares requirements. Courses are, of course, of varying lengths. Each NCEA Level normally takes one year; the OSSD can take four or five years; the LCA and QCE usually take two years; and upper secondary courses in Sweden last three years.

Table 7: Credit-based assessment systems—a summary of requirements

Ireland, LCA	 200 credits available 62 credits available for satisfactory completion of modules, of 4 key assignments for each module, and for 90% attendance. Evidence of the key assignments can be presented in a variety of forms, e.g. written, visual, artefact, photograph, video, audio 70 credits available for performance in 7 tasks, i.e. practical activities which apply the learning from the courses/modules students have taken (e.g. the development of a product or artefact; the investigation of an issue or topic; the staging of an event) 68 credits for performance in 7 final examinations Grades of 'pass', 'merit' or 'distinction' are awarded for 120-139 credits; 140-169 credits; or 170-200 credits respectively Pupils complete 44 modules over the course of the two-year programme; each is of 30 hours' duration
New Zealand, NCEA	80 credits at each NCEA Level, Levels 1, 2 and 3; Level 3 is the usual level achieved on completion of upper secondary education
	Must include: 10 literacy credits 10 numeracy credits
	l credit is awarded for 10 hours of learning (teaching time, homework, and assessment) and must be at the 'Achieved' grade in a scale which comprises grades 'Not Achieved', 'Achieved', 'Merit' and 'Excellence'
	A typical course generates between 18 and 24 credits
Ontario, OSSD	30 credits Students must complete the OSSLT (literacy test) (or an approved literacy course)
	Students must also complete 40 hours of community involvement activities
	1 credit is awarded for completion, with a mark of 50% or higher, of a course scheduled for a minimum of 110 hours

Queensland, QCE	20 credits Compulsory completion of one of a range of literacy and numeracy courses or qualifications
	l credit is awarded for 55 hours of timetabled school time and credits must be achieved at a set 'pass' standard, which is the grade 'Sound Achievement' in the scale 'Very High Achievement', 'High Achievement', 'Sound Achievement', 'Limited Achievement', and 'Very Limited Achievement'
Sweden	All courses for the national vocational upper secondary programmes and the national upper secondary HE preparatory programmes are assigned a certain number of credits
	Students must study courses amounting to 2,500 credits in total during the three years of upper secondary education

Ireland is the only one of the jurisdictions where the awarding of some credit for the LCA is explicitly dependent on a minimum rate of student attendance.

As Table 8 highlights, **success in the upper secondary leaving certificate/qualification alone does not grant entry to HE**, even in France where, legally, public universities are expected to accept all students with a baccalauréat. Additional selection criteria in the nine jurisdictions include merit ratings and skills tests; success in particular upper secondary courses, often at specific grades; and/or interviews.

Table 8: Entry to higher education

England	HE institutions set their own requirements for entry. The minimum requirement
	is generally two or three A Level passes, usually at a required grade. For particularly competitive courses, students may be required to take additional entrance tests or pass an interview. Although A Levels remain the most common HE entry qualification, other qualifications, such as Applied General Qualifications, are accepted.
Finland	Although success in the matriculation examination provides a general entitlement to university, entry is restricted usually via an entrance examination, combined with the student's results in the matriculation examination and in the general upper secondary leaving certificate.
France	Public universities are required by law to offer places to all applicants who have achieved a baccalauréat, but popular courses are often oversubscribed. Universities offering these courses may put a cap on the number of students who can enrol and select students based on, for example, catchment areas; the drawing of lots; results obtained in the baccalauréat; or written tests and interviews.

Ireland	The Leaving Certificate (Established and LCVP) gives access to HE. However, because of competition for places, entry is determined by order of merit on the basis of points achieved in a student's six best scores from a single Leaving Certificate examination session. In addition, individual institutions of higher education set minimum course entry requirements—known as basic matriculation requirements. In general, prospective students are not interviewed by the institution they would like to attend, although entry to some courses, such as art or architecture, requires portfolio submissions and, sometimes, aptitude tests. Subjects such as engineering and medicine may require applicants to have a particular Leaving Certificate subject, such as mathematics or science, at a particular level (ordinary or higher). The Leaving Certificate Applied (LCA) gives access to courses in the further education and training sector.
Netherlands	Entry to courses in science and research universities or to higher vocational education institutions requires completion of the VWO, HAVO or MBO, and in some cases, institutions require prospective students to have studied specific subjects. Popular courses have selection procedures which can include weighted draws, where a higher average mark in a student's final upper secondary examinations gives a higher chance of being offered a place.
New Zealand	University Entrance (UE) is the minimum requirement for making an application to study at university, and is obtained by achieving NCEA Level 3 in at least three subjects on the list of approved subjects for UE, along with literacy and numeracy requirements. Individual universities have additional requirements for entry to many degree programmes, e.g. the study of specified subjects or NCEA results that are well above UE requirements.
Ontario	The OSSD is the first, minimum requirement for university admission. In addition, universities usually require students to have passed a specific minimum number of OSSD courses at specific levels (and often at a minimum overall average grade).
Queensland	Students must usually obtain an Overall Position (OP) tertiary entrance rank. This is achieved by completing Year 12, passing the QCE with 20 credits from specific subjects and passing the Queensland Core Skills (QCS) test. Students with the best OP rankings are offered places first.
Sweden	To achieve a diploma providing basic eligibility for higher education, students must achieve 'pass' grades in upper secondary courses amounting to 2250 credits, which must include specific courses in English, Swedish and (usually) mathematics. Individual universities make offers to students dependent on the demand for places and their upper secondary results. Where there are more eligible applicants than places available, applicants may be selected on the basis of a merit rating, calculated based on the coursework and grades achieved by a student in all the courses in which they achieved a pass mark in upper secondary school or on the basis of the optional Swedish Aptitude Test—a standardised literacy (Swedish and English) and numeracy test used specifically for admission to HE.

Reporting

Students receive certificates or diplomas recording their success in upper secondary courses or qualifications, and those in athe credit-based systems in New Zealand, Ontario and Queensland receive an official transcript/record of their upper secondary learning in addition. In New Zealand, this can be added to over time.



Finland and Ontario provide students who do not successfully complete this phase with an **alternative** form of record. In Finland, this is the 'Certificate of Resignation', which records the achievements of students who do not complete the upper secondary syllabus. In Ontario, students who reach the age of 18 and are leaving school without having met the OSSD requirements may be awarded the Ontario Secondary School Certificate (OSSC),

or the Certificate of Accomplishment, to recognise and record their achievements.

In Ireland, students who acquire fewer than 120 credits in the (200-credit) LCA receive a 'record of experience', while students in Queensland who have difficulties in learning that are not primarily due to socio-economic, cultural or linguistic factors, receive the Queensland Certificate of Individual Achievement (QCIA) rather than the QCE. The QCIA is an official record that students have completed at least 12 years of education, which also provides a summary of their skills and knowledge that they can present to employers and training providers.

In New Zealand and Queensland, students who have achieved the minimum entry requirements for university receive a University Entrance (UE) certificate (New Zealand) or a Tertiary Entrance Statement (TES). In these two jurisdictions also, students can access their upper secondary record online at any time via the New Zealand Qualifications Authority (NZQA) 'Learner Login' website or the Queensland Curriculum and Assessment Authority (QCAA) 'Student Connect' website. Access to the NZQA website is through a student's National Student Number (NSN), against which all standards and national qualifications which students gain throughout their life are recorded. Student Connect learner accounts, which record students' senior secondary subject enrolments and the results of any completed studies which contribute to the QCE, are accessed via a learner unique identifier (LUI).

Table 9 summarises the certificates and records that students receive.

Table 9: Records for students

England	Students receive certificates for the upper secondary academic and vocational qualifications they complete. A Level results are sent to students and schools and colleges in August (the examinations take place in May/June), with certificates following about eight weeks later. This allows for any queries about grades to be resolved. For students holding provisional offers of places from universities, their results are sent directly to the universities in question in August. There is national-level reporting of results in the school and college performance tables.
Finland	Students completing the general upper secondary school syllabus receive the general upper secondary school leaving certificate. All students who have completed the syllabus in one or more upper secondary school subjects also receive a certificate recording the completion of that subject syllabus. Where students are successful in the matriculation examination, they receive the Matriculation Examination Certificate and those who leave upper secondary education without completing the syllabus receive a 'Certificate of Resignation' recording their completed studies and the marks received. Students successfully completing all modules included in an upper secondary vocational qualification receive a qualification certificate.
France	Baccalauréat results are published online in July following the May/June examination sessions. There is also national reporting of aggregated results. Students receive a diploma/certificate recording the grade achieved and the baccalauréat pathway followed.
Ireland	At the end of the Transition Year (TY) programme, students have a completed diary/log book or journal, and also receive a Pupil Profile and record of achievement from the school. Schools offering the TY usually develop their own certificate for pupils (often graded at distinction, merit and pass levels). For the Leaving Certificate (Established and LCVP), students receive a certificate showing the grade and level achieved in each subject. For the LCVP, in addition, they receive a statement of the grade achieved for the vocational link modules. Aggregated Leaving Certificate results, by grade and subject, are published nationally. LCA students who successfully complete the programme with 120 credits or more receive a certificate (awarded at pass, merit or distinction, depending on the number of credits achieved). Those who acquire fewer than 120 credits, or who leave the programme early, receive a 'record of experience'

Netherlands	Students receive certificates confirming their success in the upper secondary VWO, HAVO or MBO programmes. There is also school-level and national reporting of aggregated student results.
New Zealand	A range of documents records students' achievements, including NCEA certificates and the University Entrance (UE) certificate. All students also have a School Results Summary (SRS), which lists all the achievement and unit standards for which students have been assessed; groups the results by year, course and level; and shows any national qualifications and endorsements, UE and/or New Zealand Scholarship results achieved. In addition, a Record of Achievement (ROA) provides each student with an official transcript of standards and qualifications achieved. The ROA is added to as students gain new standards and qualifications through further tertiary study and industry training. Aggregated NCEA results are also published nationally.
Ontario	 Students meeting the OSSD requirements receive the OSSD diploma. Those aged 18 who have at least 14 (of the 30 required) credits can leave school with an Ontario Secondary School Certificate (OSSC) instead. Where students don't meet the requirements for either the OSSD or the OSSC, they may be granted a Certificate of Accomplishment which records their achievement for employers and training providers. In addition, all students have: a Provincial Report Card, which provides a record of the student's achievement of the curriculum expectations in every course, at particular points in the school year or semester, in the form of a percentage grade an Ontario Student Record (OSR)—the formal record of a student's educational progress through school which goes with a student when he/she transfers to a different school or institution an Ontario Student Transcript (OST), which is a cumulative and continuous record of a student's successful and unsuccessful attempts at completing Grade 11 and 12 courses (ages 16-18), and completion of other OSSD requirements.
Queensland	Every student completing Year 12 receives a Senior Education Profile (SEP) from the Queensland Curriculum and Assessment Authority (QCAA). This contains a Senior Statement confirming that they have completed Year 12, and providing a transcript of the learning they have undertaken, which might include a QCE, QCIA or an International Baccalaureate (IB) Diploma. The SEP for students who have successfully completed the QCE and achieved an Overall Position (OP) ranking for admission to higher education (HE) also contains a Tertiary Entrance Statement (TES). This provides information recognised by HE providers in other Australian states and territories and internationally, and that may be required to enrol in HE outside Queensland.
Sweden	All students completing upper secondary education receive a school leaving certificate. Students who complete their upper secondary national (general or vocational) programme with the required pass grades and credits for eligibility for HE receive the upper secondary diploma with basic eligibility for HE. Students on national vocational programmes who successfully complete the programme, but who do not achieve the pass grades in those subjects required for eligibility for HE, receive the vocational programme diploma.

As highlighted in Table 9, **results** from upper secondary assessment **are often aggregated for national-level reporting** and, in England and New Zealand, for example, school-level results provide a means of accountability enabling monitoring of the performance of the system itself.

Concluding remarks

Internal assessment is a feature of all systems but is more prevalent for vocational pathways and qualifications than in general, academic pathways. Records of student learning, or alternative forms of certification for students who do not achieve the upper secondary qualification they were aiming for, are also common. These records/ transcripts, or alternative certificates, confirm the learning they have undertaken and are intended as a 'tool' for the future.

7. Inclusion and support in upper secondary education

There is a general principle across jurisdictions that **upper secondary provision should enable all students** regardless of their individual need, profile or ability **to achieve their maximum potential**.

There are also often specific requirements to pay particular attention to outcomes for certain groups. In Ontario, these groups are those at risk of lower achievement, young people in care, and the indigenous population. The indigenous populations are a particular focus in New Zealand and in Queensland also. In Queensland too, as in Ireland, there is an emphasis on students from disadvantaged communities (the socio-economically disadvantaged) and on students with disabilities and. where Oueensland focuses on students who are homeless or refugees, Ireland supports the inclusion of those with language, cultural and social differences. In England, these groups include disabled learners and learners with special educational needs (SEN); the highest and lowest attaining learners; learners for whom English is an additional language (EAL); learners from minority ethnic groups; learners who



have been excluded from school; socio-economically disadvantaged learners; and looked after children (children in the care of the local authority).

Particular support to combat educational disadvantage in Ireland is provided under the Delivering Equality of Opportunity in Schools (DEIS) programme, which provides additional funding and a range of targeted support to schools identified on the basis of the socio-economic demographic of their pupil cohorts. This aims to mitigate educational disadvantage and, for upper secondary education, the programme includes an overarching goal of improving the number of students who remain in DEIS schools to take their Leaving Certificate examinations. This proportion has grown to 82.7% for those students who began secondary education in 2009 and compares with a retention rate for non-DEIS schools of 92%.

There are also specific support measures for students at risk of dropping out or identified as unlikely to achieve a secondary or upper secondary leaving qualification. These include:

- practical training programmes for 12- to 18-year-olds unlikely to achieve a secondarylevel qualification in the Netherlands, or the possibility of a tailored programme offered in another school or adult education college
- upper secondary preparatory programmes in Finland—some specifically for learners whose first language is not Finnish or Swedish, others for students at risk of not succeeding
- an optional, additional year of study between compulsory basic education and the upper secondary phase in Finland
- opportunities to focus on work preparation, undertake an extended work placement, or undertake other non-qualification activities so that they are better placed to enter employment when they leave education in England
- specialist programmes to address the needs of groups of students with a particular curriculum or career interest and assist in the transition to post-secondary destinations in Ontario
- introductory or special support programmes in Sweden, tailored to the needs of individual students and with the ultimate aim of enabling them to achieve an upper secondary diploma
- allowing students to extend their period of upper secondary study in Finland, Ontario and Sweden
- allowing students to follow reduced programmes of study in Sweden which don't lead to an upper secondary diploma.

For those **students who** have left education without achieving an upper secondary qualification, jurisdictions including Finland, France, Ireland and Sweden have support systems in place. In France, students aged between 16 and 25 years who have left the education system without any type of qualification can enrol in an upper secondary pathway to acquire an upper secondary qualification. In Sweden, students aged

18 and above who have not completed secondary education can attend threemonth courses in folk high schools (intended for adults) aimed at preparing them to begin or to return to upper secondary education. In Finland, the government has introduced a 'Youth Guarantee' for young people who are not in education, employment or training. This provides all young people under the age of 25, and recent graduates under the age of

30, with either a job, on-the job-training/skills training, a place in education and training, or access to outreach youth work and workshop activities within three months of becoming unemployed. It was introduced in response to concerns regarding increased youth unemployment, and a significant minority of young people who were at risk of social exclusion through their limited education and who were

neither working nor on education or training programmes. The two-year Youthreach programme in Ireland similarly offers unemployed and unqualified 16- to 20-yearolds a programme of integrated education, training and work experience, or one of a range of foundation and progression courses, with a view to them moving on to further education and employment.

In all nine jurisdictions, there is a general presumption that students with special educational needs and disabilities will participate in mainstream education. Mainstream pathways and qualifications aim to be flexible enough to accommodate this, by, for example, recognising achievement across a range of ability levels; offering students choice in component subjects or courses; allowing the modification of educational programmes below the usual yearlevel expectations for a particular subject or course; allowing examination accommodations (providing that these don't give these students an unfair advantage); and embedding the use of ICT.

Where mainstream pathways are not suitable, in addition to provision in special schools (or special units attached to mainstream schools), some jurisdictions have introduced specific initiatives for students with special educational needs. In England, for example, young people with SEN between the ages of 16 and 24 can participate in an internship. This is a structured study programme, based primarily with an employer, which includes two unpaid work placements of six months each, alongside study towards qualifications (where suitable) and English and mathematics at an appropriate level. The aim is to help students to move into paid employment. In Queensland, there is a parallel certificate to the upper secondary QCE. The Queensland Certificate of Individual Achievement (QCIA) offers an alternative method for recording the achievement of pupils with SEN. It is an official record that students have completed at least 12 years of education, and provides a summary of their skills and knowledge that they can present to employers and training providers. In Ireland, an alternative entry system to higher education is in place for students with

special educational needs whose disability has had a negative effect on their secondary education. The Disability Access Route to Education (DARE) enables school leavers with a disability, under the age of 23, to access university places with a reduced points score compared to that of other students (although they still have to meet any minimum entry requirements and specific programme requirements).

In England, New Zealand and Ontario, planning for the upper secondary phase, and beyond, for students with special educational needs begins at age 13 or 14 and includes, in England, 'preparation for adulthood' meetings involving pupils, parents, teachers and careers advisors. In New Zealand, young people with 'high need' special educational needs are encouraged to develop, with their parents and school, an Individual Transition Plan or Career Plan, documenting their future plans and aspirations and the support, skills, knowledge, courses etc. which will enable them to achieve their goals. Similar plans in Ontario document a student's intended transition to post-secondary education, or the workplace, or the support that will

be needed to help the student live as independently as possible in the community. In Ireland, transition planning for upper secondary students with special educational needs is expected to take place well in advance of them leaving school, and to involve consultation with the student, their parents/carers and relevant external professionals. It usually results in a post-school plan identifying the student's next steps and chosen career path.

Concluding remarks

All nine jurisdictions have systems in place for students identified as in need of additional support; the reasons for which may be particular to their national context, e.g. indigenous or immigrant students. Students in need of additional support include those at risk of dropping out, or of leaving education without a secure foundation for their post-secondary transition. Mainstream pathways aim to be as flexible as possible to suit a wide variety of student need, and preparatory programmes are in place in some jurisdictions to ensure that some students can progress successfully to and through the upper secondary phase.

8. Flexibility and transfer in upper secondary education

In addition to the opportunities previously highlighted to encourage students to remain on track to complete the upper secondary phase and/or achieve a qualification/ qualifications, the nine jurisdictions provide a range of other opportunities for flexibility and transfer in upper secondary education. The following provides examples of the types of flexible options offered.

Opportunities for Flexibility or Transfer

Students can move or change pathways, for example:

- In Finland, general upper secondary school leavers can apply for upper secondary vocational education and training and complete vocational qualifications.
- In France, students in Year 10 (15-16) can switch between a vocational (professional) and a general or technological pathway. In Year 11, students can transfer between the general baccalauréat and technological baccalauréat programmes, or can change routes within these courses.
- In the Netherlands, students who have followed the lower secondary vocational route can transfer to an upper secondary professional education (HAVO) route rather than follow an upper secondary vocational (MBO) route. One in five students do this. Students can also transfer from the HAVO to the pre-university VWO pathway.
- The essential principle behind the organisation of secondary level education in Ontario, and the various pathways which can offer credit towards high school graduation, is that options for students remain flexible, so that they can shift between pathways should their goals and plans change.
- In Queensland, a student's Senior Education and Training Plan (SET) is kept under regular review to ensure that the subjects and learning included remain right for the student's intended individual pathway after Year 12. Planned courses of study and their contribution towards the credits required to successfully achieve the QCE can change during the four semesters that comprise Years 11 and 12.

Students can combine vocational and academic study

The credit-based systems in Finland, New Zealand, Ontario and Queensland allow students the flexibility to combine academic and vocational study and so successfully complete upper secondary education. In England, students can combine the study of academic and vocational qualifications in the same upper secondary study programme. In Ireland, students following a Leaving Certificate programme, can combine vocational/ technical and academic subjects; some complete the Leaving Certificate Vocational Programme (LCVP) as a result.

Students can complete part of their study in the workplace, in the local community, in a different institution to their 'home' institution, or in an alternative provider to a school, for example:

- Upper secondary students undertaking an apprenticeship in England spend part of their time working for an employer. Students completing a vocational Technical Certificate and Technical Level courses participate in school- or college-based study towards a qualification, combined with some meaningful activity involving employers.
- Students may study part of their upper secondary general or vocational course in another institution to their 'home' institution in Finland, usually in cases where their institution doesn't offer a specific course they wish to study. In addition, workplace learning is a requirement for vocational upper secondary courses.
- Students in France can follow their upper secondary vocational/professional route in an apprenticeship centre, and those at risk of dropping out of upper secondary education in the Netherlands, and who are following a special study programme, can follow this programme in an adult education institution.
- In New Zealand, students can acquire credits towards their NCEA in structured workplace learning for part of their time. Students can also gain vocational credits towards their NCEA by following courses in polytechnics, private training organisations, or in Trade Academies, formed by partnerships between schools, tertiary institutions, industry training organisations and employers.
- In Ontario and Queensland, students can gain credits towards their upper secondary leaving qualification by study in school, in the workplace, with a registered technical and further education provider (Queensland), in skills training centres (Ontario), or through community-based learning programmes.
- Unemployed young people in Ireland (aged 16+) who have chosen not to take a Leaving Certificate programme can follow an employer-led craft apprenticeship—a combined workplace and training provider-based educational and training programme aimed at developing skills to meet the needs of industry and the labour market. They can also follow a national traineeship programme, which is an occupational skills development programme combining formal training with a local Education and Training Board (ETB) and workplace coaching with an employer.

In credit-based systems, students not achieving an upper secondary qualification can continue to earn credits after leaving upper secondary education

- This happens in New Zealand, where students can continue to earn NCEA credits through tertiary study or workplace learning.
- In Ontario, credit recovery programmes allow students two years to achieve the credits they need to pass the OSSD, and adults who have not completed their high school diploma can gain credits towards OSSD completion while in employment through adult co-operative education programmes.



 In Queensland, students who do not achieve a QCE at the end of Year 12 can continue to work towards one for up to seven years after leaving school through the completion of additional learning, such as VET courses, traineeships or recognised workplace programmes. QCE credits remain live for up to nine years.

Similarly, students older than the 'usual' age can participate in upper secondary education, for example:

- In France, students aged between 16 and 25 who have left the education system without a qualification can enrol in an upper secondary pathway.
- In Sweden, students who have completed compulsory lower secondary education can enter a programme of upper secondary education up to and including the first half of the calendar year in which they turn 20.

Students can retake failed courses or retake courses they have passed to improve their grades in England, Finland, France, Ireland and the Netherlands, for example.

Students' prior learning is recognised, for example:

- In Finland, prior learning can be accredited towards students' general or vocational upper secondary courses. Where it is recognised, upper secondary programmes can be shorter for students.
- In Ontario, Prior Learning Assessment and Recognition (PLAR) arrangements allow students to have knowledge and skills gained in both formal and informal ways, outside school, evaluated against the overall expectations of the OSSD and recognised as credits towards it.

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Alternative methods allow students to achieve upper secondary qualification requirements, for example:

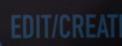
- In Ontario, students who are unable to pass the Ontario Secondary School Literacy Test (OSSLT), a compulsory requirement for the OSSD, can achieve this through alternative means, e.g. by successfully completing the Ontario Secondary School Literacy Course (OSSLC).
- In Finland, general upper secondary education can be completed via distance learning under the supervision of teachers, and using textbooks and other written materials; distance learning programmes on radio and TV; email; and web-based and other online materials.
- In Ontario, when upper secondary students wish to change to a different type of course in a specific subject and need to complete a prerequisite course in advance of this transfer, they can take this course through summer school, night school, e-learning, the Independent Learning Centre (Ontario's designated provider of distance education), or independent study.
- Students in Ireland may take their mathematics and Irish Leaving Certificate examinations at an additional, lower level—Foundation level. This aims to enable students who might have difficulty in achieving these subjects at Ordinary or Higher level to receive Leaving Certificate accreditation in these key subjects.

Concluding remarks

To complement the range of available pathways/qualifications and support systems in place for upper secondary students, jurisdictions offer an additional layer of flexibility and support through opportunities to transfer or retake courses and qualifications; opportunities to combine vocational and academic study, or to study in 'alternative' environments; the recognition of alternative or prior learning; and opportunities to achieve upper secondary qualification requirements in alternative ways, or to complete upper secondary courses and qualifications at a later age.

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This desk study has highlighted some recently implemented or planned reforms of upper secondary education in eight jurisdictions different to Ireland, which will be of interest to Irish policymakers Irish policymakers reviewing the provision of senior cycle education.

In Queensland, for example, reform of the QCE, which is planned from January 2019, aims to ensure that updated QCE subject syllabuses—much like the 'refreshed' upper secondary curriculum recently introduced in Finland, reflect the knowledge and skills required for further study and employment in the 21st century. At the same time, a new QCE assessment system will introduce external assessment alongside the school-based, externally moderated system. It is notable that this, the only one of the eight jurisdictions that currently uses 'after-the-event' externally moderated, internal assessment only is changing to include some external assessment and 'pre-use' moderation/ approval of internal assessment.

In New Zealand, reforms to the NCEA, such as the introduction of Vocational Pathways Awards and increased course options, have been intended to help prevent early school leaving and ensure upper secondary completion. The reforms respond to OECD concerns (OECD, 2013; Crossan and Scott, 2016) over a lower than the OECD average enrolment rate in senior secondary education; large performance and completion gaps for students from disadvantaged socioeconomic backgrounds; educational equity going hand-in-hand with increasing diversity in the student population; and lower outcomes for indigenous students who are also less likely to complete secondary education.

In England, the academic qualifications available in upper secondary education have been made more rigorous, with the intention of ensuring that students develop deep subject knowledge and have the right skills to progress to university study. Assessment has returned to end-of-course, linear testing; modular assessment and coursework have largely ceased to be part of AS and A Level courses. Study programmes have also been introduced, with a view to enabling students to develop their own tailored pathway for upper secondary education. In vocational upper secondary education, the government is encouraging apprenticeship take-up and intends to introduce new technical study

programmes—'T-Levels', which will sit alongside apprenticeships and the academic route, beginning in 2020. Developed with employer involvement, the occupational T-Level routes aim to prepare students for a world of work in which they will have to be flexible and to change careers over their lifetime. When T-Levels are introduced, the government intends also to introduce a 'transition year' to help those completing lower secondary education who are not yet ready for an academic or technical upper secondary programme to develop the knowledge and skills to continue with their education and training. This will be complemented by increased permeability in the system through 'bridging courses', which will allow students to move between academic and technical options.

There are similar plans to introduce more permeability between pathways in the Netherlands by, for example, more closely aligning the pre-vocational lower secondary VMBO route and the upper secondary preparatory route for higher professional education (HAVO). This aims to ensure that VMBO students wishing to continue their studies on a HAVO pathway (rather than an upper secondary, vocational MBO pathway) are better prepared to do so. There is also debate about the introduction of 'bridging' programmes between pathways. These proposals are a possible response to OECD conclusions that increasing permeability in secondary education in the Netherlands would improve the system still further (OECD, 2016).

Like the recent and planned reforms for upper secondary technical pathways in England, which aim, at the same time as improving the quality of the available programmes, to reduce the significant number of courses and qualifications available, in Finland also, planned reforms to vocational upper secondary education aim to introduce fewer, more wide-ranging vocational qualifications from 2019. As in England, these qualifications, which will be broader than existing qualifications and provide students with improved opportunities to develop their competences in a flexible way, aim to meet the changing demands of working life.

In light of the above reforms, and the findings

highlighted in earlier sections of this desk study, any jurisdiction considering a review of upper secondary provision may want to take into consideration the following:

- Upper secondary education systems appear not to be a 'one-size-fits-all' offer, but rather to provide students with a range of options with a view to suiting their future destination.
- There is demand for upper secondary alternatives to traditional academic pathways.
- Internal assessment arrangements feature prominently in the upper secondary phase, but have a heightened role in vocational, as opposed to academic, pathways, and are a particular feature of credit-based systems.
- Planning—both at the individual student level and in terms of local planning of provision—is increasingly important as jurisdictions offer an increasing variety of pathways.
- Preparatory 'years' or programmes, offering a 'breathing space' between lower and upper secondary education, are being offered or considered as a way in which students can better plan for and be better prepared for the upper secondary phase.
- Bridging programmes, to allow more permeability between tracks, are developing features of upper secondary education in international jurisdictions.
- Environments outside of school, e.g. alternative/training providers, work-based learning or community learning make a key contribution to experiential learning in this phase.
- Official records of achievement, in addition to certificates, are a feature of the upper secondary phase, serving the needs of students and of future employers or educational institutions.
- Upper secondary curricula and assessment systems are closely interwoven and interdependent.
- There is a focus in the upper secondary 'offer' on ensuring students' physical and mental wellbeing.
- Links to the previous and next phases of a student's career and education are crucial, and consequently reforms introduced in this phase can have wide-ranging implications at individual and system level.

Although this study has shown that there are important similarities in how the nine jurisdictions provide opportunities for students in the upper secondary phase, which are worthy of consideration when planning reform, the individual country context is also key. Each system is unique, reflecting national priorities, the national and local context and the overarching aims of the education system. These important differences need also to be taken into consideration. The country summaries (which follow as an Appendix) and the detailed country tables (published separately) place the upper secondary education systems in the nine jurisdictions in this important context, reflecting the nuances of each system.

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Appendix: Summary descriptions

Summary of upper secondary education: England

Aim and purpose: The 2016 government White Paper, Educational Excellence Everywhere (Department for Education, 2016) sets out its vision for schools across England, underlining that, regardless of their background, ability or needs, all children and young people deserve access to an education which 'allows them to reach their full potential and prepares them to succeed in adult life in



modern Britain'. The role of education as a vehicle for social justice and economic growth is highlighted. The White Paper states that upper secondary education should enable all young people to leave education ready for the world of work. More specifically, academic qualifications (AS and A Levels) aim to prepare students for undergraduate study and the world of work. Vocational qualifications aim to prepare students for the next stage of education, training and employment and to ensure that the qualifications themselves are recognised both by employers and universities.

Structure: Compulsory full-time education is from Year 1 to Year 11 (ages 5-16). Between the ages of 16-18, in the upper secondary phase (Years 12 and 13), young people must participate in full- or part-time education or training.

Pathways/programmes in upper secondary education: 16- to 18-year-olds in full-time education follow an individual 'study programme', which includes one or more substantial qualifications. These can be academic (AS and A Levels) or vocational (applied/technical). A study programme can be solely academic or vocational; or can include the study of general academic and vocational qualifications in combination. Students may also choose to take an apprenticeship or traineeship. Traineeships are intended for those aged 16+ who need extra hep to access an apprenticeship or employment. Upper secondary students studying part-time towards an academic or vocational qualification must combine their study with a minimum of 20 hours per week of work or volunteering. The available post-16 vocational pathways will change from 2019 when 15 new technical routes (T-Levels) will begin to be introduced.

Curriculum within pathways: The curriculum in upper secondary education is determined by a student's chosen study programme. Those choosing to follow an

academic upper secondary study programme usually take a number of A Level subject courses, generally three or four, leading to the completion of AS Levels at the end of Year 12 (age 17) and A Levels at the end of Year 13 (age 18). On successful completion of their A Levels, students generally progress to employment or higher education. Students selecting the vocational option follow study programmes leading to Technical Certificates (at age 17) or Technical Level qualifications or Applied General Qualifications at age 18. These prepare them for further study, skilled employment or courses of higher education. Students taking AS or A Levels are free to take any combination of subjects on offer by their school or college, ranging for example from modern foreign languages through to design and technology and chemistry. In the vocational pathway, Technical Certificates relate to a specific industry or occupation; Technical Level qualifications are available in recognised occupations (e.g. hospitality or engineering); and Applied General Qualifications are offered in broad vocational areas such as sport or business. Apprenticeships are work-based training programmes, available in a range of occupations.

Inclusion: Schools and colleges providing upper secondary education are expected to respond to the individual needs of all learners and to set high expectations to enable them to achieve their potential. They are also expected to pay particular attention to outcomes for specific groups, including disabled learners and learners with special educational needs (SEN); the highest and lowest attaining learners; learners for whom English is an additional language (EAL); learners from minority ethnic groups; learners who have been excluded from school; and socio-economically disadvantaged learners. For students with identified special educational needs and/or disabilities (SEND), there is a general presumption of inclusion in mainstream education (with support such as assistive technology or specialist tuition), and access arrangements allow them to participate in the external qualifications available in upper secondary education. These students may also participate in a supported internship with an employer, which aims to help them to move directly into paid employment. EAL students are integrated into mainstream education and provided with additional language support. Alternative forms of provision are available for learners who have behavioural difficulties and may have been excluded from school or college, or for students who are unable to attend mainstream provision for other reasons. Students who, at age 16, are not ready to take Level 2 gualifications on the Regulated Qualifications Framework (RQF) (e.g. the GCSE, usually taken on completion of lower secondary education), can focus on preparation for work, or be offered an extended work placement and other non-qualification activities with a view to enabling them to be better placed to enter employment when they leave education.

Assessment and reporting in upper secondary education: Assessment is linked to the academic or vocational qualifications a student is taking. Assessment for AS and A Levels is through externally set and marked written examinations, now usually taken at the end of the course (Year 12, age 17, for AS Levels and Year 13, age 18 for A Levels). Other types of assessment are now used only where they are needed to test specific skills; for example, through practical work as well as written examinations in science. Students take examinations in May/June of the academic year and receive their results in August. The grading scale is A*-E (where A* is high) (U is reserved for 'unclassified' [failed]). Vocational upper secondary qualifications are usually awarded on a 'distinction, merit, pass, fail' grading scale and assessed via a combination of externally-set examinations

or assignments, and internal assessment. For Technical Certificates and Technical Level qualifications, assessment must include some activity involving employers. Higher education institutions set their own entrance requirements for each course they offer; the minimum requirement is generally two or three A Level passes at specific grades. For particularly competitive courses, students may be required to take additional entrance tests or pass an interview. Although A Levels remain the most common entry qualification for higher education, other qualifications, such as Applied General Qualifications, are accepted. Any upper secondary student who has not achieved a good examination pass in English and/or mathematics in lower secondary education (at age 16) must continue to work towards completing these in the upper secondary phase.

Flexibility and transfer options: There is a degree of flexibility in the study programme structure, since students can combine study for academic and vocational qualifications; can choose to follow an apprenticeship or traineeship; or, if they are not yet ready for secondary level qualifications, can follow a programme aimed at preparing them for employment. When changes to the available technical/vocational routes begin to be introduced from 2019, the government intends to introduce 'bridging courses' to allow students to move between academic and technical options, along with a 'transition year'. This is intended for 16-year-olds who are not yet ready for academic or vocational study in upper secondary education to develop their knowledge and skills to enable them to continue with their education and training.

References:

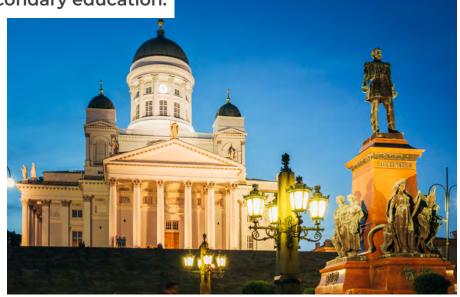
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The detailed country table for England is available here

Summary of upper secondary education: Finland

Aim and purpose:

The purpose of upper secondary education varies depending on the pathway a student is following – general or vocational upper secondary education. General upper secondary education aims to provide the knowledge and skills necessary for further study and working life, and to produce balanced, rounded individuals who



contribute to society and are able to benefit from lifelong learning and self-development opportunities. Upper secondary vocational education also aims to prepare students for lifelong learning and self-development, and to provide them with the knowledge, skills and competences for the world of work. Its purpose is to ensure that young people gain the skills to find employment in a specific field, alongside the ability to adapt and so be capable of developing their vocational skills to suit workplace requirements throughout their lives. These aims and purposes are framed within the context of the government's *Strategic Programme 2015-2025* (Government of Finland, 2015), which includes the aim of reducing the numbers of young people dropping out by reforming upper secondary vocational education. Preparation for the reform began in 2015 through a steering group on working life, which has proposed a system of broad vocational qualifications to enable students to develop their competences in a flexible way and to meet changing demands.

Structure: Post-compulsory upper secondary education lasts for three years from age 16 to age 19, Years 10-12, and is usually provided in general or vocational upper secondary schools.

Pathways/programmes in upper secondary education: After nine years of compulsory education, 16-year-old school leavers opt for one of the two upper secondary pathways. Although the usual age for full-time, three-year (post-compulsory) upper secondary general or vocational education is 16-19, students can be older as studies can be extended to a fourth year, or students may take a one-year preparatory or pre-vocational programme prior to entering an upper secondary pathway.

Curriculum within pathways: There is a National Core Curriculum (NCC) for general upper secondary education, which is adapted into local curricula. From their local upper

secondary curriculum, students take a minimum of 75 courses over the three years of upper secondary education. Each individual student's study plan includes compulsory and specialist courses—a minimum of ten must be specialist—and, as instruction is organised by module; in drawing up their study plan, individual students can select from a range of syllabuses in the compulsory subject areas and can combine studies from general education and vocational education and training. Study plans become more focused/ specialist as a student's upper secondary studies progress. The curriculum for upper secondary vocational education is determined by a student's choice of national vocational qualification. The 52 available qualifications follow a 180-competence point model, where one year of study is equivalent to 60 points. 135 competence points must come from vocational studies; 35 from the study of core subjects (competences in communication and interaction; competences in mathematics and natural sciences; social and labour market competences; and social and cultural competences); and 10 competence points come from free-choice modules. Of the 180 points, at least 35 must be from a period of on-the-iob learning which accounts for around six months of the three-year course. Prior learning acquired in working life or other training environments can be recognised towards competence points, and students can select their free-choice modules from those on offer at their own institution or in another general or vocational institution. Where a student selects free-choice modules that focus on core subjects, this may mean that he/ she can complete general upper secondary school and/or the matriculation examination at the same time as the vocational qualification. The national vocational qualification requirements include key lifelong learning skills in the skills requirements for vocational modules and core subjects (e.g. interaction and co-operation; problem solving; initiative and entrepreneurship). Upper secondary vocational qualifications can also be obtained through apprenticeship training. Apprentices are employed; and their practical training in the workplace, accounting for 70–80% of learning, is complemented by theoretical education in a vocational education institution.

Inclusion: Public authorities must provide all young people with an equal opportunity to participate in post-compulsory upper secondary education, in line with their abilities and any special educational needs they have. They are also required to provide equally for the educational needs of the Finnish- and Swedish-speaking population. The system for students with special educational needs is based on the principle that support is provided within mainstream education where possible, but also in special classes and schools. Provision should be as close to mainstream as possible and, as all upper secondary students have an individual learning plan, where specific support is needed, this will be detailed in the plan. Finnish and Swedish are official languages of instruction and some upper secondary vocational institutions are bilingual. The native language of Sami (Lappish) is the language of instruction in some upper secondary general and vocational institutions. Young people whose first language isn't Finnish or Swedish can follow a preparatory curriculum for upper secondary education. This aims to provide them with the language skills to participate in upper secondary education/further education and training and society. It was developed to respond to concerns that young immigrants account for a greater number of those who do not apply for, are not admitted to, or drop out of upper secondary education.

Assessment and reporting in upper secondary education: Students in general upper secondary education usually take the matriculation examination, which consists of a minimum of four compulsory tests. They take the matriculation examination tests when they have completed the relevant course of study, or in one examination period for the complete examination. The tests are set externally, marked by students' teachers and moderated by the Matriculation Examination Board. Upper secondary vocational qualifications are awarded once students have completed all 180 competence points in their individual study plan. Students who successfully complete a three-year upper secondary vocational qualification are eligible for further study in universities of applied education; those who complete the matriculation examination are eligible for entry to university. Although upper secondary vocational qualifications and/or the matriculation examination provide a general entitlement to university, entry is restricted via a *numerus clausus* system, as there are many more applicants than places. In 2017, 31% of those applying for higher education were selected for entry.

Flexibility and transfer options: The modular structure of upper secondary qualifications allows students to compile a study programme that is suited to their needs, abilities and aptitudes and, for example, to combine the study of general academic subjects (in general upper secondary education) with the study of vocational subjects. They may also take part of their upper secondary general or vocational course in another institution to their 'home' institution—usually in cases where their institution doesn't offer a specific course they wish to study. In addition, prior learning can be accredited for students' general or vocational upper secondary courses, provided that the objectives and core content of this prior learning are equivalent to those set out in the general upper secondary school curriculum or the upper secondary vocational qualification requirements.

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The detailed country table for Finland is available here.

Summary of upper secondary education: France

Aim and purpose: The Code de l'Education (Education Code; Légifrance, 2017), which outlines the main purposes and principles of the education system in France, determines that compulsory education should enable all students to develop 'a common foundation of knowledge, skills and culture'—known as the socle commun. The five areas of the *socle commun*—languages to think and communicate;



methods and tools to learn; forming a sense of self and citizenship; natural and technical systems; and representations of the world and human activity, are intended to provide students with the skills to be able to continue their studies, develop their personal and professional futures, and actively participate in society. With regard to upper secondary education: the Code states that this should build on lower secondary education and the *socle commun*, develop students' general culture and knowledge, and provide them with the foundations for further study and employment. Through the three pathways available—general, technological and professional—upper secondary education aims also to offer students a pathway that responds to their individual profile and talents, and enables them consequently to fulfil their potential, at the same time improving qualification levels and reducing drop-out rates.

Structure: Secondary education is from Year 6 to Year 12, ages 11-18. Upper secondary provision is the final three years, Years 10-12, ages 15-18. Education is compulsory until completion of Year 10 (age 16).

Pathways/programmes in upper secondary education: Decisions on pathways for upper secondary education are taken in Year 9 (ages 14-15, in lower secondary education), when students and their parents meet with their teachers to discuss their achievements, abilities and aptitudes. Students choose a preferred pathway based on this discussion, but the headteacher is ultimately responsible for deciding which pathway a student will take. There are three main pathways: general—available in three different routes, leads to the general *baccalauréat* qualification and prepares students for further study, including higher education; technological—available in eight routes, leads to the technological *baccalauréat* and prepares students for further study, including higher education; and vocational/professional—available in two main routes, which prepares students for employment by developing general and professional skills in a range of sectors, but also allows them to progress to further study. Around one third of students follow vocational/ professional upper secondary routes (the vocational *baccalauréat* or the vocational aptitude certificate [CAP]). Public universities are required to offer places to all applicants with a *baccalauréat*. In practice, this is not possible and institutions use selection criteria catchment areas, written tests or interviews where courses are oversubscribed.

Curriculum within pathways: The senior secondary curriculum is determined by the specific pathway a student is following. Most students following a general or technological *baccalauréat* pathway follow a common curriculum in Year 10 (ages 15-16), which is known as the initiation cycle. The aim is for them to study a range of subjects in the fields of literature, art, science and technology (eight common core subjects and two subject options), further exploring and developing their skills and aptitudes, and to use this as the basis on which to make their final decision on their preferred route for the final two years of upper secondary education. All upper secondary pathways include the teaching of moral and civic education, and physical education throughout and, in addition, there is timetabled 'individual support'. This is time for students to spend expanding their knowledge and learning in particular areas, or in seeking support regarding their pathway choices and future destinations. Work experience is a required component of vocational/ professional upper secondary routes.

Inclusion: Legislation requires students with special educational needs and disabilities to benefit from education in a mainstream school setting as close as possible to their home. Students receive personalised support in line with their individual support plan which is reviewed annually. The nature of the support varies depending on the student's specific needs, but may include adapted teaching aids; support from a trained assistant; extra time or help from a trained assistant in examinations; special classes linked to mainstream schools; or home care services for students unable to attend school. Special 'welcome' classes are organised for students who have recently arrived in France (including those who speak French as a first language and those who don't). They aim to enable 'newcomer' students to quickly be able to spend the majority of their time in mainstream classes with their peers. Students aged between 16 and 25 who have left education without any type of qualification are also entitled to enrol in an upper secondary pathway with a view to achieving a qualification; and students who are already in upper secondary education but who may be struggling in specific subjects are entitled to attend remedial classes in those subjects.

Assessment and reporting in upper secondary education: Assessment in upper secondary education is linked to the qualifications being studied. For students following a general or technological *baccalauréat*, assessment includes external written, oral and practical examinations in all the subjects a student has studied. These are marked by an examinations board. In calculating a student's final *baccalauréat* result from the marks from their examinations, the examinations board may consider a student's yearly average results from teacher assessment in subject tests completed throughout the three years of upper secondary education, alongside their examination performance. Students following a professional *baccalauréat* pathway take examinations in seven subject areas. All *baccalauréat* results are expressed as marks out of 20; a score of 10 or more is a pass.

Students following a vocational aptitude certificate (CAP) upper secondary route, which they usually complete at the end of Year 11, age 17, take a maximum of seven examinations. The examinations board calculates a first average mark based on a student's marks in their general subjects, and a second average mark based on their marks in their specialist subjects. Students must achieve a mark of 10/20 for both of these averages to pass the CAP. Some successful *baccalauréat* students move on to study higher technical or professional qualifications, rather than entering university. Others do not enter university immediately, but enrol in a preparatory class before seeking entry to a *grande école* (a highly-selective higher education institution).

Flexibility and transfer options: Students can complete their upper secondary qualifications in one of various forms of *lycée* (upper secondary school) or, if they are following a vocational/professional route, in an apprenticeship centre. Students interested in transferring to another upper secondary pathway, route or institution, can attend classes in this different route to test them out, and may transfer in the middle or at the end of an academic year. Permitted transfers include Year 10 students switching between a vocational pathway and a general or technological pathway; Year 11 students enrolled in a general or technological pathway to a different route within one of these pathways, or transferring from a general pathway to a technological pathway (and vice versa); and students enrolled in a vocational aptitude certificate (CAP) (and vice versa).

References:

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The detailed country table for France is available here.

Summary of upper secondary education: Ireland

Aim and purpose: Upper secondary education aims to produce individuals who are resourceful. confident. engaged and active learners. Programmes in this phase emphasise the preparation of students for further education or training, for employment and for their role as participative, enterprising citizens, through the development of selfdirected learning and independent thought and



a spirit of inquiry, critical thinking, problem-solving, self-reliance, initiative and enterprise. The Action Plan for Education 2016-2019 (DES, 2016) and the Action Plan for Education 2017 (DES, 2017) focus on increasing subject choice for upper secondary students important for student motivation and engagement and to equip them with the skills and knowledge to participate in a changing world; ensuring that curriculum development responds to the changing needs of learners, society and the economy; improving transitions to the next stages of students' lives; creating a greater diversity of learning opportunities beyond school, e.g. by strengthening apprenticeships and traineeships as alternative pathways for some learners; enhancing support for learners to make informed career choices; and creating a focus on entrepreneurship, creativity and innovation to develop the national skills base and meet the challenges of growth in the modern world.

Structure: Young people are required to be in education from ages 6 to 16. In practice, the norm is to start school at age 5. Students in senior cycle (upper secondary) education are aged 15 to 17/18.

Pathways/programmes in upper secondary education: Students in senior cycle are following a Transition Year (TY) programme, a Leaving Certificate (Established) programme, a Leaving Certificate Vocational Programme (LCVP), or the Leaving Certificate Applied (LCA). Around two-thirds follow an optional one-year TY programme at age 15-16. This acts as a 'bridge' between the lower and upper secondary phases and offers a varied programme, including work experience, over the course of a year that is free from formal examinations. On completion of TY, or immediately on completion of lower secondary (junior cycle) education should they not be following a TY, students embark on a two-year Leaving Certificate (Established), LCVP or LCA. The Leaving Certificate (Established) offers a broad and balanced education and some specialisation towards a student's future

career. The LCVP focuses on technical and vocational Leaving Certificate subjects. Through a cross-curricular programme, the Leaving Certificate Applied (LCA) is intended for those students whose needs, aptitudes and learning styles are not adequately catered for by the other Leaving Certificate programmes. Students who have followed the Leaving Certificate (Established) or the LCVP receive the Leaving Certificate which is required for entry to higher education (HE). The LCA does not grant access to HE. Students, in consultation with their parents/carers, teachers and guidance counsellors, decide on their senior cycle pathway towards the end of junior cycle education. In making this decision, they consider their abilities/interests; the type of learner they are; the style of examination they are most suited to; and their after-school goals. They may be limited in their options by their school not offering the TY or LCVP.

Curriculum within pathways: TY programmes are developed by individual schools. They include the continued study of core subjects; the opportunity to sample new subjects; and involvement in activities including work experience, outdoor pursuits and social outreach initiatives. The Leaving Certificate (Established) is available in more than 30 subjects covering languages, mathematics and sciences, the arts, applied/business subjects, humanities, technology, and politics and society. Students must take at least five subjects. Students following the LCVP select at least two vocational/technical Leaving Certificate subjects in their five subjects, and complete two link modules—'preparation for the world of work' and 'enterprise education'. The LCA is modular (44 modules) and credit-based (200 credits). Modules are available in three curriculum areas—vocational preparation, general education, and vocational education. Students on all Leaving Certificate programmes and in the TY follow courses of physical education (PE) and social, personal and health education (SPHE). Irish must be included among a student's selected subjects for the Leaving Certificate (Established) and the LCVP. In the LCA, all students must complete modules in Irish, English and communication, mathematical applications, and IT. A modern European language is compulsory in the LCVP and LCA. The five key skills of information processing, being personally effective, communicating, critical and creative thinking, and working with others are being embedded within the learning outcomes for each Leaving Certificate subject.

Inclusion: The Action Plan for Education 2016-2019 (DES, 2016) has a focus on improving educational outcomes for learners at risk of educational disadvantage and those with special educational needs (SEN). Schools catering for socio-economically disadvantaged students receive additional funding and priority access to support to help mitigate educational disadvantage. Schools also provide language and learning support for 'newcomer pupils' for whom English is a second language. Legislation requires that, where possible, those with SEN and disabilities are educated in an inclusive environment with those who don't have such needs. As a result, students may be placed in integrated settings in mainstream classes; in special classes attached to mainstream schools; or in special schools, depending on their degree of need. They may access the mainstream curriculum and examinations; for some, through the provision of 'reasonable accommodations' such as assistive technology, readers or scribes.

Assessment and reporting: The TY is assessed on an ongoing basis through oral, aural, practical and written activities and projects. Schools develop their own TY certificate, usually graded at 'distinction', 'merit' or 'pass'. National Leaving Certificate examinations, developed, operated and marked externally by the State Examinations Commission (SEC) mark the end of Leaving Certificate (Established) programmes and the LCVP. Practical examinations and coursework are included in the assessment for some subjects and for the LCVP link modules. Credits for the LCA are awarded for the satisfactory completion of modules and 90% attendance; for performance in seven student tasks; and for performance in seven written, terminal examinations. Students who acquire less than 120 credits, or who leave the programme early, receive a 'record of experience'. Although the Leaving Certificate—gained through Leaving Certificate (Established) programmes and the LCVP—is required for entry to HE, it does not grant automatic access. Places are usually allocated in order of merit on the basis of points achieved in the Leaving Certificate examinations, and individual institutions set minimum course entry requirements—known as basic matriculation requirements.

Flexibility and transfer options: Students cannot normally transfer from one Leaving Certificate programme to another. An alternative HE entry system—the Disability Access Route to Education (DARE)—enables some school leavers with a disability to access university places with a reduced points score compared to that of other students. Early school leavers (unemployed young people aged 16-20 who have no qualifications or vocational training) may follow a two-year Youthreach programme of integrated education, training and work experience, or one of a range of foundation and progression courses, with a view to them moving on to further education and employment. Students not opting for a TY or Leaving Certificate programme may also follow an apprenticeship or a national traineeship programme. These are employer-led occupational skills development programmes combining formal (off-the-job) training and workplace (on-the-job) coaching.

References:

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The detailed country table for Ireland is available on here.

Summary of upper secondary education: Netherlands

Aim and purpose: The tweede fase routes (VWO and HAVO), which prepare students for university and higher professional education respectively, aim to help learners to develop their talents within a study pathway which is appropriate to their knowledge and skills, and so be prepared for full participation in society and for employment. The upper secondary vocational pathway (MBO), which



provides both theoretical instruction and practical training in preparation for the practice of a wide range of occupations, aims to further the personal development and general education of students, helping them to play an active part in society. *Onderwijs2032* (Education2032) is the ongoing national debate on education focusing on the skills and knowledge students need to acquire to be prepared for the future. Proposals from students, parents, teachers, schools, teachers' unions, and industry have identified important key skills areas as ICT, problem-solving skills, critical thinking, social skills, and citizenship.

Structure: Secondary education begins at age 12 and the upper secondary phase at age 15+. Although compulsory education runs from ages 5-16, young people are required to remain in education until they obtain a 'basic qualification' for entry into employment, at age 17/18+.

Pathways/programmes in upper secondary education: Students obtain this basic qualification by following one of three main pathways in upper secondary education. Students aged 15-18 can follow the VWO pathway which prepares them for the VWO certificate and university education; those aged 15-17 can follow a HAVO route preparing them for the HAVO certificate and higher professional education; and those aged 16+ who have followed a lower secondary vocational (VMBO) pathway can follow an upper secondary vocational MBO pathway available at a range of Levels (1-4), Level 2 of which is the basic qualification required. This prepares students to be able to take on operational level work in employment or to progress to further vocational education.

Curriculum within pathways: The curriculum is determined by a student's chosen pathway. Those on VWO or HAVO programmes choose one of four subject 'clusters'

(nature and technology; nature and health; economy and society; culture and society) for which they study a range of core subjects (these vary dependent on whether the programme is a VWO or HAVO programme). They also study subjects which are unique to each cluster and can choose optional subjects from a range offered by their school. Students enrolled in an MBO (upper secondary vocational) route follow courses related to one of three subject areas—business; engineering and technology; and personal and social services and health care—for which the curriculum is determined by the level of their course and the competence-based qualifications they are working towards. MBO routes contain core curriculum elements including the study of general subjects such as literacy, numeracy, citizenship and career management skills; the study of core vocational subjects which are common to all students specialising in a particular industry or area: gualification-specific subjects at different levels, depending on the level of the MBO course; and optional modules, which form 15% of a student's learning hours. These optional modules number more than 400, giving educational institutions the freedom to provide students with the skills and knowledge needed to succeed in the labour market in their area. All MBO routes include practical training, which forms 20-60% of a student's study time when they choose to study through a school, and more than 60% of a student's study time when they study through an employer.

Inclusion: Upper secondary students who are at risk of dropping out without achieving a basic qualification for employment/school leaving are provided with a tailored education programme. This may be provided in another (different) school or in an adult vocational training college. Students identified, at age 12, as being at risk of not achieving the minimum qualification requirements for school leaving on completion of upper secondary education can enrol in a practical training programme for 12- to 18-year-olds. This offers hands-on experience in preparation for the world of work. Depending on the practical training programme they are enrolled in, on completion, students may go straight into employment or continue with further study on an upper secondary vocational MBO programme. Dutch language support is available for secondary school students who require it, regardless of whether they have recently arrived in the country. Students with additional learning needs are, as far as possible, integrated within the mainstream system. Where schools determine that they are not able to adequately provide for an individual student's special educational needs, learners are placed on one of three pathways in special schools, focused either on life skills, labour market preparation, or further education. Where possible, students follow the curriculum offered in mainstream pathways and those enrolled in the further education pathway work towards a school leaving certificate (a VWO or HAVO certificate, or a lower secondary vocational [VMBO] certificate).

Assessment and reporting in upper secondary education: Assessment for the VWO or HAVO certificate includes school-based and central/national examinations in a number of subjects. Schools submit their examinations for review by the Education Inspectorate before they are permitted for use. The subjects in which students take examinations vary depending on the subject cluster in which they are enrolled, but all take examinations in Dutch, English and mathematics. A student's final grade for each subject is calculated using the average of marks from the central and school examinations, with both given equal weight. Students with an average of 6 out of 10 or more in a specified number of

subjects (depending on the subject cluster) are considered to have achieved the certificate. There is school-level and national reporting of aggregated student results. Depending on the specific MBO route on which they are enrolled, students take competence-based examinations at the end of Year 11, 12, 13 and/or 14 (ages 17-20). These are designed by the educational institution they are attending to meet national quality standards. Recent discussions on the quality of MBO education have included proposals to introduce compulsory national examinations in Dutch and mathematics; to give the business community a more significant role in the design of MBO examinations; and to standardise the examinations. For admission to courses in science and research universities, students require a VWO certificate (or completion of one year of (post-MBO) higher vocational education). Courses in higher professional education institutions require a VWO or HAVO certificate or an MBO Level 4. Universities and higher professional education institutions may also require prospective students to have studied specific subjects. Admission to courses in highly popular university subjects may depend on a student having achieved a higher average mark in their upper secondary examinations than other course applicants.

Inclusion: Flexibility and transfer options: Upper secondary students can transfer routes at certain points. Those who have successfully completed a lower secondary vocational VMBO programme, for example, may transfer to the upper secondary HAVO (higher professional education) route (one in five students do this), and students who have successfully completed the lower secondary HAVO route may transfer to the pre-university VWO pathway. Students at risk of dropping out of education without achieving the basic school leaving requirements may transfer to a different school or study in an adult vocational training college.

The detailed country table for the Netherlands is available on here.

Summary of upper secondary education: New Zealand

Aim and purpose:

Ambitious for New Zealand (New Zealand Government, MoE, 2016) sets out what the government intends to do in 2016-2020 to achieve its overall aims of creating an education system that ensures better life choices and outcomes for New Zealanders; equips them to thrive in the rapidly developing global environment; and enables everyone to succeed and so create a flourishing



society and a strong economy. For senior secondary students (ages 15-18), the focus is on improving student-centred pathways; better 'tailoring' education so that it is responsive to the diverse needs of students; and offering relevant pathways through the education system into the workplace and society. The government regards the achievement of a senior secondary National Certificate of Educational Achievement (NCEA) Level 2 qualification as an important benchmark of success in enabling New Zealanders to reach their potential and contribute to the economy and society. This qualification is looked for by employers and for entry to many programmes of further education, and it is a target in the Delivering Better Public Services (BPS) programme that 85% of 18-year-olds should have NCEA Level 2 (or equivalent) in 2017. Specific strategies to support Māori and Pasifika (indigenous) students and to offer more varied, flexible, tailored and engaging pathways towards achievement of the NCEA (e.g. through the Youth Guarantee programme [New Zealand Government, MoE, 2017a]) are responding to a lower than the OECD average enrolment rate in senior secondary education; large performance and completion gaps for students from disadvantaged socio-economic backgrounds; and lower outcomes for indigenous students who are less likely to complete upper secondary education.

Structure: Secondary education in New Zealand is from Year 9 to Year 13, ages 13-18. Upper secondary provision is the final three years of education, Years 11-13, ages 15-18, but education is compulsory until completion of Year 11 (age 16) only.

Pathways/programmes in upper secondary education: Upper secondary pathways are intended to lead to the credit-based NCEA qualification which is targeted at all students, whether they are hoping to go to university, follow a course of further education, are planning to do an apprenticeship, or are intending to enter employment directly. It is available at Levels 1, 2 and 3 of the New Zealand Qualifications Framework and most

secondary students follow NCEA Level 1 courses in Year 11 (aged 15-16; the last year of compulsory education), progressing to Level 2 in Year 12, and Level 3 in Year 13 (aged 17-18). The NCEA recognises learning in academic and vocational/practical subjects and some students follow specific 'Vocational Pathways' (New Zealand Government, MoE, 2017b) leading to the Level 2 NCEA qualification in one of six industry areas. In 2015, almost 30% of school leavers achieved NCEA Level 2 with one or more Vocational Pathway Awards. Students are advised to consider the courses/subjects they want to study for the NCEA as early as possible during secondary education and to take a broad range of subjects at Level 1 (Year 11), tailoring the subject areas studied for Level 2 and 3 qualifications to suit their intended future pathway. University Entrance (UE) is the minimum requirement for entry to higher education (HE) and is achieved through an NCEA Level 3 qualification, which must include success in three 'approved subjects' studied at NCEA Level 3, and minimum literacy and numeracy requirements.

Curriculum within pathways: The senior secondary curriculum is determined by a student's choice of academic/vocational courses for the NCEA. At each of the three levels, students must achieve 80 credits, which can come from either or both of achievement standards (based on the New Zealand Curriculum, NZC) or unit standards (competency-based standards that usually assess vocational skills). Ten of the 80 credits must come from literacy standards, and a further ten from completed numeracy standards. All credit-bearing courses are recognised by the New Zealand Qualifications Authority (NZQA) and one credit usually represents ten hours of learning (teaching time, homework and assessment time). A typical course generates between 18 and 24 credits.

Although there are no specific NZC subject requirements for students in Years 11-13, all schools are expected to align their upper secondary curriculum with the intent of the NZC framework and, in doing so, to pay attention to student wellbeing, as reflected in the health and physical education learning area of the NZC; the government's Youth Mental Health Project, which seeks to improve mental health outcomes for young people aged 12 to 19 years; and the resource *Wellbeing for Success* (ERO, 2016) which aims to assist schools in evaluating and improving student wellbeing.

Inclusion: The Ministry of Education's policy statement on inclusion (New Zealand Government, MoE, n.d.) establishes that all schools should demonstrate inclusive practices, supporting those with special educational needs through class-wide and school-wide strategies, and inclusion is one of the eight principles of the NZC framework. This states that the curriculum developed by schools should be non-sexist, non-racist, and non-discriminatory, and ensure that students' identities, languages, abilities and talents are recognised and affirmed, and their learning needs addressed. The principle applies to all students, including those with special educational needs (SEN), Māori and Pasifika students, and gifted students. The NCEA is also designed to be flexible for students choice in 'component' courses, so that they can tailor their NCEA to their needs and abilities. Young people with 'high need' SEN are advised to develop an Individual Transition Plan at age 14, and a portfolio of their skills to ensure a successful post-school transition.

Assessment and reporting in upper secondary education: Assessment for the NCEA is based on student achievement in a range of unit or achievement standards which assess their knowledge and skills within a given subject. Each standard is worth a specific number of credits and assessment is both internal and external. Internal assessments are moderated by the NZQA which is also responsible for the national NCEA examinations— the external assessments. Marks for achievement standards are usually graded on a four-point scale—'Not Achieved', 'Achieved', 'Merit' and 'Excellence', and students are encouraged to focus on the quality of their 80 credits as universities look for Merit and Excellence endorsements when selecting students. Results are recorded in NCEA certificates and in the School Results Summary (SRS). This lists all standards for which students have been assessed; groups results by year, course and level; and shows any national qualifications and endorsements or UE results achieved. Students also receive a Record of Achievement (ROA). This official transcript of standards and qualifications throughout their life.

Flexibility and transfer options: The credit-based NCEA aims to allow students to tailor their upper secondary pathway to their interests and aptitudes, and to support their future goals, by recognising a broad variety of academic and vocational learning, at a range of levels, and which can be achieved in a range of learning environments (e.g. schools, tertiary providers, partnerships between schools and the workplace). Students do not have to complete NCEA qualifications at a given level within a single school/academic year (although many do). They can accumulate credits over a number of years and can continue to earn credits towards NCEA qualifications through tertiary study or workplace learning when they have left school.

References:

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The detailed country table for New Zealand is available on here.

Summary of upper secondary education: Ontario (Canada)

Aim and purpose:

Secondary education aims to 'provide all students with the fundamental knowledge and skills they will need in any area of endeavour as well as the opportunity to specialize in and/or explore areas related to their postsecondary goals and personal interests. [It] ...prepares them in senior grades for their postsecondary destinations, including apprenticeship training,



college, community living, university, or the workplace' (Ontario Ministry of Education, 2016). Changes introduced to secondary education—offering more flexibility in course options/pathways; more experiential learning; and providing more one-to-one support—are intended to enable students to 'customise their learning' and, as a result, help more students to graduate. The government's goal is for 85% of students to graduate from high school within five years of beginning their course. *Achieving Excellence*—the vision for education (Government of Ontario, 2014) aims also for those leaving high school to be prepared for a competitive, globally-connected and technologically-engaged world, and for every learner to have the knowledge and skills to be successful, economically productive and an actively-engaged citizen.

Structure: Secondary education in Ontario is provided in Grades 9-12 of compulsory education for students aged 14-18. The senior secondary years are Grades 11 and 12, for students aged 16-18.

Pathways/programmes in upper secondary education: Students generally follow a programme leading to the Ontario Secondary School Diploma (OSSD), but the pathway they follow and the specific courses they take vary depending on student choice. In Grades 11 and 12, students follow one of five types of courses—college preparation; university preparation; university/college preparation; workplace preparation; or open courses. There are also opportunities for learning experiences beyond the school to contribute credits towards the OSSD. These include the Dual Credit Program, which allows high school students to take college or apprenticeship courses that count towards their OSSD and a post-secondary certificate, diploma or degree, or a Certificate of Apprenticeship; co-operative education programmes (co-op programmes) that allow students to earn OSSD credits while completing a work placement in the community; Ontario Youth

Apprenticeship Program (OYAP) courses for young people who have completed 16 credits towards the OSSD and are enrolled as full-time OSSD students; and Specialist High Skills Major (SHSM) Programs that allow students to acquire career-focused technical knowledge and skills in specific economic sectors while meeting the requirements of the OSSD. All students have an Individual Pathways Plan (IPP) which records their goals and learning and is their main planning tool.

Curriculum within pathways: The curriculum is determined by the requirements of the OSSD. To graduate, students need a minimum of 30 credits—18 of which are compulsory (e.g. in subjects such as English, mathematics, science, health and physical education, career studies, or civics). They are also required to pass the Ontario Secondary School Literacy Test (OSSLT) and so meet the secondary school literacy requirement; and must complete 40 hours of community involvement activities. The remaining 12 optional credits, some of which can come from Dual Credit Programs, co-op programmes, or the OYAP, may also come from a student's choice of locally-developed courses; developed by the school board for students in a particular school or region, which usually include specific local career preparation needs. The curriculum for Grade 11 to 12 students following the SHSM Program includes a defined package of credits; certification and training within the sector of study; experiential learning and career exploration activities; 'reach-ahead' experiences connected to the student's post-secondary plans; and essential skills and work habits. Skills and competences are embedded in the curriculum for all subjects/courses and curriculum documents set out the required knowledge and understanding in the particular subject area, along with the thinking, communication, and application skills to be acquired. Individual subject curriculum documents also include expectations to make links with financial literacy; numeracy; literacy, critical literacy and inquiry skills; information and communications technology; and education/career planning. Wellbeing is one of the goals of Achieving Excellence. The aim is for students to build the knowledge and skills to become healthy, active and engaged citizens.

Inclusion: Schools are required to provide academic support and engaging programmes for all students including those at risk of lower achievement; young people in care; and the indigenous population, and to improve achievement gaps. They are also required to intervene in a timely and effective way to identify and support young people with special educational needs. Students whose special educational needs are formally recorded in an Individual Education Plan (IEP) are known as 'exceptional students'. Where possible, their needs are met in mainstream education and they must have a fair and equal opportunity to complete the OSSD. As French is an official language, students may receive their upper secondary education in French-language schools, which have a mandate to protect the French language and culture. Schools also make special provisions for English language learners, who do not speak English as their first language, through, for example, special classes. Assessment and reporting in upper secondary education: Students receive one credit towards their OSSD when they receive marks of over 50% for courses that have been scheduled for a minimum of 110 hours. The final grade for each course is based 70% on evaluations conducted throughout the course; 30% on the basis of a final assessment in the form of an examination or other method of assessment suitable to course content. Students must also take the OSSLT—an externally set and marked test of the literacy expectations up

until the end of Grade 9. Students meeting the OSSD requirements receive the diploma. Those aged 18 who have at least 14 credits can leave school with an Ontario Secondary School Certificate (OSSC). Those who don't meet the requirements of either the OSSD or OSSC may be granted a Certificate of Accomplishment, which records their achievement for employers and training providers. Although the OSSD is the minimum requirement for university admission, individual institutions have their own entry requirements in addition, such as student success at certain grades in specified OSSD courses, interviews, or portfolio submission.

Flexibility and transfer options: The principle behind the organisation of secondary education and the various pathways which can offer credit towards high school graduation is that options for students remain flexible, so that they can shift between pathways/ programmes should their goals change. Schools are expected to make provision to allow students to make such changes of direction. They must also allow students who have not met the credit requirements of a course two years to pursue 'credit recovery programmes'; provide students who have failed the OSSD literacy requirement with alternative opportunities to meet this; recognise students' prior learning (knowledge and skills gained in formal or informal ways outside Ontario secondary school) as credits towards the OSSD; and provide specialist programmes for students intending to go directly into the workforce. Although students normally complete the OSSD in four years, they also have the flexibility to gain the diploma sooner (taking more credits in earlier years of high school) or to extend their studies to five years. Adults who have not completed their high school diploma can gain credits towards completion while in employment through adult co-operative education programmes.

References:

Ontario Ministry of Education. (2016). *Ontario schools kindergarten to grade 12: Policy and program requirements* [online]. Available: http://www.edu.gov.on.ca/eng/document/policy/os/onschools_2016e.pdf [2 June, 2017].

Government of Ontario. (2014). Achieving excellence: A renewed vision for Ontario [online]. Available: http://www.edu.gov.on.ca/eng/about/renewedVision.pdf [5 June, 2017].

The detailed country table for Ontario is available on here.

Summary of upper secondary education: Queensland (Australia)

Aim and purpose: The education action plan for Queensland (Advancing Education [DET, 2017a]) focuses on positioning schools to support senior secondary students so that they develop the knowledge, skills and qualities for the jobs of the future. It seeks to strengthen the available pathways, expand the number of vocational education and training (VET) options, and



ensure that students have the opportunity to complete Year 12 (age 18) and achieve the Queensland Certificate of Education (QCE) as the stepping stone to enhanced employment prospects and future opportunities. Introduced in 2008 as the new senior secondary leaving qualification, the QCE began the process of generating a stronger link between school and career. It reflected a heightened focus on tailored, more flexible pathways and placed greater value on VET for students in senior secondary school. Under the plan, senior secondary assessment will change in 2019/20, along with the system of entry to tertiary/higher education (HE), but the QCE will remain the key Year 12 qualification.

Structure: Secondary education in Queensland is from Year 8 to Year 12, ages 13-18. Upper secondary provision is the final two years of education: Years 11 and 12, ages 16-18. Education is compulsory until completion of Year 10 (age 16) and then, unless they are in full-time work, young people are required to participate in education and training until they have completed Year 12/the QCE, gained a vocational qualification, or turned 17.

Pathways/programmes in upper secondary education: Decisions on pathways for Year 11 and 12 are taken in Year 10 when students, with their teachers and parents, develop a Senior Education and Training (SET) plan. A range of senior secondary pathways is available: the intention is that these are responsive to individual needs and so enable young people to complete Year 12/the QCE. The study of general/academic subjects in school; VET qualifications in school; VET qualifications in institutions of technical and further education; school-based apprenticeships and traineeships; university subjects in school; the International Baccalaureate (IB) Diploma; an employment skills development programme; or workplace and community learning can all contribute credits towards the successful completion of the QCE. Achievement of the QCE alone does not grant entry

to HE; young people wishing to go on to HE need to also obtain an Overall Position (OP) ranking. Around half of young people completing the QCE obtain an OP ranking.

Curriculum within pathways: The senior secondary curriculum is determined by a student's choice of subjects for the QCE. Although a range of subjects, courses and qualifications can contribute towards the award of the QCE, students must achieve 20 credits at a set 'pass' grade. Twelve of the 20 credits must come from completed 'core' courses of study; the remaining eight can come from a combination of core, 'preparatory', 'enrichment' or 'advanced' courses. Students must also achieve minimum literacy and numeracy requirements by successfully completing one of a range of literacy and numeracy qualifications. All credit-bearing courses must be recognised by the Queensland Curriculum and Assessment Authority (QCAA) and one credit is generally equivalent to one semester of study or 55 hours' minimum timetabled school time.

In accordance with the *P-12 Curriculum, Assessment and Reporting Framework* (DET, 2017b), all Year 11 and 12 students must receive a programme of learning that enables them to achieve a Senior Education Profile (SEP) (see below) and provides them with health and wellbeing education as part of the school's pastoral care programme.

Inclusion: The aim in Queensland is to ensure that 'inclusive education practices are embedded in all state schools policies and initiatives' (DET, 2016). Schools must ensure that students with special educational needs and disabilities can, where possible, participate in education and training on the same basis as students without a disability. Some students in senior secondary education, who have impairments or difficulties in learning that are not primarily due to socio-economic, cultural or linguistic factors, also follow individual learning programmes leading to the Queensland Certificate of Individual Achievement (QCIA) (rather than the QCE) on completion of Year 12. The QCIA is an official record that students have completed at least 12 years of education. It provides a summary of their skills and knowledge that they can present to employers and training providers.

Assessment and reporting in upper secondary education: Every student completing Year 12 receives a Senior Education Profile (SEP) from the QCAA. This contains a Senior Statement confirming that they have completed Year 12, and providing a transcript of the learning they have undertaken, which might include a QCE, QCIA or an IB Diploma. The SEP for students who have successfully completed the QCE and achieved an Overall Position (OP) ranking for admission to HE also contains a Tertiary Entrance Statement (TES). This provides information recognised by HE providers in other Australian states and territories and internationally, and that may be required to enrol in HE outside Queensland.

Assessment for the QCE is currently school-based. Senior secondary teachers design, develop and administer assessments based on broad subject syllabus requirements, and external moderation ensures that students are treated fairly and that achievement standards are comparable across all schools for all students. For students wishing to gain an OP ranking for HE entry, teachers calculate subject achievement indicators (SAIs)—scores from a student's results in his/her best five subjects. In addition, students seeking an OP ranking take the Queensland Core Skills (QCS) test, which is set and marked by

the QCAA. The marks from this test of generic skills combine with the SAIs towards the calculation of an individual's OP ranking by the QCAA. New senior secondary assessment and HE entry systems begin for students completing Year 12 in December 2020 (the school year begins in late January). They include updated QCE subject syllabuses to reflect the knowledge and skills required for further study and employment in the 21st century; a new QCE assessment model that introduces external assessment alongside the school-based system; and replacement of the OP HE ranking with an Australian Tertiary Admission Rank (ATAR) (used in all other Australian states and territories).

Flexibility and transfer options: The credit-based QCE aims to offer flexibility and allow students to tailor their senior pathway to suit their interests and support their future goals by recognising a broad range of learning in a range of learning environments. A student's Senior Education and Training Plan (SET) is kept under regular review to ensure that the subjects and learning included remain right for the student's intended individual pathway/career after Year 12. Planned courses of study/qualifications can change during the four semesters that comprise Years 11 and 12, with the approval of the student's school or learning provider. Students who do not achieve a QCE at the end of Year 12 can also continue to work towards one for up to seven years after leaving school through the completion of additional learning, such as VET courses, traineeships or recognised workplace programmes, and QCE credits remain live for up to nine years.

References:

Queensland Government. Department of Education and Training (DET). (2016). *Inclusive education policy statement* [online]. Available: http://education.qld.gov.au/schools/inclusive/ index.html [11 April, 2017].

Queensland Government. Department of Education and Training (DET). (2017a). Advancing education: An action plan for education in Queensland [online]. Available: http://advancingeducation.qld.gov.au/Pages/default.aspx [19 April, 2017].

Queensland Government. Department of Education and Training (DET). (2017b). *P-12 curriculum, assessment and reporting framework* [online]. Available: http://education.qld.gov. au/curriculum/framework/p-12/docs/p-12-carf-requirements.pdf [11 April, 2017].

The detailed country table for Queensland is available here.

Summary of upper secondary education: Sweden

Aim and purpose: The Skollagen (Education Act) (Swedish Parliament, 2010) determines that upper secondary education in Sweden should build on the knowledge that students have acquired during compulsory education, providing them with a solid foundation for their professional life and further studies, and with opportunities for personal development and active participation in society.



The Education Act introduced some changes to upper secondary education, with the overall aim of ensuring that students leaving this phase are well-prepared for progression to work, further study or higher education. It strengthened entry requirements for some upper secondary programmes, with a view to ensuring that fewer students drop out of their selected programme and are able to complete upper secondary education within three years. It improved programme quality and equily, with a view to ensuring that all programmes are of equally high quality and equally valued by students/parents; and it strengthened programmes of study and steering documents.

Structure: Upper secondary provision is the final three years of education, Years 10-12, ages 16-19. Compulsory education is from ages 7 to 16 (Years 1-9) and provided in the 'all-through basic school'.

Pathways/programmes in upper secondary education: Decisions on pathways for Years 10-12 are taken in Year 9, the final year of compulsory education, when pupils consult with their teachers and trained guidance counsellors. A range of upper secondary programmes is available from which students select one. These include 18 national programmes (12 vocational; six preparatory programmes for higher education); five introductory programmes, for those students not eligible for a national programme and which enable them to progress to a national programme or to work; and special variations of the national programmes or apprenticeships. Students must achieve minimum grades in certain subjects at the end of compulsory education (16) for entry to the national programmes. Successful completion of one of the national programmes including, as a minimum, pass grades in specified courses in Swedish, English, mathematics and the diploma project grants the upper secondary diploma with basic eligibility for higher education (HE). Where HE courses are oversubscribed, universities may select some students based on their 'merit rating' (determined by their upper secondary grades), or

on the basis of the (optional for students) Swedish Aptitude Test for university entry, a standardised test in literacy (Swedish and English) and numeracy.

Curriculum within pathways: The senior secondary curriculum is determined by a student's choice of programme. For those on one of the 18 national programmes, 'diploma goals' provide the foundation for teaching and learning in each programme, and are supported by subject syllabuses. The diploma goals for all national programmes emphasise entrepreneurship skills (e.g. taking initiative, seeing opportunities, being creative and solving problems) and language/literacy development (Swedish and English). All national programmes also share the same eight core compulsory subjects ('foundation subjects'), which students study to varying degrees depending on their specific programme. Courses also include programme-specific subjects (common to all students on the same programme); 'orientations' (which generally begin in the second or third year of the three-year programme and allow students to specialise); programme specialisations, which complement and are more in-depth than programme-specific subjects; an individual option; and a diploma project. Work-based learning is also a core component of national vocational programmes. The curriculum for the five introductory programmes is determined by the programme aims and by each student's individual learning plan, which is tailored to their needs and interests.

Inclusion: Education in Sweden aims to take into account the needs of all students, supporting them to achieve their individual potential, and ensuring that, where there are differences in ability, all efforts are made to ensure that every student can benefit from their education. The range of programmes available in upper secondary education aims to enable all students to follow a pathway that meets their individual needs, and most students with special educational needs participate in mainstream upper secondary education. Where students have particular needs, schools can draw up special support programmes. In general, it is intended that these should enable students to achieve an upper secondary diploma and be related to a national programme, but programmes may deviate from these requirements. Able students can also follow an 'extended programme', while students who face difficulties with their studies as a whole can study a 'reduced programme' (which doesn't lead to an upper secondary diploma). In addition, one of the five upper secondary introductory programmes is specifically aimed at students whose mother tongue is not Swedish.

Assessment and reporting in upper secondary education: Assessment is linked to student achievement in their chosen programme. Each course component of a programme of study is assigned a certain number of credits, according to the scope of the work and number of teaching hours across the three years of upper secondary education. Students enrolled in higher education preparatory programmes and in national vocational programmes study courses amounting to 2500 credits in total, and to achieve a diploma providing basic eligibility for higher education or a vocational diploma, must achieve 'pass' grades in courses amounting to 2250 credits. They take externally-set compulsory national tests in English, mathematics, and Swedish; the number of which varies depending on their specific programme. The tests are administered once every semester and marked by a student's teacher, who combines the results with the student's results from continuous teacher assessment throughout the course to produce an overall assessment

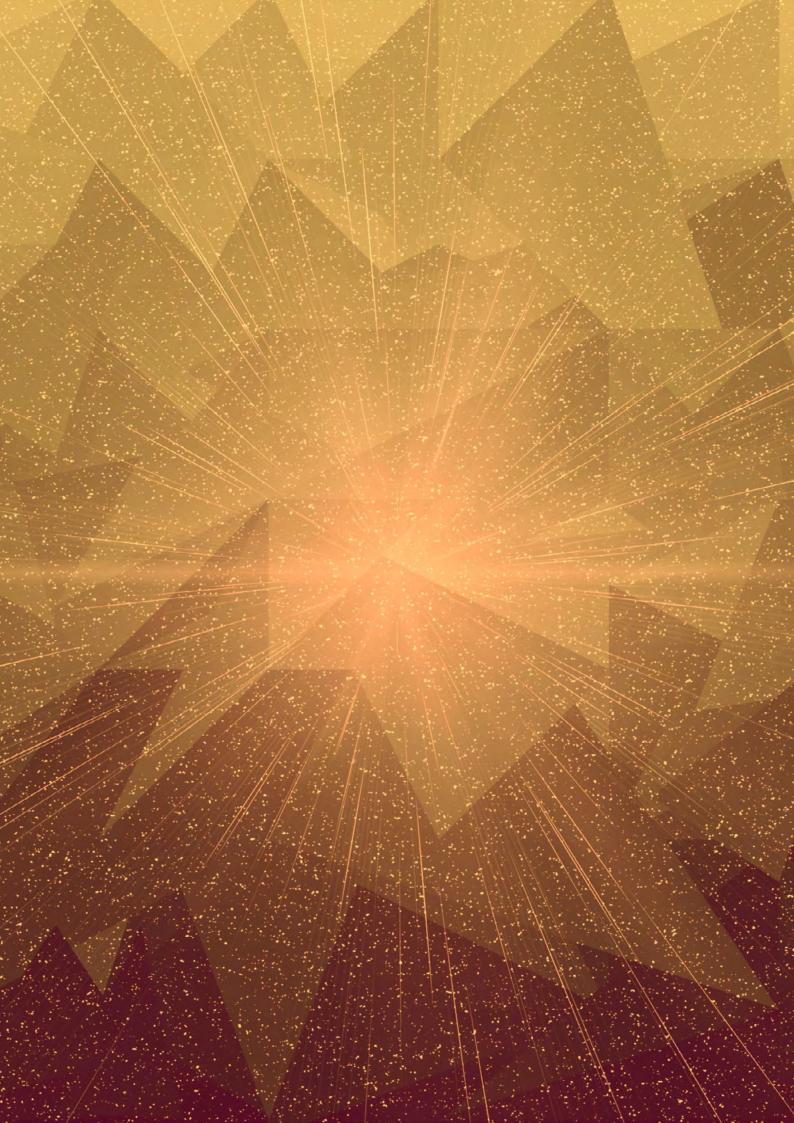
of a student's knowledge, and to determine individual student grades for each course. All students completing upper secondary education receive a school leaving certificate. Students who complete their upper secondary national programme with the required pass grades and credits for eligibility for HE receive the upper secondary diploma with basic eligibility for HE. Students on national vocational programmes who successfully complete the programme, but who do not achieve the pass grades in those subjects required for eligibility for HE, receive the vocational programme diploma.

Flexibility and transfer options: Although national programmes are the norm in upper secondary education, a degree of flexibility is inherent in a system in which students successfully completing an introductory programme can progress to a national programme; students enrolled in a national vocational programme can follow courses which enable them to achieve basic eligibility for higher education; students who are struggling can follow reduced or individually-tailored programmes with a view to enabling them to complete upper secondary education; and students at risk of dropping out from a national programme may transfer to an introductory programme which, by its nature, is tailored to their specific needs. In addition, students who are struggling to complete their upper secondary national programme may have their period of study extended beyond three years, and all students who have successfully completed compulsory education are entitled to enter a programme of upper secondary education up to and including the first half of the calendar year in which they turn 20.

References:

Swedish Parliament. (2010). *Skollag (The Education Act)* [online]. Available: http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/skollag-2010800_sfs-2010-800 [22 April, 2017].

The detailed country table for Sweden is available here.







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