

GELP New Metrics working group – March 2014 Progress Paper

Introduction

Our Problem of Practice

This working group started from a point of collective recognition that there are a set of competencies which are increasingly important in our connected and fast-moving societies. To a large extent, the conceptual work of identifying and defining this set has been done – with some variation across jurisdictions, but with substantial overlaps. As will be detailed later in this paper, a focus on this set of competencies entails:

- Greater emphasis on deeper learning and transferable skills such as critical thinking and creativity
- Greater emphasis on the intra- and inter- personal skills that manifest as grit, collaboration, and adaptability

The current focus of this working group arose from the sense that, across all our jurisdictions, this set of competencies are not sufficiently captured by the examinations, diplomas or graduation requirements which govern a student's experience of secondary school. Indeed, it feels like these transition points are key limiting factors on transformation - promoting shallow learning, directed at a few, narrow subject areas, and limiting the potential of new technologies and new thinking to enable a more varied, more relevant and more engaging education. Moreover, we feel that the transformation of systems can no longer progress without addressing this limiting factor: no matter how complex the problem, it can no longer be demarcated and set to one side. We have therefore set ourselves the challenge of rethinking the end point of formal educationⁱ. Within this, we are focussing on the practical task of responding to this question:

How can we move from the successful identification of key competencies to processes for assessing, reporting, certifying/credentialing and informing selection?

Outline of the Paper

In this paper we will:

- Give an overview of the current landscape and the view of the road ahead, based on responses to the survey
- Outline a draft 'case for change' in this instance the case for changing graduation requirements. This needs to be part of our final output to communicate to others why we feel this work is imperative why must we rethink the ends of formal schooling?
- Set out some key principles to consider in this process, and some sources of new thinking on the nature of certification. This might be a section we would work up into a set of design principles for next generation graduation and certification systems.
- Look in depth at two examples of countries trying to introduce a new set of high stakes qualifications, which nationally bear the functions of certification, reporting and selection, in order to draw learning about process of designing new assessment for certification.
- Set out our next steps as a group



The current situation: Feedback from the survey

Key methods of graduating students:

- Course credits
- Final year exams

Things of interest:

- Competency-based learning
- Moving on when ready
- Capstone projects
- Industry certification
- Early college high schools wipe out the transition and carry students straight through towards a career

Key concerns:

- Variation across states/districts in setting graduation requirements a barrier to swift,
 widespread change but also an opportunity to prototype
- The multiple players gaining agreement across multiple schools/districts/states and multiple tertiary providers a major challenge
- Lack of a clear vision or evidence that there are better ways to do things we may have the burning platform but not necessary anywhere to jump to

These key concerns have helped to shape our focus and starting point. In a complex landscape, we want to start at the points where there is concrete evidence of change – the teachers, schools and districts that are developing new forms of assessment. We then want to take these examples of assessment, along with our learning about the nature of certification, and build samples of new systems for certification or graduation. More detail of this process is included in the next steps at the end of this paper.

Section 1. Why must we rethink the end-of-school transition?

New thinking on the purpose of education

Globally, we are seeing a higher demand for more skilled workers, and more of them. This means that schools need to retain, engage and serve a broader range of students, and prepare them for a more complex world.

The key skills in this world will also be different. Rather than solid preparation for a single career, grit, creativity and entrepreneurship will be the capacities that mark out successful students in this century (In a recent IBM poll of 1,500 CEOs, creativity ranked first in a list of leadership competencies of the future). As youth unemployment in some countries continues to stagnate at record high level, many workers already have to create their own jobs or work harder to get them. Young people today already need to be more innovative and show more initiative than their predecessors.

Moving away from subjects as the key for a good education is a challenge for many countries. Maths, Science, English - maybe even Latin - have long been shorthands for a particular kind of schooling, one which parents covet and students are steered towards with the promise that it will give them 'options' in later life. Still, many politicians and education system leaders feel compelled



to frame 'rigor' in terms of a deeper drilling in these subjects, competing with other nations to set higher benchmarks which all students must reach.

Yet students today are finding that even a rigorous preparation in particular subjects can leave them stumbling when it comes to a job market, if it is not combined with a range of experience. Last year, nearly one in ten of the graduates from Oxford University - where students study a single subject for three years and in many cases do no collaborative work or work experience - were not in employment or further education six months later, and the university ranked 73rd in the U.K. in terms of its employment rate.

To overcome the bias towards 'traditional subjects' we need to call on new approaches to education that honour the place of 'disciplinary thinking' but offer different conceptions of key skills. Howard Gardner's "Five Minds for the future" or Tony Wagner's "seven survival skills", for example, illustrate how education can systematically develop necessary capabilities and place the various interdisciplinary and social challenges that arise in work and daily life in the 21st century at the heart of its agenda.

To clarify, this is not an argument against knowledge as the basis for a good education, nor for the removal of subjects from a curriculum, but a recognition that we are doing students a disservice if we pretend that to make space for the developmental experiences that are most important in *this* century we have to rethink some of our biases and balance the upholding of traditions with the protection of our common future.

So what are these new experiences and capabilities? Within GELP, we have talked them over many times, but a new report from the National Research Council in the USA is helpful in focussing on the aim of schooling as 'deeper learning'³. The report defines deeper learning as that which allows students to transfer skills between situations and to develop expertise. Further, the report identifies three 'competencies' which are developed across and through the knowledge of a discipline or subject:

- Cognitive, relating to reasoning and memory;
- Intrapersonal, relating to management of behaviour and emotion; and
- Interpersonal, relating to communication and understanding.
- The report also emphasized the positive impact that these competencies have on learners' adult lives.

¹ Gardner's five "minds" are a conception of the mindsets, dispositions and skills needed in order to achieve success in times of relentless change. The Disciplinary Mind comes with mastery of major schools of thought: science, mathematics, history, and a professional craft. The Synthesizing Mind can integrate different disciplines into a coherent whole and enables the communication of this synthesis. The Creating Mind brings a new perspective on problems and innovates solutions. The Respectful Mind has the awareness of and appreciation for differences among human beings. The Ethical Mind enables and pursues the fulfilment of one's responsibilities as a worker and as a citizen.

² Tony Wagner, also an Education professor at Harvard, constructed a list of "seven survival skills" for education in the 21st century based on the recommendations of business leaders. These emphasizes the ability to collaborate across networks; to lead by influence and example rather than authority; to adapt and be agile; show initiative and entrepreneurship; be skilled in written and oral communication and be disposed to curiosity and imagination.

³ National Research Council (2012). Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century



The shift to the language of competencies rather than content is helpful. Competencies focus on the way students are able to effectively use and apply knowledge and skills in the world. In the area of cognitive competencies, the OECD's PISA has played a major role in reconceptualising our understanding of cognitive skills – in reading, mathematics and science - as involving the ability to use and apply knowledge in 'real world' situations. And we are already seeing the evidence that this shift is warranted: longitudinal evidence in Canada and Australia shows that those students who do better at PISA at age 15 achieve improved education and work outcomes later in life⁴. As we continue to strengthen our metrics and assessment, we can look for and focus on those which offer similar promise of robust connection to real further education and employment outcomes.

This leads us back to our focus question:

How can we move from the successful identification of key competencies to processes for assessing, reporting, certifying/credentialing and informing selection?

Section 2. From assessment of competencies to redesigning graduation

In the introduction, we set out our task as one of moving from (a) identifying leading methods of assessing competencies and deeper learning, to (b) considering how these methods can be validly and reliably used for certification, reporting and selection. We therefore turn to consider: what are the requirements for next generation systems of student certification?

2.1. Design principles for a new certification or graduation system

The situation described above – a broader range of students to prepare, and tougher environment to prepare them for – necessitates that new certifications and their associated programs must be more relevant, more rigorous, and more inclusive. But they must also be feasible in the bounds of current technology and our (political) capacity for change⁵.

To be more rigorous and also more inclusive, we will need programmes that are:

- More engaging for all young people, and with opportunity to connect to the lives and aspirations of students from a wide variety of backgrounds
- More flexible and efficient at meeting the needs of learners with a wide range of starting and end points.

To be more relevant we will need programmes that:

- Promote deeper learning learning that can be applied to new settings. This may mean explicitly re-thinking subject boundaries to promote cross-cutting competencies.
- Necessitate real-world experience or hands on activity in many cases, direct applied or vocational learning built into flexible programmes.

2.2 What are the components of a certification or graduation system?

⁴ OECD (2010) Pathways to success: How knowledge and skills at age 15 shape future lives in Canada. Available online at http://www.oecd-ilibrary.org/education/pathways-to-success/introduction-the-case-for-linking-pisa-with-longitudinal-studies_9789264081925-2-en

⁵ We thank Peter Hill for the formulation of these four criteria



The requirements for graduation or certification are typically overseen by government of one level or other, and the qualifications in question apply within the bounds of a jurisdiction. However, the different aspects of a diploma or certificate may be certified by a wide range of different bodies, and in some cases, the whole certificate can be awarded by a non-governmental body but recognised by national institutions.

There are a small number of independent international bodies that administer and award secondary certificates, such as the International Baccalaureate. Additionally, NGOs are beginning to take the lead on new assessment design. Two major non-profit consortiums are taking on the task of designing assessments to test the standards of the U.S. Common Core. The role of commercial providers in secondary certification is already substantial and is growing. In North America, commercial providers are extensively involved in the delivery of high school graduation tests and college entrance testing.

Commercial providers are also a major provider of Prior Learning Assessments (PLAs) which can be taken by anyone at any point to demonstrate their capabilities in certain areas – these are sometimes used by individuals who have not received an official school certificate or diploma but wish to gain entry or advancement to a career or further education course. These kind of 'bypasses' are still unusual at the school level (but becoming more common as an alternative to expensive higher education) and so it is worth considering what they offer in terms of flexibility and specificity to certain competences.

A summary of the main bodies that are providers of certification in different contexts helps draw attention to the range of examples and cases we might draw from in seeking new ideas about moving from assessment to certification.

The Gatekeepers: possible providers of certification

Government agencies (Curriculum, Qualifications and Assessment bodies)	NGOs (e.g. IBO)	
Commercial Providers (e.g. Pearson/Edexcel)	Higher Education	
Independent professional bodies	Trade/Employer collectives (e.g. School of Communication Arts)	
Schools/teachers (school-directed courses)	Individual Employers	

Table 1: providers of certification or components of graduation requirements

In this section, we have begun to map out key principles and sources to consider in building a new graduation and certification system. We will continue to develop this section, and with your help convert it into thinking tools or frameworks for use in the building process.

Can you offer any feedback that would help in this process? What ideas or elements are most interesting to you?



Section 3 - Mini Cases

These two mini-cases are presented here to fulfil 4 key purposes:

- 1. To inform us all about two examples of countries trying to introduce a new set of high stakes qualifications that nationally bear the functions of certification, reporting and selection.
- 2. To look in detail at the process they underwent and draw learning about potential key steps.
- 3. To provide examples against which we can test our own ideas and assumptions.
- 4. To provide examples of a 'past horizon' of moving towards certification of key competencies, so that we can more clearly see what would be involved in the next horizon.

Case Study 1

Scotland: designing qualifications to catch up with a new curriculum

(The key points from both case studies are included in the conclusion of the paper).

Country context

In the early years of the 21st century, Scotland, which has independent control of its education system from the rest of the U.K., began a process of reconsidering its national curriculum. As a nation that has always placed high value on learning and learning for its own sake, Scotland wanted to design a curriculum that would promote life-long learning; was attuned to calls for new pedagogies and skills; and would raise the aspirations of all students. The Curriculum for Excellence (CfE), as it became named, first appeared as published frameworks in 2004 and was formally introduced into schools in 2010-11, following a number of years of development. The curriculum is made up of a series of learning areas which are each detailed with 'experiences and outcomes'. The framework as a whole is an 'aims-based curriculum', shaped by the vision that students in Scotland should become 'successful learners, confident individuals, responsible citizens, and effective contributors'. These aims blend academic, social and personal outcomes, and the curriculum as a whole integrates social and cultural learning goals across various learning areas.

The documents and resources introduced with the new curriculum emphasized the role of formative assessment in learning, and there have been efforts to strengthen school and teacher-led assessment to see that the intentions of the curriculum are being carried through⁶. There was always recognition, however, that the curriculum would not really impact all schools and all learners unless corresponding changes were made to national qualifications. Indeed, education academics in Scotland observe that the apparent delay to introduction of the new qualifications has held up full commitment to the CfE within schools and communities, even though there is widespread support for the spirit of the new curriculum (Leon Robson, University of Glasgow, personal communication). In 2012, the Scottish Education Secretary, Mike Russell, described exam reform in Scotland as 'a ten year process' – one which began right back in the early years of rethinking the curriculum⁷.

The Scottish Qualifications Authority (SQA), a body that had been established in 1996, had the duty to develop a new set of qualifications aligned with the Curriculum for Excellence: the Qualifications

⁶ Additionally, the school inspection framework, which is a voluntarily process for schools but taken seriously throughout Scotland, was revised after consultation in 2010. It is based on a range of Quality Indicators which provide schools with ways of assessing their progress in fulfilling the goals of the CfE.

⁷ http://www.bbc.co.uk/news/uk-scotland-19654523



would need to cover each level of the Scottish system, including 'Nationals', (the exams in all general subjects taken by all school students at 16) and 'Highers' (exams in selected chosen subjects taken by students typically at 18 for entry to higher and further education, and many jobs).

The new Highers and Advanced Highers are therefore not a single over-arching diploma, but new qualifications offered in over 80 subjects to student in their final year of school. In some cases, the course will be only a minor change to what previously existed; in others, the syllabus has been revised quite extensively. Some courses are entirely new, for example a course in 'Religious, Moral and Philosophical Studies', aligned with the new CfE subject of that name, which replaces the earlier Religious Education exams. In all cases, however, the SQA had the same purpose underpinning redesign: their intention is that "Assessment in the new qualifications will sample learners' skills, knowledge and understanding, and provide opportunities for deeper learning."

Design

The Process

The new Qualifications were shaped – and are still being shaped – by a series of key groups and teams. These were established by the SQA – though in all cases other bodies were responsible for nominating members, and for some groups individual teachers could join freely to contribute as they wish.

The three key groups are:

- Curriculum Area Review Groups provide advice and guidance in each of the 8 curriculum (overarching subjects) areas. Members of each group are nominated representatives from partner organisations, stakeholders, teaching associations and parent groups.
- Qualifications Design Teams work on the design of qualifications within individual subject disciplines. The teams are made up of subject experts, nominated by Local Authorities, colleges, universities and employers.
- Subject Working Groups carry out specific pieces of work designated by the Qualifications
 Design Teams. Teachers and lecturers can nominate themselves to join these groups. All
 work produced by the Subject Working Groups is reviewed by Qualifications Design Teams
 and Curriculum Area Review Groups before they are signed off.

Overall, over 1,000 people contributed to the development process. Internal governance groups within SQA oversee and sign off the work of all the groups.

The Products

The process resulted in new specifications for school-level courses throughout the Scottish Qualifications Framework. Each new course specification opens with the Rationale statement that begins:

"All new and revised National Courses reflect Curriculum for Excellence values, purposes and principles. They offer flexibility, provide more time for learning, more focus on skills and applying learning, and scope for personalisation and choice."

Each specification aims to live up to this promise by offering a balance between rigour and flexibility. One simple way of illustrating the change is a comparison between:



- The <u>course specification</u> for the new Advanced Higher English Literature exam (8 spaced pages).
- A <u>course specification</u> for a 2014 AQA English Literature A level qualification in England, akin to the former Scottish Advanced Higher (40 pages)

As well as a stripped down specification, most of the new qualifications feature <u>Added Value Assessments</u>. These are a similar to an extended project but are carefully designed to tie together the elements of the course (and are described as "what makes the Course more than the sum of its parts"). Two examples provided by SQA illustrate the nature of these assessments:

... learners studying National 4 Practical Woodworking will work on three distinct Units - Flat Frame Construction, Carcase Construction and Machining and Finishing - during their studies. The learners will also be required to pass an additional Added Value Unit - Making a Finished Product from Wood - which requires them to produce a finished product which provides evidence of some of the skills, knowledge, understanding they have acquired throughout their Course. In another example, learners studying National 5 Geography will also work on three Units – Global Issues, Human Environments and Physical Environments. These learners will have the opportunity to apply the knowledge and skills they have learned while studying these three Units in their Course assessment.

SQA has identified seven broad methods for assessing Added value in Courses (with definitions taken from the SQA's 'jargon buster'):

- Assignments: Structured problem-solving exercise with clear guidelines
- Case studies: a stimulus-based assessment of a learner's ability to analyse and draw conclusions
- Practical activities: Direct application of a learner's skills to making or building something.
- Performances: Practical demonstration of a learner's skills
- Portfolios: Collection of a learner's work assembled over the period of learning
- Projects: Open-ended task with support appropriate to the qualification level requiring investigative/research skills.
- Question papers/tests: Type of assessment. Question papers, or tests, examine a learner's knowledge or understanding by using written responses. We use the term "question paper" when referring to an externally assessed written exam.

In setting out this vocabulary - and explicitly placing 'question paper' as just one time of assessment (avoiding the word exam) - the SQA is trying to promote the idea that all of these forms of assessment are equally robust and valid, when carefully designed and implemented.

Implementation

Timelines – smoothing the entry of a new high-stake qualification

Most of the new qualifications are valid from 2014, but the new Advanced Higher exams (those taken at the end of secondary school and which determine access to universities) will have their first offering in 2015. Furthermore, Scottish Ministers let it be known in November 2013 that they would "respect any decisions by head teachers to let pupils do the old Highers instead". The Minister for Learning, Alasdair Allen, stated: "...Curriculum for Excellence is founded on the professional judgement of teachers. ...Where a principal teacher...considers that the best interests of a young person will be served by using the existing higher for a further year, then they should be able to work with their school, local authority and, critically, the parent body to agree this." [source: BBC]



The decision to offer the *old* Higher might be taken if heads felt teachers were not yet fully prepared to facilitate the learning of the new courses, or if they felt those first years of senior pupils might not be ready for them having been through most of their schooling under the 'old' model. Teachers in Scotland (interviewed in relation to curriculum changes) observe that younger students now beginning with CfE do show a 'step change' in their thinking, and have been quicker than older students to get to grips with the higher expectations for critical thinking and communication.

Following the announcement, however, the general secretary of Scotland's secondary headteachers' union publically stated that headteachers did not think a delay was desirable and were still supporting the new qualifications: "We believe we are still on track to keep the programme going to schedule and, with the right support, schools should introduce the new Higher because it is a natural follow-on from earlier exams. There may be a few departments that are not ready, but we believe it is better to keep going than stepping back to do the old Higher." [source: Herald Scotland]

Predictably, one of the opposing political partied seized on the announcement to claim that the exam system was in 'disarray' and criticized it as a 'delay', but the Secondary Teachers' Association came forward with the statement that government recognition that there might be valid reasons to require delay was reassuring for their members.

Supports: helping educators prepare for change

One current criticism of the move towards new Highers has been the comparative lack of support for schools in facilitating the learning on these courses. For the previous introduction of new 'Nationals', an array of resources and supports were provided for schools, including large amounts of online material: In the 12 months preceding introduction of the new courses, SQA published nearly 1,000 subject assessment support documents, including, specimen question papers, coursework information and unit assessment support packs. All materials, which were produced by working with teachers across Scotland, were web-based materials and covered all 95 courses.

The support to teachers includes a range of 'route maps through assessment', currently available for all the National subjects. These take the place of a 'syllabus' which typically accompanies exam qualifications. A syllabus is essentially a checklist of everything a student needed to pass an exam, and became seen as limiting and a source of shallow learning. The route maps contain key information on the nature of the assessment, as well as the ideas covered by the course. They ensure that both teachers and students cannot 'feel lost' in the more open learning opportunities promoted by the CfE - important when qualifications are high stakes.

The release of a second large wave of materials in early 2013 followed concerns voiced by Scotland's largest teaching union, the EIS. Release of new material was co-ordinated as an opportunity to reaffirm union support of the curriculum and new assessments. EIS General secretary Larry Flanagan said: "Teachers across Scotland will be encouraged by the availability of these new resources which will support the ongoing process of CfE implementation in our schools".

As of 2014, the 'implementation' of both the curriculum and the qualifications is still ongoing.

Case Study 2. Hong Kong: New methods of assessment

Context

In the year 2000, the Education Commission of Hong Kong submitted to the government a paper titled 'Reform Proposals for the Education System in Hong Kong'. Five years later, the government's



Education Bureau (then the Education and Manpower Bureau) announced a new model for secondary schools in Hong Kong. Previously, students in Hong Kong sat the Hong Kong Certificate of Education Examination (HKCEE) in their junior year, followed by the Hong Kong Advanced Level Examination (HKALE) in their senior year: two high stakes assessments. Under this new model, all students are expected to complete three years of senior secondary education (following three years of junior secondary), at the end of which successful students acquire the Hong Kong Diploma of Secondary Education (HKDSE): a combination of examinations and school-based assessment.

Many of the changes that came in with the HKDSE, including standards-referenced rather than norm-referenced assessment, and school-based assessment, had been described in that year 2000 paper.

A key driver for the whole process of change was awareness of a test-driven culture of learning in Hong Kong schools, which did not serve students well in higher education or work. One purpose of the redesign was therefore to promote better and more holistic learning and teaching practices, and motivate students to focus on feedback and improvement rather than a one-off assessment.

Design

The Process

The HKDSE was developed over the course of four years by the Hong Kong Examinations and Assessment Authority (HKEAA), a statutory but independent and self-financing body established in 1977. The HKEAA is not a political body and is overseen by a council of 17 members drawn from the school sector, higher education, government bodies and key professional and employment sectors in Hong Kong.

A key part of the process of redesign was rigorous international benchmarking of the content and competencies of subjects, in relation to both higher education needs for specific subjects and the world of work (although with more emphasis on the former). This was part of the move from norm-referenced (individuals benchmarked against the performance of the population) to standards-referenced (individuals benchmarked against externally established standards) assessment for major examinations, which had been gradually taking place in Hong Kong since 2000.

In replacing two separate examinations with an overarching diploma, the HKEAA wanted to ensure it could meet the needs of all students, and the needs of selection. It therefore designed an awarding method that accommodates all learners, which a 1-5 scale for most subjects and a 5* and 5** options to promote high achievement. Applied Learning subjects which are assessed according to a pass/fail standard also include an 'attained with distinction' strata to recognise high achievement.

The Product

The HKDSE comprises of four core subjects (Chinese Language, English Language, Mathematics and Liberal Studies), plus two to three elective subjects. These are chosen from:

- Category A New Senior Secondary subjects;
- Category B Applied Learning subjects or
- Category C Other Language subjects.

A wide range of subjects are included in these categories, including many discrete vocational options.



A key change is the introduction of the Liberal Studies subject as a requirement for all students: previously, Liberal Studies was an optional 'AS' (lower level) subject. Making the subject compulsory was a move to insure all students have an element of breadth in their senior education; develop critical thinking skills; have opportunity to explore key questions about identity, adulthood and life in the C21st; and engage as young adults (as opposed to at earlier stages of education) with key issues and topics in Chinese history and the contemporary world.

A further key change was that each core subject and a number of elective subjects within the HKDSE involves an element of school-based assessment (SBA)⁸. This is carried out within school and students are assessed by their own subject teachers: the SBA score is not reported separately from exams scores and makes up a variable percentage of marks – so students are incentivised to take it as seriously as the exams.

Implementation

The HKDSE was finalised in 2009, and students began studying for it the following year. The HKDSE Examinations were administered for the first time in 2012 to over 70,000 candidates.

The introduction of SBA was the most difficult part of the process, and created complaints of too heavy a workload on teachers in terms of marking and reportin⁹g. There remain concerns about plagiarism. SBA takes many forms according to different subjects, and the HKEAA have produced handbooks for all subject teachers to standardize methods of assessment and reporting. Early evidence suggests that teachers respond well to the additional training and development that enables them to make appropriate judgments. In early trials for a precursor to SBA in the English Language assessment (2007-8), the analysis established that

- a) Assessment criteria were well understood by teachers, and most could assess their students accurately
- b) The reliability of SBA was not an issue

Overall, the HKEAA considers implementation a success. In 2013, a progress report published by HKEAA in 2013 found that the introduction of the HKDSE increased the percentage of students qualifying for undergraduate studies by about 40%¹⁰. A survey of students, teachers, principals and panel heads found agreement that the HKDSE enabled to greater engagement of students and promoted 21st century skills like transfer of knowledge and independent thinking.

Section 4 – Conclusion

Key findings

⁸ http://www.hkeaa.edu.hk/Do<u>cLibrary/Media/Leaflets/SBA_pamphlet_E_web.pdf</u>

⁹ http://www.scmp.com/lifestyle/family-education/article/1345398/teachers-and-pupils-struggle-school-based-assessment

¹⁰ Curriculum Development Council, Hong Kong Examinations and Assessment Authority (2013). *Progress report on the new academic structure review: The new senior secondary learning journey – moving forward to excel (executive summary)*. Retrieved from

http://334.edb.hkedcity.net/doc/eng/ReviewProgress/Summary e.pdf



In section one of this draft paper, we outlined the situation which has necessitated steps towards redesigning graduation or certification systems in many jurisdictions. Section 2 set out some key principles to consider in this process, and some sources of new thinking on the nature of certification. In section 3, we looked in depth at two examples of countries trying to introduce a new set of high stakes qualifications, which nationally bear the functions of certification, reporting and selection. From the first case study, we saw that:

- The change in Scotland began with a new curriculum, which clearly articulated the expected aims of schooling, and the competences students were expected to develop.
- There was widespread support for the new curriculum prior to the introduction of new associated high stakes assessments
- A national body responsible for qualifications was already in place prior to the introduction of the new curriculum and assessments.
- The process of designing new qualifications was managed by this body but was carried out by a series of national, subject-specific, cross-sector design teams.

From the case of Hong Kong, we saw that:

- One of the key purposes behind the change in Hong Kong was to reduce the emphasis on preparation for high stakes test and orientate students towards learning and feedback cycles
- Key concerns for the HKDSE were the broadening of compulsory aspects of the curriculum, and the rigour of international benchmarking
- School-based assessment can be implemented reliably and accurately as a component of high stakes assessment, but there are still concerns about plagiarism

Implications and questions

These are some questions working group members might consider based on the case studies:

Is a competency-based curriculum a prerequisite to enable successful redesign of graduation or certification requirements? Or are rigorous subject standards as in Hong Kong an equally good foundation?

Is a national/state/province-wide approach necessary or might there be better opportunity in a district level approach that could allow the prototyping of different methods of assessment, and different combinations of assessments to make up an overall qualification?

In both Hong Kong and Scotland's education system, final exams and subject-based qualifications are the key building block of certification, reporting and selection functions. Does the process of change look very different in a credit- or course-based system? What are the advantages and disadvantages of a qualification-based system?

If the work in Hong Kong and Scotland represents a past horizon of certification and graduation reform, how can we get to the next horizon? How can we go further in terms of moving towards a certification system that recognizes key competencies and deeper learning? Does the transformative change lie in the nature of assessments or requirements; the way they are combined; or both?

Next Steps for the working group program

The questions above are opportunities for reflection for each member of the group and their jurisdiction team.



We suggest our practical next steps have a more precise focus. In order to test out the advantages and disadvantages of different approaches to certification and graduation, we want to build a few examples of what a next horizon school certificate or diploma might look like. For our building blocks, we will invite each member to source 1 or 2 examples from your context of assessment of key competencies. To do this you could look to schools, districts or organisations that are leading the way in this area – they might be focussed on assessing deeper learning, or on certifying particular cognitive, intra- or interpersonal competencies. We know that this kind of work is occurring on the ground all around the world, so we are asking you to draw on your networks to help us create an international picture of the leading edge of work in this area. We hope you can gather these examples by 24th March. And we will add some of our own.

With this range of examples in front of us, we propose a building task: each member will work to build a set of graduation requirements for their context, making clear the principles they are working from. We will discuss the outputs together in our meeting on 9th April, prototyping a collaborative building activity that we could undergo in our workshop in San Francisco.

We very much welcome your feedback on this proposal, or any part of the paper. Thank you for you engagement in this work.

Whatever it takes, however, certification results from a sequence of learning (programmes, courses etc) and a demonstration of competency – usually multiple competencies at once in the form of external examinations, internal assessments, demonstrations of learning. With this loose definition, we can construct a continuum of types of certification:

Туре	Holistic Diploma	Qualifications	Certificate
Purpose	Demonstrate status as an educated and rounded citizen	Prove competency in particular subject areas (whether vocationally or academically prepared)	Entry to a specific job/further education programme
Example	High school diploma (and associated graduation requirements); I.B. Diploma	Advanced level qualifications ('A' levels; APs)	Trade, skill-based or technical certificate

Table 2: Certifications on a spectrum

Any given system or learner probably will have need for multiple types of certification - though perhaps of use at different points in a learner's life and career. Whatever the type, the certification of particular competencies may be relevant either as one 'building block' of a diploma or qualification, or as a one-off process in and of itself.

¹ [Endnote from p. 1] In this working group so far, we have made reference to the 'school/post-school transition' as the focus of our attention. In several systems, this interface is represented by a graduation certificate, a 'diploma' or a baccalauréat. In others, there is no single overarching certificate, but a series of subject-based qualifications which act as entry points to higher education or employment, and are reported in national statistics.