

GELP New Metrics working group

Workshop pre-reading: From new assessments to new systems of assessment and metrics

This working group started from a point of collective recognition that there are a set of competencies that are increasingly important for students to possess in our connected and fast-moving societies, but which are not commonly assessed and monitored by school systems.

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 education¹. 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?

Getting the most out of the workshops

In this short summary paper, we focus on the key material that will be useful background for the workshops, and provide brief descriptions of and links to several other informative pieces (links will require a gelponline log-in). We encourage anyone intending to attend the workshop to review the linked papers and slides.

A longer version of this paper can be viewed [here](#). That longer paper includes:

- An overview of the current landscape and the view of the road ahead, based on responses to a survey completed by members of the New Metrics working group.
- A draft 'case for change' – the case for changing graduation requirements – why must we rethink the ends of formal schooling?
- A set of key principles to consider in the process of redesigning graduation, certification or the end of formal schooling.
- Two case studies of jurisdictions, Scotland and Hong Kong, who have recently reformed their high stakes qualifications (which bare the functions of certification, reporting and selection in those jurisdictions).

The sections below outline the key aspects drawn from this work and other work of the group.

1. New Assessment systems

The quality of system level assessments are a lagging factor in the pursuit of better learning. [This set of slides](#), first presented by Peter Hill at the Education World Forum in January, introduces the project. To overcome this lag will require a co-ordinated step change. Co-ordinated assessment systems with far greater capability in terms of flexibility and breadth provide new opportunities for awarding bodies, for rethinking accountability, and for strengthening learning and teaching. For detail, see [this extract](#) from a yet-to-be-released work on *The Future of Assessment*.

Online technologies have the potential to help create new systems of assessment which link formative, classroom assessment, and system metrics. The flexibility entailed in adaptive systems helps meet the many more students where they are, and meaningfully assess a much wider range of competency levels. Additionally, although not all of the new assessments themselves should be or can be computer-based, digital connectivity offers great scope for co-ordination and validation of a broader range of assessment types.

2. Assessment of new competencies

As referenced above, systems of assessment are being called on to offer information on a broader range of competencies, to support and promote the development of important, non subject-specific skills. These may gradually include not just cognitive but also interpersonal and intrapersonal skills.

[This collection](#) of new approaches to measurement and metrics is compiled to exemplify the range of tools and system strategies that are currently in use or becoming available to capture a new range of competencies.

3. From new assessments to redesigning graduation

We move now from identifying leading methods of assessing competencies and deeper learning, to considering how these methods can be validly and reliably used for certification, reporting and selection.

Our current global situation – one of a wider 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 change¹.

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

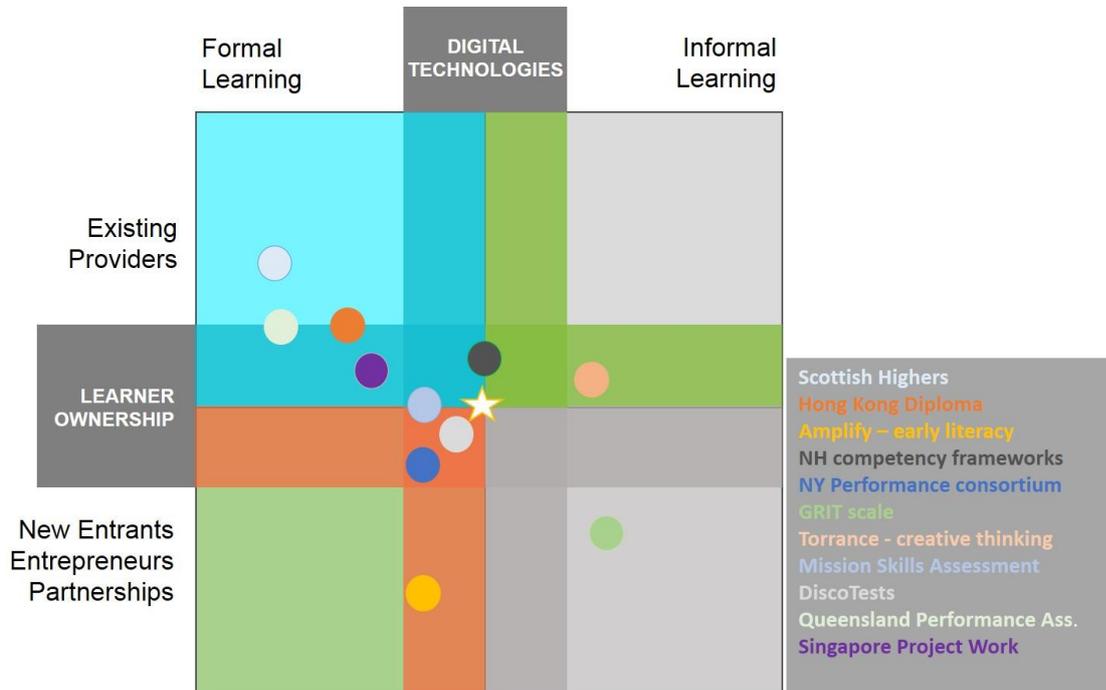
- More engaging for all young people, and with opportunity to connect to the lives and aspirations of students from a wide variety of backgrounds.
- More flexible and efficient at meeting the needs of learners with a wide range of starting and end points.
- But still based on standards that are internationally benchmarked, and with tasks which seek to measure higher-order knowledge and skills.

To be **more relevant** we will need programmes that:

¹ We thank Peter Hill for the formulation of these four criteria

- 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.

These criteria offer us the beginning of design principles for new graduation and qualification programs. To develop these criteria and test other key concerns, we have created a matrix to illustrate where the assessment approaches in our collection fall in relation to key dimensions:



We will be inviting workshop participants to recreate their own set of dimensions, based on priorities for the redesign of qualification assessments in their system.

4. From agenda setting to action

Our working group is generally resolved on the direction in which new assessments and assessment systems need to move, so is working on thinking through the steps involved in getting there.

This is a tool which could help us do that: a diagnostic for systems to work out where they are and what they need to focus on next (filled in to indicate levels of readiness in an imagined system).

Awareness Understanding of new developments in assessment and their implications for curriculum, pedagogy and certification	
Infrastructure and resources Interconnectivity, per capita ratio of digital devices and allocated financial resources	
Goal setting and planning Long-term vision, shorter-term plans for and commitment to moving forward	
Capacity building Knowledge, skills and experience of staff at all levels, and systems for enhancing these through collaboration	
Implementation Extent and quality of adoption and effective strategy for scaling up	
Research and development Systematic, data driven process for assuring on-going improvement and enhanced capacity	
Monitoring and evaluation Systems in place to monitor progress towards realising longer-term goals and shorter-term next steps within a broad 'intelligent' accountability framework	

In our workshop we aim to use this tool to help jurisdictions to diagnose the extent of their current capabilities in each of the key areas involved in assessment transformation.

All of this work needs to be seen in relation to the overall GELP roadmap: redesigning assessment, in particular the high-stakes assessments that make up end of school qualification, is a highly political process in which all stakeholders need to be involved. A clear vision, case for change, leadership, and disciplined innovation practices are crucially important if leaders are to make progress on assessment system transformation.

ⁱ [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.

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:

Type	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.