



New Metrics Briefing: introducing a Value Chain for Education Systems

This briefing is intended to provide relevant introduction and background to the GELP community on the issue of 'New Metrics'. The first part of the paper introduces a framework to be used at the GELP New Delhi event in October 2013, and is key reading for all participants. The second half is optional and outlines various key debates within the topic of New Metrics which might be pursued in the extension sessions at the event and beyond.

The framework and our conversation in Delhi is designed to progress thinking on how metrics can further both strategic goals and long-term transformation of a system. To set this conversation in the context of relevant challenges, we recall that in the final chapter of *Redesigning Education* (the GELP book), we described three major challenges to education systems as they adapt to take advantage of new opportunities and requirements for learning. These were:

- Shifting the role of government to one of platform
- Building new capacities and diversifying the role of education professionals
- Managing market forces to improve quality and equity of access

For each of these challenges, New Metrics play a key role in articulating new goals and ensuring progress towards them - rather than towards a repeat of former system outcomes:

“Overall, the movement toward a more open learning ecosystem makes it all the more necessary that we measure what we value – as opposed to valuing what we can measure. There is an urgent need to develop better metrics to track how systems are fulfilling such goals as equity, inclusiveness and learner ownership. But most centrally, the key objective, the very purpose of education systems in this century, needs to be redefined. Governments must negotiate the criteria for systems success within their own cultural context, in debate with their citizens. The difficulty of this process must not preclude it from receiving attention.”
(*Redesigning Education*, p. 156)

As this quotation implies, the definition of New Metrics is an opportunity for public deliberation as well as a technical exercise. With the framework and with the discussions below, we attempt to frame different aspects of the New Metrics conversation in order to draw out the key issues and terms for debate.

1.1 Locating a Framework for System Metrics

In the run up to GELP Sydney in Spring 2013, the Systems Metrics working group drew up a paper which proposed that measures of system-level progress fall into one of four domains; they were divided into those that provide information on

- the **state of the system** and particularly **its potential** to deliver 21st century learning outcomes
- the extent to which **learning processes** are exhibiting the characteristics expected to support successful 21st century learning
- the extent to which 21st century **learning outcomes** are being achieved and
- the **life outcomes** achieved by 21st century learners¹.

Continuing from where the group left off, in this briefing we set out how these four domains can be arranged in the form of a **logic model**, in order to make explicit and to strengthen the assumptions governing the selection and development of new metrics at a system level. The particular kind of logic model we present is designed by Mark Moore². It is described as a '**value chain**', used to illustrate how *public value*³ is created by a system or organization.

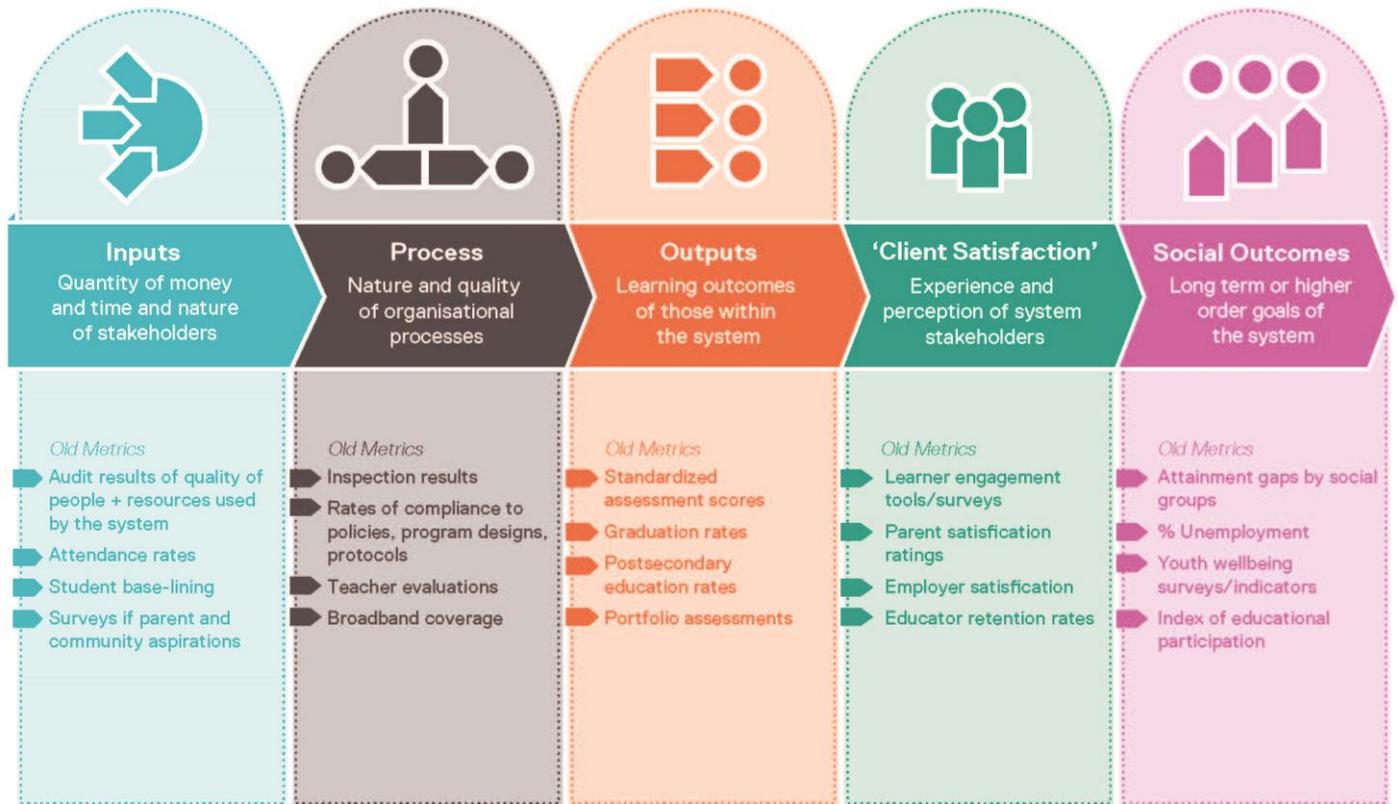
1.2 Education Systems as a Value Chain

An example of a value chain is shown below, populated with basic and abstract examples of metrics that might monitor each section:

¹ GELP Sydney – Metrics for 21st Century Learning Systems (May 2013) [[Draft Paper](#) - requires GELP login]

² Mark Moore, 'Developing a Public Value Account and a Public Value scorecard'. [Pdf](#).

³ 'Public Value' is a placeholder phrase intended to refer to any kind of value that might be created by a public system. It was invented to play an equivalent organizing role to that of 'shareholder value' in private companies - that is, a focal goal towards which public sector leaders, professionals and entrepreneurs could direct their efforts. For more on its origins, see Mark Moore (1995) *Creating Public Value Strategic Management in Government*, Harvard University Press: Cambridge, MA.



As can be seen, on the one hand the value chain represents a logic model, moving towards the production of certain 'outputs' and finally 'social outcomes' of value⁴. Additionally, however, each step in the in the 'chain' illustrates a process which not only leads to valuable outcomes but is itself of value to citizens.

For example, in a very simplified way, as an 'input' a high quality teaching profession may be instrumental to the achievement of high graduation rates, but it also might be valued for the role of the adults in question as role models for youth. It *might* be possible to achieve other routes to the outcome of graduation rates, and a public system might want to consider enabling those if they create other, greater forms of value, but as long as it deems (where possible through public reflection and deliberation) that a quality teaching profession is in itself valuable, this is an important step of the value chain to monitor, over and above its impact on outcomes.

This is a relatively uncontentious and simplified example, but one sees how the framework of a value chain differs just slightly from that of a standard logic model.

1.2.2 Using the Value Chain in jurisdictions

At GELP Delhi, each jurisdiction will populate a framework with system features and outcomes selected as worthy of measurement and monitoring.

1.2.3 A note on language:

Mark Moore's value chain uses terms of industrial processes - 'inputs', 'processes', 'outputs' - and of and the commercial sector - 'client satisfaction'. We have retained this language for simplicity, but not because we feel that labels are unimportant. A first task of each jurisdiction is to consider how one might re-label these areas to better describe the ideal system dynamics. Inputs might become 'building blocks', 'seeds', or 'platform'. Processes might be 'experiences', 'environments' or 'features'. And so forth.

1.2.4 Why focus on more than outcomes?

⁴ Because the model as a whole takes a system-level view, we refer to learner-level outcomes as 'outputs': the achievement of a single learner is seen as a product of going through the system, rather than as the overall desired outcome of the system. The desired outcome of the system - of a system of public education - can be larger goals like opportunity, growth, social stability - or whatever a public may deem valuable.



New Metrics might for most first and foremost imply the measurement of new **outcomes**, as the key area in need of definition. For a strong expression of this position, see Simon Breakspear's note for the GELP community, included in the pre-reading pack.

New outputs and outcomes are a key concern in the New Metrics conversation, but there are several reasons for considering measurement 'all along the value chain', as opposed to focusing only on measurement of outcomes.

- **Measuring along the chain provides assurances and motivation where it is as yet difficult to reliably measure outcomes.** GELP jurisdictions aspire to set their systems on a new course – towards not only an improved education system but one that develops new capacities in young people. Consensus can build only slowly on what these new outcomes are and how to recognize them: they are complex, quite possibly culturally-specific, and as much about personal dispositions as skills - therefore very difficult to assess reliably using psychometric measures, and difficult to pin down with more authentic measures.
- **The chain can help system leaders test public assumptions and connect the dots of policy choices.** Leaders can decide at what point along the chain to begin, depending on where most consensus lies. For example, if a new pedagogy is gathering much support and favour, frequency of that pedagogy might be accepted as a worthwhile process measure. But choices in one box require a re-scrutinising of assumptions made in boxes to the left, and an eye on the consequent impact on boxes to the right. So from any given solid starting point, leaders can raise questions and offer new possibilities for other steps.
- **The chain helps to locate the responsibility of a system leader.** System leaders may differ as to where to place their emphasis of measurement. Some may hold themselves responsible for social outcomes at the system level; others may see their role as securing the right inputs and processes, and view outputs and outcomes as the responsibility of individual learners and other sectors of society. Both of these are of course viable choices, where chosen metrics form part of a coherent chain as to how those inputs lead to the best outcomes, or how those outcomes are connected to actions on inputs.
- **Measuring along the chain supports optimization of a system.** In complex systems, there may be many inputs, assets, and organizations that are relevant to the production of outcomes. The more that is known about the quantity and quality of various aspects, the more that innovations and deviations from normal structures can be noted, observed, and their impact on other parts of the chain evaluated.
- **The framework helps to emphasize the range of system features one might value.** By forcing a focus on the features of a system as well as its outputs, the value chain framework prompts reflection on what system features are valuable in and of themselves, as well as on account of the outputs they might produce.
- **Measuring inputs and processes helps to signal other values.** A focus on outcome measures can promote a diversity and experimentation with approaches. However, as the theory and features of Education 3.0 develop, it may be helpful to provide guidance to professionals, parents or learners: process metrics can help *signal* where a part of the system needs to change and in what way. For example, a system that began collecting data on the amount of time students spent learning in non-school environments might a) motivate more schools to arrange out of school programs and b) signal to parents and students that learning out of school is a valuable experience. When metrics are collected and made public, it is also an opportunity to convey to parents, teachers and students *why* and *in what conditions* that measure is important.

In sum, the framework is intended to allow for the most open possible conversation as to what is worthy of measurement in Education systems, while ensuring that no relevant part of this conversation is missed.

1.3.1 Populating the Value Chain with New System Metrics

In populating the value chain, jurisdictions might draw on a wide range of types of metrics. Some types of metrics – perhaps 'old' but with the potential for renewal – are offered in the framework above. A few examples of newer approaches – most still in development – are detailed in the following section, which concludes the main part of this briefing.

A note on 'system':

The Value Chain model was designed to illustrate the creation of value by any public sector organization. However, it can be applied to different levels of a system, for example a local district or a whole nation. The processes and inputs which are most relevant will differ depending on the level of the system. Each jurisdiction must choose at which level of the system to engage with the framework.

A note on 'new':

Each step in the chain has corresponding potential for New Metrics. In each case, the 'new' in New Metrics refers both to new areas of monitoring - new inputs, processes and outcomes which we increasingly consider valuable - and to new methods of monitoring: of capturing accurately and authentically what has always been deemed valuable.



1.3.2 Examples - new objects of measurement and new metrics

'Inputs':

National Assessment for New Teachers (Stanford/Pearson)

EdTPA: <https://scale.stanford.edu/teaching/edtpa>

'Processes':

Observation and survey of '(Science) Learning Activation' – engagement in learning

<http://www.activationlab.org/activation/>

Formative assessment of complex thinking [Anatomy of a DiscoTest](#), Developmental Testing Service (2010-3)

'Green Evaluation' – the move in China to broaden the metrics on which schools are evaluated

Yong Zhao [blog](#), June 24, 2013

Choice-based assessment for the refinement of learning environments

<http://aaalab.stanford.edu/research/new-models-of-assessment/choice-based-assessments/>

'Outputs':

The Learning Record

<http://www.learningrecord.org/>

'[Summary of Possible Metrics and Measures](#)', GELP working paper (May 2013) [requires GELP login].

'[A framework for the assessment of collaborative problem-solving](#)', PISA/OECD (July 2013)

And [responses](#) from Educators to PISA 2014 plans.

Singapore Ministry of Education has put out a tender for vendors to develop an on-line tool to for students' self-reporting of their socio-emotional competencies.

[News article](#) June 13, 2013

'Client Satisfaction':

NYC School Survey

[website](#)

Crowd-sourcing ideas for improvement from local stakeholders – Poway Unified School District

[Education Week](#), June 11 2013

'Social Outcomes':

Green Mountain College strategy for Measuring Progress – Natural, Financial and Social and Human Capital Metrics

[Webpage and videos](#)



Part 2: Extensions: the scope of the issue and key debates

The session at GELP Delhi has been design to incorporate and allow for the greatest possible range of concerns in relation to New Metrics. For that reason, we have not leapt to define what purposes and functions of metrics we are most concerned with. Below, however, we touch on some of the key questions and debates which are raised by this topic. The aim of these sections is not to be conclusive, but to give words to the range of issues relevant to discussion of New Metrics. Note that the sections are ordered, but do not necessarily reach conclusions or follow directly one from another.

2.1 Defining the nature and functions of metrics

2.1.1 What do we mean by metrics?

A metric – a measure – is a way of trying to capture the performance of a project, organization or system and report it to stakeholders.

An education system metric is anything which can serve as data that, when aggregated, conveys information about the quality of an educational experience, or of an education system. Information might be collected and conveyed for a variety of different reasons.

2.1.2 Evaluative vs. normative functions

In general, metrics are gathered so that we know what is happening, in order that we can make it better. Serving in this **evaluative** function, metrics are evidently important because without them, it is hard to know whether efforts are going in the right direction, and what is 'working' and what is not (allowing for all the nuances such judgments actually entail).

Metrics, particularly when made public or when prioritized by leaders, can also have a **normative** function. In other words, they not only highlight and direct attention towards certain goals, but can *create* goals, desires and aims. This holds even where metrics form part of 'soft' accountability structures that operate on publicity and pride, as opposed to being tied to funds, career progressions etc. (See the phenomenon of isomorphism, whereby local systems within a nation tend to resemble each other, even in the absence of federal control, because they are measured on the same yardsticks). It is this dynamic which makes the choice of metrics a particularly important – and delicate – matter.

The way that a metric is constructed and communicated can lower or raise its normative function.

2.1.3 Growth mindset vs. goal-setting

Metrics can be used to motivate in different way. To promote a **growth mindset** (see the work of Carol Dweck), metrics might take the form of fine-grained data that shows up incremental progress. This might be in a learner's progress in developing a particular skill, or the progress of a system in embedding new curriculum goals across its schools. Such metrics are for internal use - to motivate those close to the data. They would be produced in terms of soft accountability - transparent to an organisation, as opposed to publication on a high-stakes annual cycle. If set in the right conditions, transparency encourages regular attendance to the metric and consistent effort towards progress.

In contrast, metrics can be produced in more 'absolute' terms and reflect a more long-standing data point, for example number of students at 'pass' level in an annual assessment. Given the importance of a growth mindset for motivation and improvement, one might wonder why we should ever want anything other than fine-grained, detailed metrics that track incremental progress. But occasionally, leaders might want to privilege certain metrics into what we might call **goal-setting** metrics.

Goal-setting metrics are composed differently from those used in day-to-day practice by leaders. They are typically more parsimonious, in order that they are easily comprehensible. Graduation rates, for example, are meaningful and straightforward to read, represented by a single figure. A goal-setting metric might be a composite of lots of individual measures and data points. Communicating the right goals allows stakeholders outside of the core processes to contribute to the work. (For more on this topic, see Mark Moore, *Recognizing Public Value*, 2013).

Whether a metric promotes growth mindsets or a particular goal can be affected by the principles of its composition:



- parsimony - is the metric a single set of data points, or a range of many? Can it be easily summarised and communicated?
- transparency - is the data published and communicated regularly, or is it unknown to the organization or public on a day-to-day basis?
- associated accountability - are there high-stakes consequences attached to the metric?

2.2. Metrics vs. diagnostics

The GELP working paper 'Metrics for 21st Century Learning Systems' set out a number of early design considerations for new metrics:

*To achieve maximum benefit from system metrics, they should be **methodologically valid** and **able to provide consistent information over time**, be **seen primarily as a formative tool** and **support the engagement of a broad range of stakeholders** in the task of system transformation.*

These recommendations are solid for the definition of fine-grained, growth metrics, which we might expect to be tightly defined and to follow linear patterns. But in addressing the subject of New Metrics we should be conscious that some system foci of interest may be less susceptible to this form of measurement. Indeed, the term 'metrics' is a holdover from a paradigm of industrial models and mechanical processes. But the processes of transformation – whether of an individual learner or of a system – are not linear, but dynamic (e.g. driven by human factors, they are likely to be open to network effects), nor would we expect every process to develop in the same way.

For goal-setting metrics, therefore, it is worth considering whether we might look to more organic means of measurement and incentivizing:

- Make public archetypes of the Education 3.0 vision and (transitional) goals – to play the role of 'target' figures to aim at.
- Carry out multi-dimensional diagnostics – to know where we are in relation to those public goals

The greatest challenge in this instance is creating sufficient public buy-in for the goals, and trust in the value of the diagnostics. However, in the same way that international competition creates momentum for certain metrics, it could have the same effect for certain visions and diagnostics, if they were sufficiently simple and parsimonious to be readily understood.

2.3. Global vs. local metrics

International comparison data has demonstrated its powerful potential to drive system change at a national level. The OECD's PISA data, in particular, now features in the policy discourse of the majority of OECD countries. In other countries, the World Bank and UNESCO, with the 'Education For All' movement, have played a major role in pushing forward access to education through recognized metrics for provision. Now UNESCO, with the Brookings Institute, is leading efforts to define globally-viable learning goals that could drive up the quality of universal education (see below).

For GELP jurisdictions, these international efforts offer potential frameworks and tools to follow or adopt in the definition of new metrics. As outlined below (2.2.3), internationally benchmarked measures may not be appropriate as the ultimate learner outcome goals. But they are almost undoubtedly to play at the least a strategic role in progress towards transformation.

Recent key developments in international efforts include:

UNESCO/Brookings Institute – 'A Framework for Measuring Learning' (July 2013)

[Full Report](#)

The UNESCO Learning Metrics Taskforce produced this framework to establish the areas of education system fit for measurement and tracking at a global level. Takes a more practical approach to build on the work of a previous conceptual paper 'Towards Universal Learning' ([pdf](#)), which outlines outlining globally-relevant domains of learning.

OECD/PISA 'A framework for the assessment of collaborative problem-solving', (July 2013)

[Full Report](#)

World Bank – Symposium on Global Learning – Concept Note (DRAFT, September 2013)

[website](#)



concept note

Outlines issues in trying to use assessment to drive learning opportunities in the post-2015 Development Agenda

3.1. New Metrics from learner assessments

3.1.1 System-use vs. learner-use

The progress and achievements of learners within a system are undeniably a key output, and when combined, outcome, of an education system. It is for systems to decide what type of data on individual or group progress is appropriate, and at what local degree, but for any system there are questions as to how to produce this information.

In recent months several bodies have addressed the question of using results of assessment of individuals for the purpose of system evaluation.

A major OECD report⁵ compares the experience of 28 OECD countries, analysing the strengths and weaknesses of different approaches to using evaluation and assessment to improve the quality, equity and efficiency of education. Key recommendations point to the need for more nuanced and more responsive use of assessment for evaluation, in order to:

- Avoid distortions
- Put students and the centre
- Manage local needs

One key direction in better use of learner assessment is the potential of big data⁶ to create system metrics from classroom level assessments. The aspiration is that this would allow assessment to be returned primarily to its formative purpose, placing a focus of system evaluation on *learning* and its processes. Two further papers⁷ released this year address this topic, and it is detailed by Simon Breakspear in the paper included in this pre-reading pack.

The second of these papers, a report emerging from 30 U.S. cross-party education leaders, concludes that collaborative effort is needed ***“to broaden the range of behaviors, characteristics and manifestations of achievement and related development that are the targets of assessment in education. This effort should be a partnership between not-for-profit organizations (either existing or newly created) the for-profit sector, professional teacher organizations, and universities.”***

This call for New Metrics - for new foci of metrics, and for new methods of measurement - is also a call for more partners in this process. If such a collaboration is to be fruitful, it is vital that parties are conscious of the complexities and potential pitfalls of setting new assessments on a pedestal as a focus of system interest.

3 complexities to be mindful of in using learner data to create system-level metrics:

- **Not all learning goals are the same.** It may be necessary to distinguish between ‘open’ (or ‘expansive’) and ‘closed’ types of learning. The majority of assessment are designed for measurement of precise and foreclosed learning goals - specific knowledge, skills and demonstrable abilities. But, as Guy Claxton and Bill Lucas have recently articulated⁸, it is possible to argue that the most important learning goals in the 21st century are those which are open-ended and amorphous - adaptability, creativity etc. Facilitating progress towards clear and defined learning goals is one, but not the only, role of education. Alternative methods of monitoring may be required to ensure the educational experience is amenable to more expansive goals.
- **Learning and development do not follow the same pattern across individuals.** As Geoff Master’s writes, an assessment tells us nothing more than “where learners are in their learning at the time of assessment”. In the design of system-level metrics, it is important not to consider whether and where the benefits of closely-defined progression expectations outweigh the demotivating effect for learners where assessments come too early.

⁵ OECD, *Synergies for Better Learning: An International Perspective on Evaluation and Assessment* (2013) [Summaries](#)

⁶ For example see ‘Big Data in Education: the 5 Types That Matter’, Knewton [blog](#), June 18 2013

⁷ Masters, Geoff N., "Reforming Educational Assessment: Imperatives, principles and challenges" (2013). [Full Report](#)
The Gordon Common on the Future of Assessment in Education (March 2013) [Full Report](#).

⁸ Lucas, Claxton and Spencer (2013) *Expansive Education*. Open University Press: London, UK

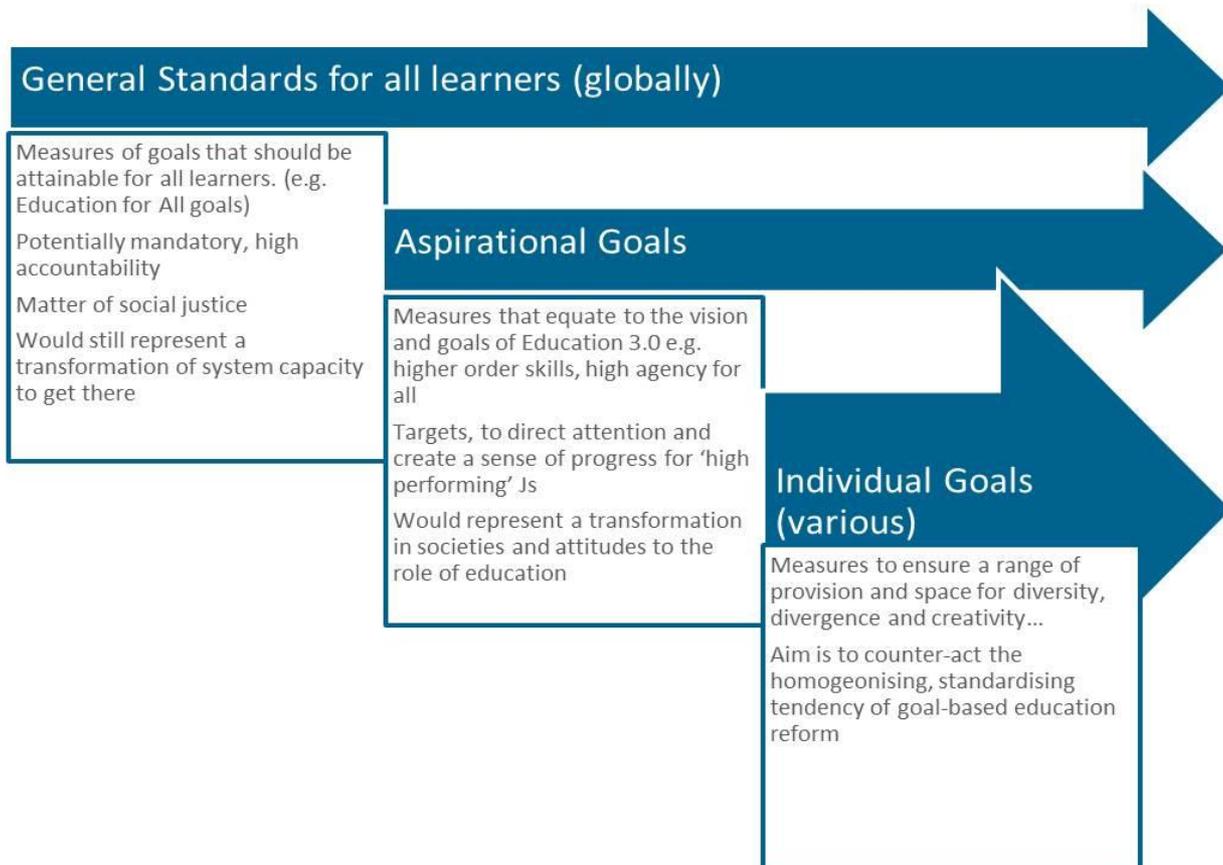


- **3.0 outcomes are typically diverse, complex and require the ignition of agency** as well as development of linear skills⁹. There may be limitations *inherent* in attempting to impose these outcomes as goals through the use of metrics. To avoid unintended consequences, system metrics may need to be couched in the right terms and policies as well as designed of the right measures.

To navigate these complexities, it is necessary to distinguish between different kinds of learner outcome goals an education system may have.

3.1.2 universal standards vs. a diversity of learning goals

A key challenge in defining outcome goals for education is the conflict between securing and promoting equal opportunities for all learners, and allowing for sufficient diversity to encompass a range of contexts and aspirations. The model below illustrates how a system might divide a conception of 'success' for students into three broad areas:



Different aspects of the 'New Metrics conversation' speak to different layers of goals: general standards may appropriately be defined at an international level, whereas more aspirational or individual goals, which might direct and define the shape of young people's dispositions and aspirations, perhaps may only be defined at the jurisdiction, local or individual level.

The nature of individual goals and their relation to system metrics relates to the discussions above (3.1.1) and to that below.

3.1.3 Captured vs. manufactured metrics

These terms describe the contrast between metrics that are collected or produced as authentic by-products of other processes, such as teacher reports, and those which are created for the purpose of measurement and evaluation, such as accountability assessments.

⁹ See also 'The dilemma of authentic learning: Do you destroy what you measure?' O'Reilly radar, March 7 2012 <http://radar.oreilly.com/2012/03/education-making-testing.html>

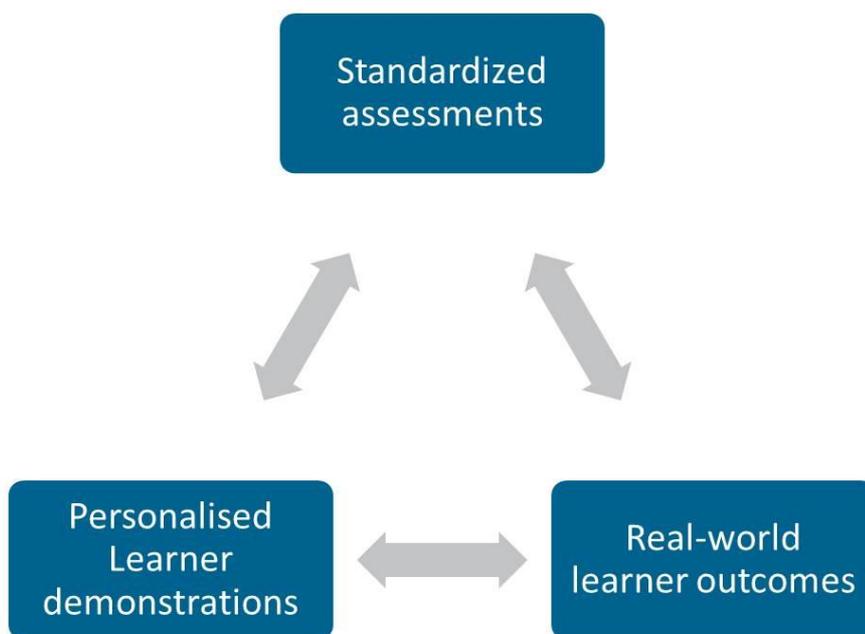


One hope of the move towards big data is that it negates the need for this distinction: system metrics may be composed from data produced naturally by the learning process. Yet even as this becomes increasingly possible, it may mean simply a greater load of manufactured assessments built into learning platforms. Methods of 'capturing' sufficiently relevant data at scale seem harder to come by. This leads on to ask: do system metrics rely on standardized assessment?

Ever since assessment of student performance became important as a measure of the health or success of an education system, there has been an assumption that standardization is a necessary part of the process: for results to be used to monitor change over time, an assessment must be marked and calibrated against certain standards, so that users of the data have assurance that there is comparability between tests, and between years.

In order to produce such comparability, however, the design of standardized assessment places a certain limit on the type of performances that can be assessed: skills and competences have to be broken down into identifiable chunks, and therefore become liable to be *taught* in chunks rather than through engaging and challenging experiences. For many in education, standardized testing represents a major limitation of the 20th century approach to learning, one that makes it particularly ill-fit for the diverse challenges and opportunities of the 21st century¹⁰. Moreover, the logic of standardization highlights a question at the heart of 3.0 Education: where should universal competitive standards end, and room for personal goals begin?

This question is hugely challenging and we cannot hope to solve it glibly. But one route out is that of triangulation: if standardized assessments are a necessary part of benchmarking and system evaluation, some of their negative effects may be alleviated if monitored in combination with other output measures:



3.1.4 Content-specific vs. broader skills

If tightening the New Metrics conversation to specific forms of learner outcome measures, one obvious focus is on the several new skills, competencies and dispositions that have been elevated in recent decades.

There is a concern that such skills, if isolated for assessment purposes, might be taught in isolation, leading to

- a) Less time for learners to engage with knowledge beyond their immediate horizons
- b) Skill development occurring out of context, or in an overly pre-digested or simplistic manner

Both of these dangers are worth keeping an eye on, however, in current contexts, there are reasons to promote the development of isolated assessments of 21st century skills:

¹⁰ See for example the work of Yong Zhao, or Nikhit Goyal's *One Size Does Not Fit All* (2012).



1. Even where national examinations or school-based performance assessments test the development of higher-order competencies, there are rarely methods in place for identifying from this data the level of development at the system level
2. If 'hidden' within other tests, assessment of 21st century skills does not carry a normative function – large-scale educational assessments help to focus public attention on particular educational goals, and motivate system and school leaders to prioritize those goals
3. Linked to the above, a 'jolt' is needed to our educational priorities and to our shared conceptions of what qualifies as 'educated' – this best comes in the form of visible re-orientation of assessment towards higher-order competencies

Each of these reasons is open to challenge – and indeed there may be other solutions to each of these issues. Alternative approaches to avoiding these issues would involve more thought, again, towards **triangulation** as opposed to over-reliance on specific assessments.

4.1 Learner progress vs. system transformation

In this paper, we have presented the issue of New Metrics primarily as one internal to each jurisdiction, with the focus of measuring progress towards desirable system outcomes. But within the GELP community, the New Metrics conversation has another potential focus: measuring progress *towards system transformation by other means and metrics*.

On the surface these might seem one and the same, and ideally, they would be. But it might be that the second offers earlier and more readily available possibilities for measurement, and greater potential for international comparison. If we were, as a community, to focus on the establishment of metrics to monitor progress towards system transformation, one starting point could be the following.

As described above, at the end of the GELP book *Redesigning Education*, we identified several tasks which needed to be taken forward, related to the teaching profession, the market of education, and the role of government. We might decide to focus the attention of new metrics on the state of each of these, establishing measures of:

1. To what extent a jurisdiction's teaching profession is leading or could be positioned to lead the work of transformation; what proportion of the teaching profession are 'on board'?
2. To what extent does a jurisdiction have the structures and resources in place to support a flourishing market of learning opportunities, including measures to promote equity?
3. To what extent is a jurisdiction's government taking an enlightened position on the work of transformation, and moving to make itself a platform rather than provider or controller?

In order to create metrics for each of these areas, we would need to identify the promising signs and, potentially, create new tools to measure progress, e.g. surveys, audits.

Another, potentially quite radical, way of measuring progress towards system transformation would be to take further our use of the strategic triangle, and seek to gauge in each jurisdiction what level of consensus there is around the value proposition of Education 3.0, or the Learning Society; what level of support there is from the political and professional stakeholders (the authorizing environment); and what level of operational capacity is at hand to carry forward the work (state of the teaching professions; rich ecosystem; strong infrastructure; public funding; other sources of funding etc).

During an extension session at GELP New Delhi, we may test appetite for pursuit of the question of New Metrics in this form.