

Equity in Education

Solutions to inequity resolve the confidence and political currency for driving transformative solutions to address traditional and ideological barriers in Education. Solutions to inequity are the difference between digital substitution of status quo vs. digital transformation of it. Solutions to inequity resolve talent shortages, translates education policy into measurable-teaching and learning transformation, resolves teacher-training, drives “race to the top” technology choices and removes wastage. A solution to equity introduces a system of education that promotes and taps into the creative potential of all learners.

The issue

Where most education systems, globally, have unique characteristics - establishing equity is one commonality that exists in most education acts and a "performance" requisite of most leaders. That, said, variances appear again when reviews in education, often referencing equity, lead to a variety of solutions - often flexing between degrees of centralisation or de-centralisation (depending on where the needle is placed) of agencies, changing policy settings, changing curriculum, reducing assessment and or embedding digital into schools. Statements, justifying solutions, promoting a drive to equity emerge:

“The single most important influence on students’ achievement and progress is the effectiveness of the teaching they receive”

However, defining the specific nature of the equity problem, particularly from a sector solution, broader talent development, skills and employability perspective, through to institutional posture, teaching and learning quality (performance), is often elusive. This is due to, often, to the lack of data or intelligence and the difficult topic of validating performance in education. In many cases, education intelligence and performance, are limited by the system (or schools) holding a variety of disparate, transactional, populous, operational, biographical and past-performance assessment data (grades).

Consequentially, collaborative teaching, “modern learning environments” and a variety of schemes or one-size fits all education methodologies then appear and are applied upon or as extension of the prevailing education structures.

“One way of addressing this variability is to focus the system on collaborative expertise and student progression” –

Thus, the difficulty with equity (giving the same access to the same opportunities to all learners) with broad schemes is that every student across earth is unique. Traditional education systems are not built to address uniqueness (but, they can be). That being - all learners, of differing needs, are often served by the mass delivery, educationally, by a singular, a few or small groups of educators. Noting this, measuring individual student

progression or performance, as a result of applied expertise, in terms of knowing each student's learning style(s) or overall progression has proven to be taboo (in most systems). This is in part due to the tensions that fuel pay, for example, and or resourcing debates when considering measuring work load vs. the effectiveness of teaching and learning quality or performance. As a result, few systems correlate size of administrative workload upon then, the choices of teaching methods and the relationship to "equitable" education.

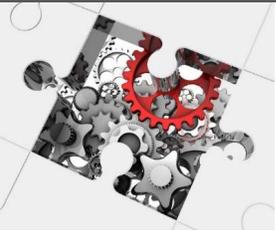
Accordingly, if a common goal of education-transformation, worldwide, is to genuinely resolve "inequity" and can be drawn upon, then equity needs to be seen in a lens of creating new policy, new incentives, new change-programmes and technological innovation that addresses the quality, accessibility and manner in which "education" is applied. This is where "education" therefore *must* then relate to highest quality of cognitive and skill development available at any one time using resources optimally (for education).

That being - the root causes of inequity (which create the basis of for solutions to be designed) becomes evident when drilling into the structures which reinforce traditional models of education. Commonalities exist worldwide; where funding incentives, such as to develop school roll (not necessarily academic quality), drives behaviours and all structures, in schools, to market their worth based on past achievement. This creates large class sizes and mass delivery.

Using this, with an example of 30+ student class, the default response to roll based strategy in schools – and where schools still operate multi-period (per day) timetable structures, is that direct teaching (teacher at the front) and post-learning assessment become common or default practices. From an inequity view point (and as much education research shows), means 80% of learners are marginalised. It is a dominant style of "teaching" that appeals to the few; where, "if" the teacher ceases instruction to engage each student equally for 1 minute per lesson, each student, in this scenario, receives just 2.89 hrs. 1:1 education attention per year. Inequity exists because, for those students remain engaged, this practice results in 20% of the intended cognitive absorption from reading slides/text and or running written exercises.

Accordingly, it is often the incentive structures, performance driver (a focus on the outcome), nostalgic timetable structures, policies that appraise direct-teaching and post-learning assessment (and compliancy to these) processes that, in themselves:

1. *are the root cause constraints that promote and incubate inequity.*
2. *continue to offer learners ever low levels of participative-comprehension learning.*
3. *lead to knee-jerk response "solutions"*



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As a result, the idea of equity or inequity often then becomes a funding distribution "haves vs. have not" argument. Knee-jerk responses occur including digital substitution through low grade-technology, such as BYOD initiatives (I-pads, Chromebooks) and simplified-classroom management tools. More broadly, these technologies are often touted as resolving inequity. However, in applying the lens of equity in terms of quality and accessibility, these technologies incubate inequity.

In reality as they are “compromise” technologies they become the instruments of inequity as they are used as a marketing position for roll-development purposes, preserving the same structures of low-order learning and process-based education. Inequity remains hidden as no additional insight has been added to identify the real root causes and structural impediments. The impact contributes to a dwindling pool of talent or broad low-skill base with weakening prospects based as the foundation level of learning, or the real impact of broad inequity – remains low.

Solutions

Resolving equity relates to the quality of education first and foremost, with accessibility the means to provide it.

Transformation solutions, therefore start, with mindsets dedicated to redefining the paradigm of education through a renewed purpose and highly objective process of change (whether policy, manner of change or solutions). Resolving inequity, therefore, distinguishes solutions between digital substitution or simplification of status quo vs. transformation or it. Genuine solutions to inequity start by shifting the quality of education to a mode that harnesses and or develops the creative potential of all learners. This means higher order, immersive, 1:1, insight driven interdisciplinary education.

The layers of change alters the strategic posture of schools, from marketing the “result” to obtain roll, to behaviors that create environments align the quality output of schools to the development and creative potential of all learners as consistent to the needs or direction of the society within which education is provided. Sounds easy, but there is there is no one size fits all in an truly equitable and enduring solution. However, there are some essential ingredients:

- 🌀 Recognition of structures that reinforce comprehension level learning with mass delivery & post-learning assessment
- 🌀 Encouragement of transformation mindsets; with empowerment for change.
- 🌀 Modernisation of traditional timetable models to enable immersive learning.
- 🌀 Process automation of any task that erodes into education quality.
- 🌀 Strategic management for all educators.
- 🌀 Data and analytics training.



Thus, the real potential to address equity (or inequity), globally, involves supporting school leaders and change-educators into, themselves, equitable access into strategic practice. Standard teacher training is no longer sufficient. This move considers dedicated training of educators in use of sophisticated technologies for applied goal-orientated change initiatives. This is so they can apply change upon the core or root cause problem area of equity in their own environment; and so measurably and with confidence.

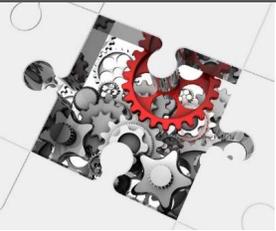
Stepping beyond school-management systems, Azure, Power BI and Office 365 are critical technological differentiators in which enable paradigm shifts, agility-change models and are vital in creating equity in all aspects of education. Thus, the foundation of resolving inequity is about enabling leaders to build and deploy higher-performance drivers with insight such as:

- 🌀 Quantified student thinking.
- 🌀 Motivational mapping and intervention triggers.
- 🌀 Engagement (and types and to what [content, activity, interaction]).
- 🌀 Knowledge (using a variety of frameworks) development.
- 🌀 Learning style detection, development and 24/7 tailored content mapping.
- 🌀 Institutional Programme Performance, Course plan & Lesson quality.

These variables and technologies justify the difference and school-leader decisions away from investments in digital-substitution or simplification initiatives towards genuine digital transformation. These technologies enable equity to exist as educators can apply informed strategic education renewal, designing agile-institutions. Contextually, politicians, governments, ministries and schools can then invest in, design and deploy programmes with confidence that equity solutions have measurability (real-time). This relates to the teaching and learning development quality for increasingly authentic 1:1 teaching and learning interactions – as it happens. This does not necessarily mean 1 teacher for 1 student. It does mean having, at the heart of it all, additional variables and enablers as required to model, manage, predict and establish counter-anticipatory thinking for an eco-system of change.

Broader Perspective

Globally, even in in systems that perceive equity as reducing haves vs. have nots, if equity is seen as in a lens of education equality, these enables justifies a shifts from roll-based incentive structures, policy and performance structures that reinforce the current-state or post-learning-assessment and direct-teaching models. Funding and performance management can then be precisely targeted, with little latency (reducing wastage and risk capital) and high yield to key institutions. As measurement of teaching



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quality, performance justifies process automation (of compliance or otherwise) to reduce workload, establishing greater facilitation for equitable teaching and learning situations – intervening and adjusting as it happens (or in anticipation).

As a platform for this, the predictive, evidence based and adaptive power of AI will transform every aspect of education in terms of equitable programme design, delivery and student engagement. IOT and AI will transform the entire concept and utilisation of education environments. Together, this will mean enabling leaders with predictive and counter-anticipatory cognitive-development, use of image-detection, content-recommendation systems, text analytics, video-analytics, speech recognition and neural-pattern analysis. Mixed with location based services, the ability to sense the right learning need, data or content provision, at the right time, across high performance devices, to support deep learning as best fit to the unique characteristics of each learner - all understood in a diverse education environment – in real-time - will be the features of a highly equitable education environment.

Put another way, this mode of education enables leaders to still compete for roll for funding gain. However, the competitive differentiator will be a school that delivers tradition, but is inequitable vs. a school that is able to prove equity, and solutions. This is in marketing demonstrable returns in investment, automated reduction in administrative workload, showcasing the national and regional value from the net use of educator time upon the equitable uplift in memory receptivity, cognitive processing, emotional or applied intelligence or development of all-learners (in real-time). In that regard, tackling equity through complete system and technological overhaul will define the century ahead in terms of the international competitiveness and or place of emerging nations. Many will leap frog others may become the 21st century beacons by proving equity in education.