Aligning and sustaining meritocracy, curriculum, and assessment validity in Singapore

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http://dx.doi.org/10.18296/am.0003

Abstract

Meritocracy embodies tension(s) between its egalitarian and elitist strands, which in turn construct how "fairness" is construed in terms of educational opportunity and outcome. In this article, two conflicting notions of fairness are identified, and the dialectic tension and relationship(s) between each are explored. Assessment practices in schools, in particular those pertaining to notions of assessment validity, are identified as early purveyors of merit determination. The case of "holistic assessment" and "bite-sized assessment" in Singaporean primary schools is discussed as an example of the importance of addressing validity in school assessment with the goal of preparing students as future citizens with capacity to fully participate in meritocracy discourse in society. A critical mass of such participative capacity is suggested as an important first step to broaden access to meritocracy, while extending the scope and practice of assessment validity in schools is considered fundamental for developing such capacity.

Introduction

Meritocracy constructs a central and privileged discourse in Singapore's history and educational system, and serves as an ideological proxy for considering issues of fairness, equity, and inclusion in that system. This construction is not exclusive to Singapore; meritocracy is a potent, formative force in many societies and in their educational systems. Understanding meritocracy is, therefore, essential to understanding how assessment and the curriculum exist in dynamic relationship to society, not only in Singapore but also elsewhere.

Broadly speaking, meritocracy may be understood as being underpinned both by the constructed notion of what counts as merit and by how merit is evaluated. Demonstrated merit and its evaluative mechanisms then serve as the premise for claiming fairness in the distribution of educational resources and pathways. Equity is likewise claimed on the basis that every learner enjoys adequate and appropriate access to basic education as well as requisite opportunity to succeed. Inclusion is presumed to exist since objective, clinical high-stakes national assessment does not overtly favour any one group of learners over another. Hence, meritocracy encapsulates and promulgates the notion(s) of fairness, equity, and inclusion in assessment and education systems. However, a closer examination of what meritocracy entails, its constitutive tensions and its inevitable agenda(s) paint a different picture. In this article, we argue that the prevailing notion of meritocracy in Singapore, in particular the mechanisms of curricula and assessment, reveal areas and issues which compromise and affect the very ideals of fairness, equity, and inclusion it seeks to effect.

Singapore provides a useful context to examine the overt, concrete expression of meritocracy. Since its inception as a nation state in 1965, Singapore has been governed by a single political party—the Peoples' Action Party. Meritocracy has been used as a justification and mechanism for vesting decision-making control in the hands of a small minority of about three hundred individuals (Bellows, 2009). Such an elite is elected, maintained and sustained on the basis of having demonstrated merit at a level and of a nature warranting inclusion within this governing minority (Ho, 2014). Meritocracy has been presented as the only viable governing principle for dealing with scarcity of resources. Consequently, "Singaporean meritocracy" has become "enshrined as a dominant cultural value in Singapore and used to justify authoritarian government" (Tan, 2008, p. 11).

Elite political control is replicated in education, through legitimisation of the authoritative and central role of the Ministry of Education (Tan, C.Y. 2013). While meritocracy pervades all aspects of society and government, the notion of meritocracy in Singaporean education, and the construction of elite decision-making, are worth special attention. This is because assessment practice and the curriculum, controlled under this central authority, determine and reflect notions of merit. It is these notions of

merit that define educational and societal systems, as well as describing people's opportunities and locations within both.

This article examines various notions of meritocracy, curricula, and assessment as a backdrop for situating Singapore's "brand" of high-stakes meritocracy in student assessment. The authors argue that the singular notion of meritocracy, henceforth "Singaporean Meritocracy", is conceptualised and often presented as a unifying and common discourse for educational curriculum and outcomes; in reality Singaporean Meritocracy exists as a group of contested—even conflicting—ideas and priorities. Two dominant, contrasting priorities and their resulting tensions are identified and discussed—egalitarian and elitist. These polarising tensions are of particular importance in relation to curricula and assessment. The consequences and implications of these contested visions, assessment practices, and the resultant production of egalitarian or elitist outcomes, or both, are discussed.

Meritocracy definitions and agendas

We begin with a broad and accommodating philosophical position on meritocracy—that meritocracy "points to merit as the rule or principle that governs how the economy, society, and politics are organized" (Tan, 2008, p. 8). Such broad statements are non-contentious, for they avoid revealing specific functions, personal interests, and political agendas. Tan's (2008) narrower definition of meritocracy is more revealing: "Meritocracy is simply a mechanism for allocating resource/opportunity to appropriate individuals" (p. 9). Hence, discrimination is inevitable and essential, but equality of opportunity is not a definitional requirement. Rather, it is understood that a meritocracy may exist under a doctrine of inequality (Lim, 2013). Under this doctrine, meritocracy as a principle and mechanism for rewarding individual merit with means (opportunity) and ends (outcomes) establishes "a 'Rule of merit' and enables a system to identify/prepare the best individuals for the most influential jobs—thereby producing an aristocracy of talent'" (Tan, 2008, p. 8).

It is essential, then, to understand whether, and how, equality is attempted and achieved, and how inequality is understood and addressed.

Egalitarian versus elitist agendas

Meritocracy embodies tension(s) between its egalitarian and elitist strands (Lim, 2013). This in turn constructs how "fairness" is construed in terms of educational opportunity and outcome. Differences between egalitarian and elitist agendas of meritocracy may be understood in terms of contrasting priorities, emphases, foci, and ultimate goals. Table 1 summarises the pertinent differences.

Table 1. Contrasting egalitarian and elitist agendas of meritocracy

Egalitarian Meritocracy	Elitist Meritocracy
Prioritises means (of achieving merit) as opposed to the ends (who is of more merit). Focuses on (more) equality of opportunity to all individuals in order to attain and demonstrate merit. *Fairness* is understood as equitable provision of means and opportunity prior to merit-based differentiation.	*Prioritises ends*, i.e., who is determined to be of merit rather than the means to achieve that. Focuses on matching resources/opportunity to individuals according to their potential for achieving merit. *Fairness* is understood as appropriate differentiation of opportunity and resources according to identification of merit and concomitant sorting of individuals.
Emphasises *adequacy of 'basic' education for all.* Universal baseline of education as right, and not based on merit. Merit is first seen in relationship to competency as person and citizen, then second in terms of discipline/ profession.	*Discriminates in quality and quantity of education resources; individuals are constructed into groups and are provided for* in order of perceived merit and potential. Merit is articulated first through disciplinary/professional tracks. Competency as citizen and person is interpreted through this.
Focuses on *providing for everyone's interest* as equally as possible. Equity informs the education system; the education system is intended to reproduce equity in society.	Focuses on *identifying and supporting a small elite* to govern everyone's interest. Hierarchy and attendant privileges inform the education system; the education system perpetuates a similar structure in society.
Ultimate goal is to *reduce disparity between outcomes within sub-groups.* Utility is understood as reduction of inequity within all systems (educational, political, etc.). Building and determining merit are positioned to broadly increase effective citizenship, leadership and equitable benefit.	Ultimate goal is to identify disparities and assign place. Utility is understood as the reproduction of strata within all systems so that people are placed according to demonstrated merit. Leadership and attendant benefits are reserved for those determined early on to be of particular merit.

Both systems of meritocracy rely on a utilitarian ethos, centering on the "utility of matching contribution to reward" (Bellows, 2009, p. 26). However, differences exist regarding provision of equal opportunity for all as a starting point for demonstrating contribution and subsequently receiving reward. An egalitarian approach argues that unequal outcomes (i.e. reward) are "justified because there is (presumed to be) equality of access and opportunity in the first place" (Ho, 2014, p. 30). Conversely, the elitist approach assumes that knowing that there are unequal outcomes is sufficient to motivate individuals regardless of their starting positions. In the elitist vision, there is no need to systemically construct equality of access and opportunity; the learner's own motivation and abilities provides sufficient equalisation. Both view gatekeeping as a utilitarian function of meritocracy in matching individuals to future roles in society. However, the elitist vision, relying on the learner to equalise disparity of opportunity, limits resources to individuals based on their potential for performing future roles in society. Conversely, the egalitarian vision provides resources to achieve equity of opportunity. Thus, both systems of meritocracy may accept differences in outcomes, but the role and agency of the system and learner in equalising the opportunity of achieving outcomes are fundamentally different.

The provision of (more) equal opportunity as a starting point for meritocracy is sometimes framed as an "adequacy" argument by egalitarian proponents. The following quote describes the "adequacy doctrine" in education:

> No educable child, Gutmann (1999) argues, 'may be excluded from an education adequate to participating in the political processes that structure choice among good lives' (p. 45). Equal access to education matters greatly because all young children need to learn how to be citizens before they acquire specialized professional skills. Walzer (1983) for instance, writes: 'All children, conceived as future citizens, have the same need to know, and…. the ideal of membership is best served if they are all taught the same things …. children learn to be citizens first—workers, managers, merchants, and professionals only afterward'. (Ho, 2014, p. 30)

The logic of adequacy as a first principle of education revolves around the notion that there exists a fundamental right to particular education and curricula for all learners regardless of expressed merit. Ho (2014) argues for universal citizenship education as a necessity for informed future

participation in political processes. Hence, the adequacy doctrine serves to affirm the need to systemically create equity in opportunity, and extend the understanding of curricula and education beyond facilitating school placements. Education and, by proxy, assessment of the individual must assure a universal baseline. Assuming this baseline includes citizenship, adequacy may demand equipping learners not only to perpetuate a meritocratic system but also challenge it, when necessary. This has significant implications for curricula and assessment.

In Singapore, for example, Ho, Sim, and Alviar-Martin (2011) called on teachers and students to critically examine the limitations of the use of meritocratic principles and to question the dominant discourses that positioned citizens differently on the basis of their academic performance and qualifications. In sum, given that schools play a central role in educating and preparing future citizens, it is necessary to ensure that schools are not engaging in social reproduction and are not excluding educable citizens from an education that is essential for full citizenship.

Proponents of the "adequacy doctrine" of educational fairness champion sufficiency of all resources for all individuals as the fundamental principle governing equitable distribution of educational resources. However, reliance on adequacy or sufficiency as a single principle or doctrine for distributing educational resources has been criticised, with opponents such as Brighouse and Swift (2009) viewing the notion of minimal adequacy for all as merely just one among several principles of justice concerning the distribution of education (p. 126). Likewise, Anderson (2007) argues for moving away from reliance on government to ensure sufficiency of education by focusing on what elites "should be doing for everyone else" and ensuring that elites are "constituted [such] that they will effectively serve all sectors of society, not just themselves." (p. 596). It is no small irony that even proponents of educational equity would recognise their reliance on elites to assure that we go beyond adequacy.

Elitist agendas focus on identifying and supporting an exclusive minority to govern everyone's interest. The utility of meritocracy is as a filtering device to select that governing minority:

> A meritocracy presumes that the outstanding, the high flyers, those with innate talent will be an elite. Elite in the Singapore context is concerned first with

> academic excellence and then job accomplishment. Those recommending a person for political office look closely at individual achievement, persistent effort and personal integrity. Inevitably, an elite, however achieved, is often associated with privilege, presumptiveness, arrogance and not being sufficiently in touch with the general public. A meritocratic political elite must be concerned with neither distancing itself from the citizens nor lacking sympathy or empathy. A meritocratic political elite manifests the unequal distribution of political influence. (Bellows, 2009, p. 27)

It is tempting to view egalitarian and elitist agendas as two separate and equal powers holding meritocracy in a balanced tension, resulting in adequate educational provision for elites and the rest. This is an appealing vision as it diplomatically suggests a (somewhat) equitable balance of power between two contrasting needs and multiple stakeholders. Our position is that meritocracy generally and especially in the case of Singapore, does not exist in balance to produce inclusive and equitable distribution of education and power. Instead, we argue that as the power to control the definition and exercise of meritocracy lies with the elite, this creates an inherent imbalance; the ones who have triumphed have every reason to maintain elitist oriented versions of meritocracy. Education, and specifically assessment, is a mechanism for reflecting, defining, and assigning merit; it is therefore possible that assessment could reflect this imbalance.

Bellows (2009) observed that in Singapore, a nation of 5.4 million people, the group of key decision makers numbered around three hundred. This carries implications for the articulated vision of education, citizenship, and leadership. Such a meritocracy creates not just a stratification of individuals for roles, but also a hierarchy for articulating (and perpetuating) relative power, including the power to dictate and perpetuate definitions of merit and the means of its demonstration. It is difficult to argue that this represents balance; instead, it suggests that an elitist meritocracy, at least in Singapore, contains vastly more power than can be counterbalanced by an egalitarian vision, and that this imbalance is perpetuated.

Power vested in small numbers of individuals may entrench privileges and perpetuate inequality of outcomes and opportunities; any redistribution of resources and opportunity is likely to instigate protectionist responses (Lim, 2013). Particular understandings of merit are defined and fiercely

guarded by meritocracy's winners. These understandings are strongly promoted in order to gain widespread consensus and support. Retaining definitional control is essential to the control of future prospects for winning and staying in power (Tan, 2008).

National examinations wash backward into the curricula and forward into Singaporean meritocracy. Examinations more than any other mechanism longitudinally define and link systems and criteria of merit. This demands an equally significant and longitudinal definition of validity. Each link in the chain requires validation. Examination results must, for example, be legitimately interpreted in terms of expected, grade-level performance. Legitimate interpretation of results must go beyond this, though. The consequences of a national examination's power to bridge school and society and define meritocracy demand the interpretations of validity are equally consequential. The chain of validity must stretch just as long as the chain of examination evidence.

Legitimacy of assessment is increasingly defined through the utility of results to produce immediate and long-term formative results. This represents an egalitarian perspective of building learners' capacity both to benefit the learner and to provide a higher baseline of competency for meritocracy. Thus, the validity of assessment is intimately tied to an egalitarian agenda. In Singapore, and worldwide, formative assessment is too often used narrowly, hierarchically, and near-exclusively towards examination and test preparation. This represents a more summative and elitist paradigm in which assessment serves a near-exclusive sorting feature. Thus, the impact of national examinations may be to promote an elitist agenda while invalidating the professed, egalitarian agenda of building learner capacity through assessment.

Validity of school assessment practices in Singapore

In Singapore, the centralised bureaucracy of the education system exerts its authority in and through assessment policy by creating and perpetuating a centrally planned and common assessment framework. This common assessment framework applies to all schools in Singapore, and is in turn, administered by a central examination authority—the Singapore Examinations and Assessment Branch (SEAB)—which is part of the

Ministry of Education (the Ministry). All students take the same national examination; hence there is the perception of a centrally maintained level playing field for all, regardless of ethnic and socioeconomic status. Thus, the argument for a centralised system of assessment is egalitarian. Students' progression through schools, institutions of higher learning, and placement into courses at each educational level is based on their performance in these common national examinations. We may therefore also say that placement within the larger meritocratic structure of society is indirectly but heavily influenced by examination performance; it is here that we run into issues with validity

Admission to each level of education is guarded almost solely by examinations, rendering them high stakes and norm-referenced. Such assessment systems have been criticised for putting a premium on reproduction of knowledge and passivity of learning at the expense of critical judgement and active engagement. It is not surprising that the use of national high-stakes examination results as a sorting mechanism in Singapore has inadvertently remoulded the curriculum, washing back into primary and secondary schools (Tan, 2011). Evident effects include a curricular focus on grades and content acquisition over learning and holistic development, as well as restriction of formative assessment in tested subjects (i.e. those subjects with national examinations) to increasing test scores rather than fostering learner agency and development (Hogan et al., 2009; Koh & Luke, 2009).

Singaporean meritocracy presumes a need for a societal elite that is based on academic excellence. The political elite in Singapore invariably possess sterling academic achievement, and the Singaporean Government openly declares its preference for candidates of high academic calibre for political office (Tan, 2008). Hence, what constitutes merit in Singaporean meritocracy begins in Singaporean schools. Demonstration of this merit revolves around high-stakes national assessment. However, due to washback, curricula and much of school-based assessment is devoted to preparation for national examinations (Tan, 2011). It can therefore be argued that it is national examinations that truly establish the early and pre-ordinate production of the hierarchical framework of merit (i.e. meritocracy) in Singapore. As Bellows (2009) argues: "testing and evaluation is not confined to academic achievement in schools, but also

extended for the political elite as a constant process in the upper political echelons" (p. 32).

Validity generally refers to the accuracy of interpretation of assessment results—whether or not an assessment measures what it is purports to measure and whether results from the assessment allow us to say something meaningful and accurate about current and future performance. Validity may also be understood as a chain of evidence, with each link in the chain strong enough for the whole progression to remain unbroken (Crooks & Kane, 1996). Within the Singapore curriculum, the chain of validity may be forged through interpretation of performance within particular disciplines. The chain extends beyond schooling and into society through legitimating the particular place within society that an individual's assessment results may place them in. However, national examinations play a massive role in shaping what is valued and emphasised in disciplines, especially for those disciplines directly tested through examinations (Koh & Luke, 2009). Thus, national examinations place stress on the whole chain of validity, reshaping curricula towards achieving higher exam scores and defining predictors of performance for future schooling and "appropriate" place within the meritocracy.

Validity's relationship to merit may then be problematic. Theoretically, schools act as early purveyors and formulators of what society ultimately and eventually recognises as merit. Assessment allows for interpretation of scholastic achievement. This provides the rationale for valid interpretation of results as a measure not only of within-discipline academic achievement, but also what constitutes merit, meritocracy, and peoples' relationship with both. Practically, however, the power of national examinations reshapes the entire chain of valid interpretation to such a degree that examination scores no longer provide inferences of merit. They become instead the defining quality.

A progressive change in assessment could better reposition and sustain future notions of merit, as well as students' long-term capacity for participating in debates on meritocracy formulation. New thinking may be required in terms of moving beyond consensual definitions of validity which privilege testing and the related need to move beyond high-stakes summative assessment.

One such example is Singapore's recent assessment changes at the primary school level, especially at Primary 1 and 2 levels. This intended reform offers insights into the complexities that accompany any attempt to move beyond high-stakes summative assessment to broaden educational outcomes beyond academic achievement; in this case, confident future citizens who develop beyond what is measured as academic performance.

Holistic and bite-sized assessment in Singaporean primary schools

The importance of assessment in Singapore is regularly discussed and debated in terms of academic achievement and more specifically in relation to doing well in examinations. The latter are used to sort students into various educational streams, schools, and eventually within society. School life for the 52,000 students in Singapore starts with 6 years of compulsory primary school with a broad-based curriculum, followed by 4 years in secondary school. Which secondary school a child ends up in depends on the results obtained in the national Primary School Leaving Examinations (PSLE) at the end of the Primary 6 level. The results also determine the course that the child will be streamed into at secondary school.

The merit-based streaming at various levels has afforded multiple pathways and created "a culture of effort" (Gopinathan, 2012, p. 67). But to many parents, the merit-based streaming also means limited places in what are considered more prestigious institutions. The competitive nature of the selection gives rise to artificial scarcity of success where one succeeds only if one finishes high in the rank order (Stiggins, 1995). Not surprisingly, private tutoring comprises a formidable shadow education system (Bray & Lykins, 2012) and sale of assessment books and examination papers from top-performing schools is a roaring business (Barr & Skrbiš, 2008).

Concerns over the prevailing negative effects of examination practices on students' learning was a principal impetus that prompted the Ministry to re-examine the relationship between assessment and learning in primary schools. In April 2009, the Primary Education Review and Implementation (PERI) Committee called for examinations for Primary

1 and 2 to be replaced by school-based holistic assessment practices to support learning. It was argued that in these early years (typically 7 to 8 years of age), too much emphasis on semestral examinations would impede students' confidence and desire to learn, and prevent students (and teachers) from understanding and using assessment to support and improve learning (Klenowski, 2009). However, there could be differences between the rhetoric and the reality of (re)aligning school-based assessment practices with new societal goals of focusing on holistic development.

In the next section, we examine such differences in the recent attempts to introduce bite-sized assessment in Singaporean primary schools, and the misalignment of school assessment with societal goals in terms of how meritocracy is construed and constructed.

Bite-sized assessment in Singapore

Reading from right to left, Figure 1 graphically charts the rhetoric of the PERI recommendations for building future confident citizens. The devolution of the recommendations to primary schools to replace semestral examinations with "bite-sized assessment" for Primary 1 and 2 students is also represented. The bottom row of each column contains verbatim quotes from the PERI report that articulate the formal intention to align current (primary) school assessment practices with the future and long-term goals of producing citizens with the confidence to face the future.

The long-term goal of confident self-directed citizens requires a corresponding change in the educational and assessment paradigm that shifts the focus from testing after instruction has been completed to assessment being integral to ongoing learning. To achieve this, primary schools were directed to remove examinations for its lowest two levels—Primary 1 and Primary 2. This was to remove the stress of testing and measurement, to de-emphasise norm referenced high-stakes examinations, and to focus on using assessment to build students' confidence. In its place, "bite-sized assessment" was exhorted as the means to signal and ensure more emphasis on learning and confidence building than on grades and results.

The actual consequences and implications of bite-sized assessment are rather different from its intentions. The then-Minister of State for Education,

Grace Fu, explained "instead of a heavy emphasis on year-end pen-and-paper examinations, teachers should use a range of assessment modes and bite-sized forms of assessment for richer feedback on learning" (Fu, 2010). However, it is not apparent what these bite-sized forms of assessment should actually do for enhancing students' learning. Tan (2011) argues that the nature of bite-sizing assessment does not in itself offer any additional benefit for building students' confidence or enhancing their learning, but

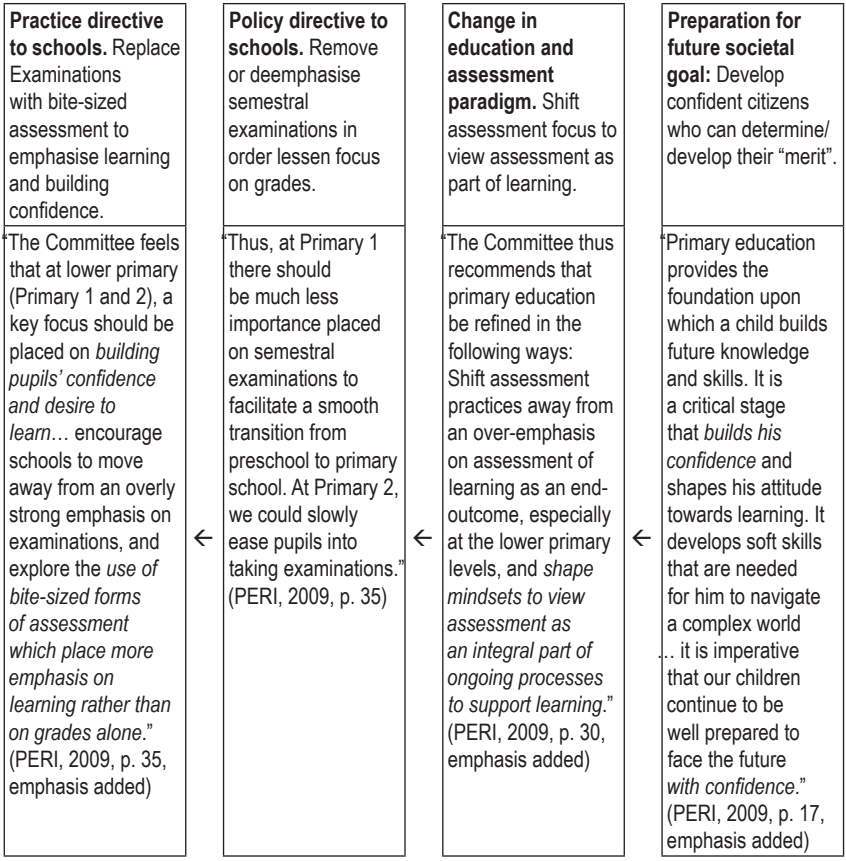


Figure 1. Intended alignment of school bite-sized assessment from/to a societal goal of participative citizenship capacity: An example from PERI (2009)

instead "dismembers learning into bite-sized portions [that] may have the unintended effect fragmenting learning into unrelated segments of information which do not add up to a coherent whole" (p. 100). Such reductionist outcomes of learning would contradict the stated intention of the PERI recommendations of "providing a more holistic and balanced education for primary school pupils." (PERI, 2009, p. 34). Likewise, Klenowski (2009) observed that "bite-sized modes of assessment, such as topical tests, to provide regular feedback on pupils' learning to parents' in Singapore, could lead to the issue of performance-orientated learning to the detriment of sustained and real learning" (p. 265).

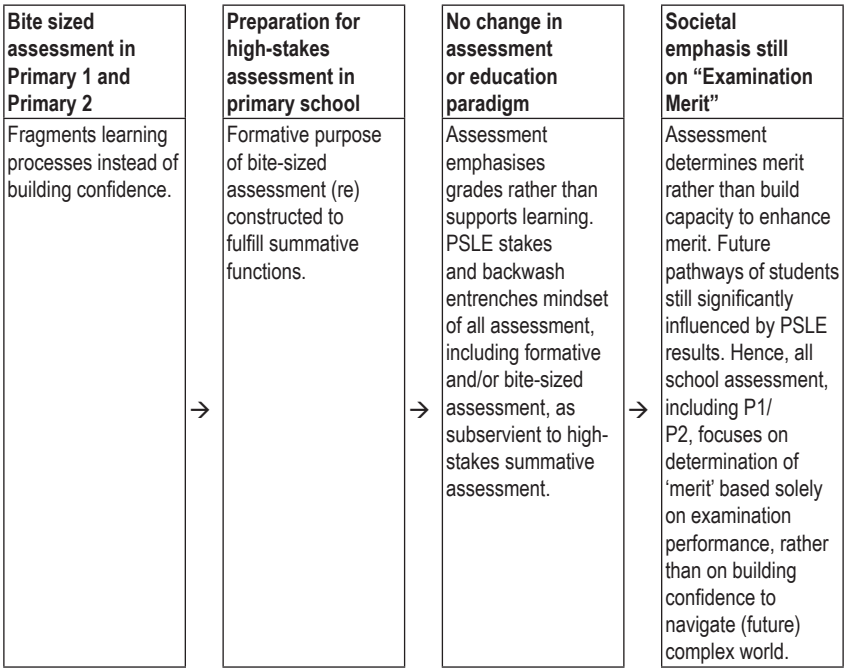


Figure 2. Reality of schools' bite-sized assessment practice entrenching societal assessment merit rather than building confidence

It is doubtful if the shift towards bite-sized assessment actually produces any change in the educational paradigm as its intended formative functions seem subservient to the performance orientation of high-stakes summative assessment. Ultimately, the societal reality of an examination meritocracy would seem to be retained, with assessment still performing the primary function of determining and stratifying educational pathways of students rather than increasing their capacity for making and/or negotiating assessment decisions.

Broadening the definition of validity

This article has articulated the prevailing tendencies of construing and constructing assessment in Singapore in terms of high-stakes tests and examinations, sorting and performance. It follows then that teachers' and stakeholders' notion of what makes assessment valid may likewise be limited to tests and examinations, and to their consequent sorting functions. If the notion of meritocracy in society is to move beyond stratifying citizens into ranked order of educational achievement, and if such academic stratification originates from assessment validity practices in schools, then the logical place to begin exploring how merit and merit determination may be broadened would be in new conceptualisations of assessment validity.

Whilst there exist arguments that there are different types of assessment validity such as validity in terms of content, prediction, construct, and consequence, Newton (2012) reiterates Messick's (1975) view that assessment validity is a unitary concept, and that the notion of construct validity represents a singular and all-encompassing view of "all of validity" (p. 4) These authors argue construct validity as the unifying discourse for which all other typologies of validity are centred. Consequently, the following consensual definition of assessment validity is offered:

> Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests … It is the interpretations of test scores required by proposed uses that are evaluated, not the test itself. When test scores are used or interpreted in more than one way, each intended interpretation must be validated. (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999, p. 9)

However, an emphasis on examinations, coupled with the above consensus definition of validity that has an explicit focus on the notion of validity in the discourse of "tests", may unwittingly, unduly, and excessively focus on testing and examinations as the only valid assessment practice. Consequently, and ironically, increased assessment literacy that focuses on assessment techniques may limit the use of assessment to testing and examining as the principal means of eliciting and interpreting evidence, at the expense of exploring a broader range of assessment approaches.

Validity interpreted in such terms largely privileges performance and achievement demonstrated in tests, and does not offer much scope for broadening societal notions of merit beyond examination meritocracy. Different notions of validity are needed not just to emphasise learning beyond examination results, but also to develop learners' long-term capacity to participate in assessing and evaluating merit and in determining merit in a democratic society. Such participative capacity involves at least two things—the *opportunity* to participate in discussions and debates about what should constitute merit, and the *ability* to contribute to and influence decisions of what qualifies as merit. In the context of schools and programmes of study, student involvement in their own assessment offers concrete opportunities to identity what should count as merit in their assessed work, and to develop their ability to make judgements about the merit of their work against agreed standards and criteria. In the longer term, such opportunities and practice in self-assessment may not only develop learners' awareness of requisite standards that underpin their learning, but also develop their acumen in assessing merit in other contexts.

A critical mass of such "participative capacity" would be required to ensure that meritocracy would not be protected and perpetuated by an elite minority. Three ways to broaden the validity of assessment practices beyond examination meritocracy and increase long-term evaluative capacity are now suggested.

Consequences for learning

First, we argue for recognition of assessment evidence towards addressing the consequences of assessment practices on learning. The term *consequential validity* refers to the extent of (positive) effects that assessment has on learning (Boud, 2000). High consequential validity

means that assessment has positive effects on students' learning. Low consequential validity means that students are discouraged from learning or distracted from what they are meant to learn. Validity is often defined in assessment terms as being what tests are meant to measure. This definition does not recognise how other assessment approaches may also influence students' consequent capacity and motivation for learning. In the context of affecting meritocracy, we would argue for the effects of assessment practices on students' future participative capacity to assess and evaluate merit, and meritocracy mechanisms, as a key component of consequential validity.

Ipsative interpretations of assessment evidence

Secondly, validity of assessment practices can also be broadened to include holistic judgments of learners' attributes so that individuals may (also) understand their individual progress in self-referenced ways. While there is a place for "scientific" quantitative measurements and aggregations of, or discriminating between, the difference in levels or types of performance between individuals, there is also a need for personal ipsative assessment of each individual that is holistic and judgemental (Hager & Butler, 1996). Ipsative assessment, or student-referenced assessment, refers to assessment practices wherein learners judge their personal improvement or enhancement of learning against previous learning, rather than against their peers (Hughes, 2011). In particular, ipsative feedback practices, which are based on a comparison with the learner's previous performance and linked to long-term progress, are more likely to be usable and offer additional motivational effects (Hughes, 2011). Hence, ipsative assessment is not meant for comparison, ranking, or discrimination between students. It is a personal and individual assessment of each learner for that individual's growth and development.

Long-term learning functions

Finally, the validity of assessment for long-term learning should be emphasised in the curriculum as a means of directly articulating learners' future and long-term capacity to participate in democratic evaluation of merit. It is observed that the discourse of formative assessment tends to focus on imminent improvement within a short period (Tan, K.H.K.,

2013). Tan K.H.K. (2013) argues that an important function of feedback practice is to identify gaps in students' learning and to provide comments and suggestions for students to act upon in order to close the gaps. Vardis (2012) argues that students usually attend to most of the teacher's written feedback if the feedback is specific to the student's written work, and if they are given the opportunity to revise their work. This then requires students to be provided with suitable post-assessment opportunities to apply the given feedback to close the gap, and these opportunities should take place soon after feedback is given.

An emphasis on opportunities for students to utilise feedback may then focus the utility of feedback on learning in the short term—learning that is envisaged in a subsequent assessment task or context. These pragmatic functions of feedback tend to focus on the next steps in learning and improvement, rather than on long(er) term learning outcomes. A useful concept for understanding how assessment can serve learners' long-term learning goals beyond formative assessment would be the notion of sustainable assessment (Boud, 2000). The latter is defined as "assessment that meets the needs of the present and prepares students to meet their own future learning needs" (p. 151). This involves teaching students to be independent assessors and learners, and decreasing the adverse impact of high-stakes assessment on their future learning capacity.

At the beginning of this article, meritocracy was explained as the ideological instrument for claiming fairness, equity, and inclusion of educational provision. Assessment practices have been identified as the specific mechanism for constructing and construing merit to the pernicious advantage of elites, such that the notion of meritocracy in Singapore is argued to be elitism oriented. We argue that the development of learners as independent assessors is the most direct and potent way for increasing democratic participation. These school assessment practices will affect meritocracy in the short term and, in the long term, meritocracy can evolve to embody a more inclusive and egalitarian social agenda.

Conclusion

Meritocracy is a term often used in educational discourse. This term conceals a plurality of tensions. In Singapore, assessment constitutes the

most powerful link between Singapore's meritocratic and educational systems. Exploring the tensions of meritocracy then requires exploring the role assessment plays within education and society.

In this article we examined contrasting egalitarian and elitist notions of meritocracy, and argued that merit is not a unitary concept but a notion applied to different interpretations and agendas. The construction of merit in society begins in school when students experience the judgement of the merit of their work in student assessment. Greater participation in the determination of merit in assessment practices is suggested as a means for decreasing unequal access to the meritocracy debate. A critical mass of such participative capacity is suggested as an important first step, and three ways to broaden the validity of assessment practices beyond examination meritocracy and to increase the long-term evaluative capacity of students as future citizens are suggested.

In Singapore, two dominant and polarising tensions are elitist and egalitarian interpretations of meritocracy. While both interpretations recognise differentiation of outcomes, tension exists around equity of opportunity towards outcome achievement. The elitist perspective maintains that responsibility for achievement lies principally with the learner; the egalitarian perspective demands creation of equity as an early, component built into the educational system. Singapore attempts to balance these interpretations, giving equal attention to valuing learner agency while mobilising limited resources towards assisting broad achievement of sufficient baseline outcomes. Whether this is truly a balance, or whether these perspectives are validly enacted, requires research. This study must start with assessment and the role it plays in shaping both educational and meritocratic systems.

Within a meritocratic society, differentiated outcomes result in a structure of levels. The legitimacy of this structure lies in outcomes relating to merit. In turn merit predicts the role of each person at their level. At higher levels, individuals must predictably be more capable. While much of the Singaporean discourse on merit revolves around academic performance, this discourse fails to take into account the washback effect of national examinations and the narrowing of curriculum and what constitutes merit.

There is an assumption that achievement may be interpreted more broadly in theory than it may actually be measured in assessment. The degree to which we may predictively rely on academic outcomes to measure merit is also compromised. Fundamentally, this poses a threat to Singaporean meritocracy, regardless of elitist or egalitarian interpretation. If disparate academic outcome achievement continues to be a key mechanism in assigning people to their respective levels, but that achievement does not relate strongly enough to actual merit, then a truly meritocratic system of recognition and distribution may be compromised.

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