Assessment Reform in Hong Kong Schools

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Abstract

In recent years, educators in Hong Kong have raised concerns about the examination culture that pervades the school system. Their arguments have focused on the detrimental effect that examination preparation has on student learning, and they advocate the introduction of less formal alternative practices that promote assessment for learning. The government, prompted by the impact of globalization and new technology on the economy that demand a more sophisticated workforce, has encouraged schools to adopt these new approaches to assessment. However, early indications suggest that there is considerable resistance to these moves from teachers and parents. Teachers tend to have difficulty in assimilated the new philosophy of assessment into their pedagogical beliefs and practices, while parents are concerned that informal assessment will undermine the value of standard, formal testing as a fair and objective means for determining social advancement. This paper discusses these tensions and presents a small-scale study that provides insights into current assessment practices in the classroom. It concludes that, given the tensions, informal assessment for learning needs to be implemented gradually in Hong Kong to ensure acceptance and sustainability.

Introduction

Hong Kong is a Special Administrative Region (SAR) of the Peoples' Republic of China, following the retrocession of sovereignty in 1997, which marked the end of over 150 years as a colony in the British Empire. The geopolitical history of Hong Kong, as a Chinese-dominated city that became a fervent centre of western-style capitalism while located on the southern coast of an Asian-style communist country that latterly has undertaken major economic reforms, has created a complex environment for schooling that brings together the legacies of Chinese educational traditions, British colonialism, market-based ideologies, hierarchical social structures and multifaceted identities. The shifting political and economic dynamics have produced numerous conflicting priorities within the education system in Hong Kong, including innovation versus conservatism, global, national and local tensions, liberalism versus authoritarianism, competition versus cohesion and devolution versus centralisation (Morris & Adamson, 2010).

Life in Hong Kong has been characterized by a sense of transience (Adamson & Morris, 1998). The Hong Kong SAR nowadays has a population of over 7 million inhabitants, having originally been only a collection of fishing villages prior to the arrival of the British in 1841. The colony expanded from Hong Kong Island to include the Kowloon peninsula and the New Territories and Outlying Islands by the end of the nineteenth century. The development of Hong Kong as an international finance centre and commercial hub has led to large numbers of migrants arriving from across the world. The diversity of the population is reflected in the multiplicity of international schools, offering a range of curricula, with the International Baccalaureate being a common feature (Bray & Yamoto, 2003). The change from the manufacturing to finance sector in the economy in the 1980s, together with the rise of an affluent middle class and the exigencies of globalization, had repercussions for the education system, as schools were expected to prepare students for their development into highly skilled human resources for

technology-driven service industries. This mission also involved universities, which, once elitist, were opening their doors to greater numbers of students for a greater range of programmes.

Hong Kong society has been characterized as embodying a Confucian cultural heritage that stresses the role of the family, respect for authority and established knowledge, the virtues of diligence, perseverance, morality and social harmony. In education, students are expected to respect the authority of teachers, and work hard to achieve academic success. According to Rozman (1991: 32):

> Ultimately the individual is responsible for his [sic] own learning, although he is made aware of role models who have followed the same path, he is placed under the strict authority of the teacher, and he is mastering the basics in concert with numerous students throughout his country. The classroom is a potent force for combining performance with conformity. Stress on moral education and rote learning heightens its effects as a socializing force.

On the other hand, the capitalist nature of Hong Kong society and the opportunities for upward mobility associated with academic success, led to the emergence of the "Hong Kong Dream" (Wong, 1992), which has created a contradiction to the emphasis on social harmony. As a result, the use of testing to determine progression through school and the fierce competition for university entrance through public examinations have engendered a culture of high-stakes, objective assessment of learning, with wash back effects on pedagogy, teachers' career prospects and parental choice of schools for their offspring.

Many of the public examinations administered by the Hong Kong Examinations and Assessment Authority (HKEAA) are highly formal, requiring the students to attend a designated examination centre, sit at an assigned desk in silence and under supervision, and answer the questions that are only revealed to the students once the examination starts. This assessment culture has not always been viewed as satisfactory for the health of students or the Hong Kong economy. To get students through the system, many schools tend to prepare students by drilling them with past test papers and testing them relentlessly, as the external assessments determine their future (Pong & Chow, 2002). Teaching content often focuses on meeting the requirements of the examinations, rather than taking the learning needs of students into consideration. Biggs (1996) argued that educators in Hong Kong had, for many years, based their assessment practices on assumptions inappropriately adopted from psychology and from the testing establishment. He then drew people's attention to the other function of assessment – to educate — and called for a major overhaul of the assessment climate in Hong Kong. The Curriculum Development Council (CDC), which publishes curriculum documents in Hong Kong, agreed:

> Hong Kong has relied on written tests and examinations as major methods of public assessment as well as within schools. Written tests and examinations assess the products of learning such as memory, understanding of knowledge and concepts at a certain point in time. However, independent learning capabilities and other learning experiences are better reflected in the processes of learning rather than in tests and examinations. Therefore, the latter would have a narrowing effect on learning if they continued to dominate assessment in Hong Kong. Curriculum change will not succeed without corresponding changes in assessment (CDC, 2001: 81)

Given that curriculum change is a prominent item on the government agenda, it is not surprising that the reform efforts have incorporated new forms of assessment that have been associated with the

recognition in recent years of the very powerful impact of feedback on students' learning (Black & Wiliam, 1998).

The purpose of this paper is to review the changes that have been implemented and to gauge, tentatively, their effectiveness, given that an early study by Berry (2005) indicated that Hong Kong teachers were still using assessment as a tool for measuring learning (AoL—assessment of learning) instead of a means for facilitating learning (AfL—assessment for learning).

Curriculum and assessment reform

Changes to the curriculum have been a regular feature of life in Hong Kong over the past 20 years, and have corresponded to the changes in the economic profile noted above. Some of the reforms have been comprehensive in scope, such as the introduction of a Target Oriented Curriculum in the mid-1990s, *Learning to Learn* (2001) and the New Senior Secondary Curriculum (2009), which included the switch from the previous system of 3-2-2 (based on the English and Welsh model) to a 3-3 structure, similar to the one operating in mainland China; reforms that seek to cater for diverse learning needs; and language policy reforms, most notably the promotion of mother-tongue (Cantonese) instruction in 1998 and the fine-tuning of the language policy (2009), which effectively reverted to the previous policy that favoured English as the medium of instruction (Kan & Adamson, 2010). At the same time, there have been various policies that devolve responsibility for curriculum decision making to the school level through the School-Based Management Initiative and School-Based Curriculum Development.

In terms of assessment reform, three structural changes have been or are being made in recent years. Firstly, the formal Academic Aptitude Test (AAT) and Secondary School Entrance Examination (SSEE) that took place at the end of primary schooling to determine students' access to secondary schools were replaced by the informal Secondary School Places Allocation (SSPA) mechanism, to avoid unnecessary drilling and the consequent distortion of student learning. Allocation is now based on the results of internal assessment of students in Primary 5 and 6. The results are moderated by the overall school performance in the Chinese verbal and mathematical aptitude tests conducted by the government. Secondly, Basic Competency Assessment (BCA) is being introduced at Primary 3, Primary 6 and Secondary 3 levels. One major purpose of BCA is to help teachers facilitate their students' learning. Thirdly, from 2010, the two high-stakes public examinations that took place at the end of Secondary 5 and Secondary 7 (mirroring 'Ordinary' and 'Advanced' Level examinations in England and Wales) are being replaced by a single examination at the end of Secondary 6, called the Hong Kong Diploma of Secondary Education (HKDSE).

The reforms mentioned above are intended to have a significant impact on the assessment practices in schools. The message of these changes is that assessment should be seen "an integral part of the learning and teaching cycle rather than a separate stage at the end of teaching" (CDC, 2001: 80). It is intended that summative tests should receive less emphasis, while the practice of formative assessment for learning is encouraged, supported by the diversification of assessment modes, parties and strategies, the provision of quality feedback of teachers as well as the active involvement of students into assessment process (CDC, 2002). The HKEAA (2008: 2) presents a view of assessment that is clearly associated with assessment for learning:

> Assessment is an integral part of the curriculum, pedagogy and assessment cycle. It
> involves collecting evidence about student learning, interpreting information and making
> judgements about students' performance with a view to providing feedback to students,
> teachers, schools, parents, other stakeholders and to the education system.

The main idea underpinning assessment for learning and alternative assessment approaches is that a great deal of conventional assessment focuses on what can be easily measured and ignores what is most important, which is enabling students to develop a deep understanding of the subject matter and how it contributes to their lives (e.g., Gipps et al., 2000; McTighe & Wiggins, 2004). The trend in Hong Kong towards encouraging the use of assessment to support students' learning and a greater use of school-based assessment (SBA) as a contribution to public examination grades means that the classroom has become an important site for the implementation of assessment reform and a good deal of responsibility falls on the shoulders of teachers. The rationale presented by the HKEAA (2010: 3) is as follows:

> Certain components of some curricula cannot be assessed within the context of a written examination, and this can be complemented by SBA. An even more compelling reason for SBA is that it emphasizes the assessment of a wide range of abilities of students, including the process of their learning and growth, thereby strengthening the tie between assessment and teaching and utilizing assessment as a support to teaching. The validity of assessments is therefore greatly improved. Teachers are undoubtedly the most suitable people to assess the process of students' learning and growth. SBA can also help reduce the pressure of "one-off examination" on students and affirm the professional judgment of teachers.

The expectation that teachers will take responsibility for assessing their students for a public examination has given rise to anxiety among outsiders (and teachers themselves) about the teachers' ability to participate in such a high stakes activity: do they have sufficient competence and objectivity? In an earlier study of the assessment component of the Target Oriented Curriculum that was implemented in primary schools in the mid 1990s, Morris *et al.* (1999) showed that schools were very reluctant to abandon formal, summative assessment, preferring to view formative assessment as an option extra rather than a fundamental change to assessment practices. Public responses to the Education Commission's *Review of Academic System: Aims of Education* (1999) demonstrated a split between the parents, students and employers who argued that public examinations should not be used as the sole mechanism to assess students' performance, and that school-based assessments and non-academic achievements should also be taken into account, and those who considered public examinations to be the fairest way of assessing students' performance, on the grounds that some pressure is needed to ensure the academic standards of students. Later, Carless (2005) found that the teachers encountered resistance from parents, as well as lack of support from colleagues and school policies, in adopting more formative assessment practices. Berry (2010) further argues that although the theoretical basis of assessment for learning has been accepted for some time, Hong Kong still has yet to effectively realize the plans and policies, as many schools remained rather conservative in their assessment practices.

Conscious of these reservations, various measures have been implemented by the HKEAA to moderate the marks and to identify any inappropriate grading, and the high degree of caution surrounding SBA indicates the sensitivity of issues relating to public examinations and the desire to create a 'level playing field' for all pupils.

In the next section, we present a small-scale study that investigates the assessment strategies used by the teachers to gauge whether the Afl movement is actually making an impact on classroom assessment practices.

Research methods

The investigation included twenty-seven teachers from nine secondary and primary Hong Kong schools. All the teachers selected one regular lesson for observation, and these lessons were video recorded. The data collected was analyzed using Torrance and Prior's (1998) convergent (representing AoL) and divergent (representing AfL) assessment framework (1998). Torrance and Pryor (1998:153-154) see convergent assessment as more connected to behaviourist views of learning whilst divergent assessment is more related to constructivist views of learning:

> In convergent assessment the important thing is to find out *whether* the child knows, understands or can do a predetermined thing. It is characterized by: adherence to precise planning; the use of methods or recording, such as tick lists and can-do statements; and an analysis of the interaction of the child and the curriculum from the point of view of the curriculum. It is routinely accomplished by closed or pseudo-open questioning and tasks… The implications of this form of assessment are essentially behaviourist, with the intention being to teach or assess the next predetermined thing in a linear or at least pre-planned progression. It is assessment *of* the child *by* the teacher. …

> Divergent assessment emphasizes the learner's understanding rather than the agenda of the assessor. Here the important thing is to discover *what* the child knows, understands or can do. It is characterized by more flexible planning, open forms of recording (narrative, quotations, etc.), and an analysis of the interaction of the child and the curriculum from the point of view of the child. This form of assessment is used more appropriately with open tasks and involves either open questioning, sometimes aimed at prompting pupils to reflect on their own thinking… It results in more descriptive, qualitative feedback. The theoretical implications of divergent assessment are that a social constructivist view of education is adopted with an intention to teach in the zone of proximal development; as a result, assessment is seen as accomplished jointly by the teacher and the pupil.

Findings and discussion

Data analysis shows that there were key tensions working against AfL through the use of convergent assessment types, and important opportunities for divergent, AfL-oriented assessment in the practices observed in the lessons. On the whole, the teachers used convergent assessment (51.3%) slightly more than divergent assessment (48.1%) (see Table 1), although the intensity and dimensions of each varied.

Table 1: Different concentration of the key tensions and important opportunities in the assessment and learning processes in the classroom

Key Tensions (Convergent assessment types)	Number of teachers identified using the convergent assessment type (n = 27)	Opportunities (Divergent assessment types)	Number of teachers identified using the convergent assessment type (Total = 27)
a. Precise, inflexible planning and an intention to stick to the plan	3 (11.1%)	A. Flexible planning or complex planning which incorporates alternative	6 (22.2%)
b. Tick lists and can-do	4 (14.8%)	B. Open forms of	1 (3.7%)

statements		recording (narrative, quotations, etc.)	
c. An analysis of the interaction of the learner and the curriculum from the point of view of curriculum coverage	16 (59.3%)	C. An analysis of the interaction of the learner and curriculum from the point of view both of the learner and of curriculum coverage	10 (37.0%)
d. Closed or pseudo-open questioning and tasks	24 (88.9%)	D. Open questioning and tasks	25 (92.6%)
e. A focus on contrasting errors with correct responses	12 (44.4%)	E. A focus of miscues - aspects of learners' work which yield insights into their current understanding and on prompting metacognition	21 (77.8%)
f. Judgemental or quantitative evaluation	22 (81.5%)	F. Descriptive rather than purely judgemental evaluation	9 (33.3%)
g. Involvement of the pupils as recipient of assessment	16 (59.3%)	G. Involvement of the pupil as initiator of assessments as well as recipients	19 (70.4%)
	97/189 (51.3%)		**91/189 (48.1%)**

It can be seen from Table 1 that there was a preference for 'tick lists and can-do statements', rather than 'open' forms of recording. Curriculum coverage was also prioritized by more teachers than an analysis of the interaction of the learner and the curriculum from the point of view both of the learner and of the curriculum coverage. There was also far greater use of 'judgemental or quantitative' evaluation than 'descriptive' evaluation. All of these tendencies are in tension with the promotion of AfL in assessment reform. On the other hand, opportunities for AfL were also seized by some teachers. Flexible or complex planning was more in evidence than inflexibility, while more teachers used student errors as an opportunity for prompting metacognition, rather than for error correction. There was also evidence of some teachers involving students as the initiator of assessments as well as the recipients.

As the study was conducted on a small scale, this analysis can only tentatively point out some of the trends. To add some more depth to the figures in Table 1, the following section presents and analyses some excerpts from the observed lessons to illustrate the different dimensions of the key tensions and important opportunities in the assessment and learning processes. Three dimensions were identified, namely, cognitive, affective, and social.

Cognitive dimension of tensions and opportunities

The cognitive domain refers to the prerequisite types of skills and knowledge deemed essential for the implementation of AoL. According to Hargreaves, Earl and Schmidt (2002), the cognitive dimension is related to the issues of organization, structure, strategy, and skill in developing new assessment techniques. From this point of view, teachers have to equip themselves with complex knowledge, ranging from knowledge of assessment strategies to skills which help integrate the assessment strategies into learning, in order to develop high quality classroom assessment.

Table 2: Cognitive dimension of tensions and opportunities

Tension	Opportunity
T: OK John and Peter are they apart? Ss: Yes T: Yes or no? S: No T: Oh sorry John. Are they apart now? *T moves two Ss' desks apart* C: Yes *T puts the desks together* T: Are they apart? C: No.	T: Water. Correct. **Now I want you to write as many words related to 'water' on a piece of paper. As many as you like**. *T walked around the classroom* T: **In addition to those words you found in the textbook, you could also think of your own.** Any special words? OK. Lam Leung. What words have you written down? Please share with us what you have got.

Key tension

In this excerpt from an English lesson, the teacher taught students the meaning of the vocabulary item, 'apart'. The teacher used questioning as an assessment strategy and an authentic situation to help students understand the meaning. However, the teacher mainly used closed questions, providing a limited challenge to students' cognitive capabilities. All the students needed to do were to answer 'Yes' or 'No'.

Opportunities

In the excerpt from the lesson related to water, the teacher used an open question to get the students to think about the topic and to produce answers that enabled the teacher to gain a deeper understanding of what the students knew. The extent of the cognitive demands required a deeper level of engagement by the students.

(ii) Affective dimension of tensions and opportunities

The internal beliefs and values of teachers regarding assessment are the most important influence on assessment decisions (McMillan, 2003). Hence, the beliefs, perception, values and attitudes of teachers towards assessment for learning could determine whether assessment practices are conducted in ways that raise student standards.

Table 3: Affective dimension of tensions and opportunities

Tension	Opportunity
T: OK let me mix them up. OK "Chi Ming has $85. He used $20. How much has he left?" How much money has he left? **OK before we calculate let me hear you recite the steps of solving problems**	T: I want to ask. **Would you know how to play these notes if I mixed them up? Oh are we going too fast? Then I'll go slower. Slower. OK** ready. One two three go

Class chanted a poem that they had previously learnt in order for them to remember the basics when solving wording problems: e.g. remembering to put the unit, to put decimals, etc.	

According to Torrance and Pryor (1998, 156), "the teachers who succeed in obtaining a more valid assessment of attainment will not be those who show interest merely in attainment, but those who also show interest in the child." In Table 3, the excerpt on the left shows that the teacher focussed on whether students knew what was required in the curriculum, and thus used memorization to bring about student learning. On the other hand, the teacher in the excerpt on the right was concerned with whether students were following the lesson, and slowed the pace to adapt to the progress of students. The teacher in this case was more student-oriented.

(iii) Social dimension of tensions and opportunities

Interaction is an important process in AfL. A dialogue would enable teachers to form a view of student thinking. The excerpt on the left in Table 4 shows a dialogue that is not focused on this aim. An authoritative tone from the teacher was intended, unsuccessfully in the event, to bring the students to order. On the other hand, the dialogue on the right hand side shows the teacher inviting students to express their views on their classmate's work, thus allowing the students to play a role as an assessor, on an equal footing with the teacher, and thereby enabling the teacher to get an understanding of the students' thinking.

Table 4: Social dimension of tensions and opportunities

Tension	Opportunity
T: OK. **I'll see which group is good, then I'll give them points**. T: Do it later. OK put it away. What lesson is this? Have you got your GS book? *Wrote on bb.* ***T was adding points*** **T: Group one is not good enough.** ***Class is gradually quiet*** … T: Here's a worksheet. For the first part. We have said things about the subjects. You take your diaries, and count how many times you have Chinese lessons. Ka Kei. How many Chinese lessons do you have? Shh. **because you have made noise I'm going to take points off you** *T took away points*. Shh. Let's see which group is the best. OK.	T: Now I want you to make up a sentence. Any sentence. Then I'll pick some students to come out and present to me. OK you should be able to do it. Please come out Lee Kan Kei. Quickly T: I know. *Ss had written: "The fireman rescued the people who are drowning" S read the sentence out* **T: What do the other students think?** **S: The sentence is so simple** T: It doesn't matter if the sentence is simple. What matters is whether they have used the vocabulary correctly. Have they? Yes. Let's give them a hand *Some Ss clap.*

	T: OK let me get another group Who would like to come out?
	S came out. The group had written: "When the teacher was telling students off, she looked very fierce".
	T: Yes. Students please give some opinion. Is this s good sentence **S: No** **T: Hey if you say no you have to say why. Law Chuek Tong?** **Law: ***** **T: Oh! He said that the sentence would be better if you made some adjustments. Can you say it again?** **Law: ***** **T: Right add 'every time' in front of the sentence**. Good.

The portrayal of assessment practices in Hong Kong emerging from this small-scale study is a preponderance of convergent, AoL assessment types, and a smaller presence of AfL divergent practices. These indications are consistent with the findings of earlier studies, although there has yet to be a large-scale study of AfL practices in Hong Kong schools. The analysis suggests that there are cognitive, affective and social constraints. Some teachers do not show awareness or understanding of the principles and practices of AfL, have contradictory views about the purposes and values of assessment, and are not ready to alter the power dynamics within the classroom.

Conclusion

Reforms in Hong Kong have demonstrated the influence of global trends that have prompted attention to "quality education" in many education systems in recent years (often following on from the successful expansion of mass education). Learner-centeredness represents a reaction against authoritarian pedagogical styles, while the socio-economic changes that have been brought about by technological innovation have given rise to the predominance of the curriculum ideology of self-actualization in both Maslow's (1943) sense of satisfying physiological and psychological needs, and Goldstein's (1995) sense of fulfilling one's potential. The rise of individualism can also be associated with political ideologies that de-emphasise the role of the state and encourage self-reliance and entrepreneurism, and with social movements that stress the agency of personal choice. Curriculum planners have focused on the needs and growth of individual learners at a time when globalization renders future careers unpredictable and so learners need to be equipped to cope with the challenges of social and economic change (Morris & Adamson, 2010).

Nonetheless, the incorporation of the ideological basis in curriculum reform documents is no guarantee of successful, wholesale implementation in the classroom. In Hong Kong, the association of success in education with upward social mobility leads to a legitimate concern for fairness and objectivity, which in turn results in convergent forms of assessment practices. Although there is evidence that some

teachers also use divergent assessment to discover what the students know, understand, or can do, the depth of divergent assessment use appears to be at a superficial level.

While the philosophy of AfL in very general terms might be seen as uncontroversial, these characteristics do challenge political and pedagogical norms. Politically, they empower teachers, and render the classroom (real or virtual) into a locus for assessments that are potential high-stakes, if classroom-based assessments contribute to decisions about selection and/or accreditation. This shift raises concerns of those who argue for a completely level playing field as the basis for such decisions, that it increases subjectivity in the assessment process. They also empower students: teachers who prefer a didactic pedagogical style might feel uncomfortable with the move towards incorporating self- and peer-assessment which might detract from the teacher's authority. The kind of "feedforward" information that AfL would produce might be unintelligible or indigestible for potential employers or other stakeholders who want statistics presented in a simplified format to facilitate decision making.

The gradual incorporation of AfL in classroom practice could be seen as a healthy sign—that the pace reflects the capacity of the system and key players in Hong Kong to absorb new ideas. As a result, the sustainable version of AfL that eventuates will bear the hallmarks of the Hong Kong educational ecology.

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