Integrating assessment of learning and assessment for learning in Hong Kong public examinations: Rationales and realities of introducing school-based assessment¹

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ABSTRACT²

Hong Kong is famous for its examination-dominated culture, which heavily relies on the public examinations. So ingrained has it become that the whole society is sensitive to any change in such an assessment mechanism. In recent years, the Hong Kong Examinations and Assessment Authority has used both external and school-based assessment as part of high stakes end of schooling assessment. Recent reforms have increased this reliance on school based assessment. The objectivity of external assessment is easily accepted by the society and the addition of school-based assessment components is often supported by tertiary institutions. Yet the practice of including school-based assessment results in addition to public examinations has been challenged by practitioners such as teachers in secondary schools as well as by the public.

This paper focuses on understanding the views of teachers concerning school based assessment since such views are likely to add pressure to its implementation. In particular it will examine why teachers and the public appear to have more faith in external assessment rather than the professional judgment of teachers.

Introduction

The duality of assessment concepts, such as assessment of learning and assessment for learning, summative assessment and formative assessment, norm referenced assessment and criterion referenced assessment, and assessing knowledge as external and fixed and assessing knowledge as constructed and fluid, provides a platform for debate. The efforts for synergizing the two ends of the spectrum are attractive and meaningful in both theoretical and practical aspects (Black et al., 2003; Hargreaves, 2005; Harlen, 2005). However, moving towards an inclusive model for integrating the two ends of assessment concepts is not an easy task. In recent years, there are plenty of examples attempting to integrate 'assessment of learning' and 'assessment for learning', only to prove them trials but not recipes for the synergy (Broadfoot & Black, 2004, p.16). Kennedy, Chan, Yu & Fok (2006) propose a more inclusive model

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of assessment needs to have the following characteristics:

- 1. All assessment needs to be conceptualized as "assessment for learning";
- 2. Feedback needs to be seen as a key function for all forms of assessment;
- Teachers need to be seen as playing an important role not only in relation to formative assessment but in all forms of summative assessment as well – both internal and external;
- 4. Decisions about assessment need to be viewed in a social context since in the end they need to be acceptable to the community.

Hong Kong is famous for its examination-dominated culture, which heavily relies on public examinations. So ingrained has it become that the whole society is sensitive to any change in such an assessment mechanism. In recent years, the Hong Kong Examinations and Assessment Authority (HKEAA) has included both external and school-based assessment as parts of the high stakes end of examination. Recent reforms have increased this reliance on school based assessment. The objectivity of external assessment is easily accepted by society and the addition of school-based assessment components is often supported by tertiary institutions. Yet the practice of including school-based assessment results in addition to public examinations has been challenged by practitioners such as teachers in secondary schools as well as by the public.

The inclusion of school-based assessment (SBA) in public examinations of Hong Kong might be seen as an example of attempting to integrate 'assessment of learning' and 'assessment for learning'. In this article, the rationales and realities of including SBA are discussed. This paper, therefore, includes three parts: 1. reviewing the development and conceptions of SBA in Hong Kong; 2. commenting on the conceptions of SBA relating to the policy and exploring the implementation problems anticipated commenting on the conception and implementation of SBA; 3. outlining suggestions for integrating 'assessment of learning' and 'assessment for learning'.

The development and rationales of SBA

Introducing SBA in public examinations is believed to be one of the significant tools for enhancing assessment for learning. In recent years, an important change in the public examination structure of Hong Kong secondary schools is the shift from a sole focus on external examinations to using both external and school-based assessment (Yip & Cheung, 2005, p.156). SBA means formative tasks count towards final marks rather than grades being based entirely on student performance in public examination (Clem, 2005). Kennedy, Chan, Yu & Fok (2006) regard this as "to move away from examinations to a greater reliance on school based assessment fuelled by teacher judgments is one further ways of ensuring less negative 'backwash' from external summative assessment."

SBA is continuously mentioned in various government education documents, which indicate that this is not a new idea. It has been implemented in a number of subjects like chemistry (Advanced Level Examination), Design and Technology, and Electronics and Electricity (HKCEE) since 1978 (HKEAA, 2005). EC (2000, p.44) proposes to review the modes, content, and assessment methods of the examinations, which allow students to display their independent thinking and creativity. The newly introduced examinations are expected to involve teachers at an appropriate degree of SBA. CDC (2001, p.80), following the line of thought of EC, pinpoints the aim of assessment is to help to provide information for both students and teachers to improve learning and teaching (assessment for learning) and reiterates the need for assessment to select students for higher education (assessment of learning). The advocates of government documents were supported by two research reports of HKEAA. Fung et al. (1998) concerned about how Hong Kong assessment system could be changed to improve teaching and learning. IBM (2003, p.33) stressed in an important consultancy report:

"Consequently, we recommend that a medium term objective should extend the TAS scheme in the next 3 years to all subjects where it is appropriate. Further, we support the ROPES³ intention to widen school-based assessment by going beyond TAS."

In short, HKEAA was being recommended to extend school-based assessment to all subjects in both Hong Kong Advance Level Examination (HKALE) and Hong Kong Certificate of Education Examination (HKCEE). EMB (2005, p.84) confirms that SBA is implemented in 13 HKALE subjects and 13 HKCEE subjects by 2006. The SBA has been adopted with an aim to improve quality of learning, teaching and

³ ROPES is Review of public examination system in Hong Kong (Fung et al., 1998).

assessment.

There are, at least, three major conceptual arguments supporting the introduction of SBA for enhancing student learning. Firstly, one of the main objectives for introducing SBA is that it can be constructed as assessment for learning and related to, teaching (IBM, 2003, p.32). The guiding principle for the teachers is to use relevant evidence gathered as part of teaching for formative purposes but to review it, for summative purposes, in relation to the criteria which will be used for all students (Harlen & James, 1997; Yung, 2001, p.1001). In other words, teachers can use SBA results to teach and to improve student learning in S. 4 to S. 5 and S. 6 to S. 7.

Secondly, SBA, supplementing external examinations, provides a more holistic and valid measurement of student abilities (Yip & Cheung, 2005, p.156). There is a range of generic skills such as communication skills, higher-order thinking skills, problem-solving skills, creativity and the ability to work independently or as a member of a team, which are highly valued in the modern world (EMB, 2004). It is assumed that these skills can be better assessed through SBA than through one-off paper-and-pencil examination (Chang, 2004). Another example is that SBA can reflect the language ability of students in a more holistic view (Chan & Cheung, 2006).

Thirdly, SBA meets the intentions of the education reforms that emphasize the more real-life environment learning and assessment. It is easy to understand that terminal, written, one-off high stakes examinations are not the way people work in the community or in employment. In real employment situation, people interact with others and arrive at conclusions by team-work, iteration and trial-and-error (EMB, 2004; IBM, 2003).

The realities of SBA implementation

Though the rationales of introducing SBA into the public examination are reasonably strong, there still exist various problems that provide another side of the story. To review the realities of SBA implementation, the main characteristics of the inclusive model mentioned before are being used (Kennedy, Chan, Yu, & Fok, 2006).

SBA, a form of formative assessment, is not the same as assessment for learning. This is the case in Hong Kong. Stiggins (2002, p.761) stressed that the concept of assessment for learning and formative assessment should be discerned:

"It is tempting to equate the idea of assessment for learning with our more common term, 'formative assessment'. But they are not the same. Assessment for learning is about far more than testing more frequently or providing teachers with evidence so that they can revise instruction, although these steps are part of it."

To make sure that SBA helps to enhance student learning, it is important to increase the accuracy of classroom assessments and to provide students with frequent informative feedback (Stiggins, 2002, p.758). However, it is unlikely that SBA possesses these features. Hong Kong possesses a strong tradition of rigorous norm-referenced summative assessment (Biggs, 1998). This tradition makes students focus on SBA scores that count towards public examination results. Professional Teachers' Union (PTU, 2006), representing part of the voice of teachers, is suspicious about the effectiveness of SBA in strengthening the relationship between assessment and teaching:

It would be little wonder that students cannot reap the benefit of SBA simply because the tie between assessment and teaching cannot be strengthened.

Moreover, SBA has is an inner conflicting point when it becomes a value-laden issue. This assessment is not only used to enhance learning, but also need to be a fair and reliable assessment. The formative scores are involving every item in the learning processes such as completing worksheet of visiting museum, tape-recoding when chatting to teacher, keeping ticket receipt for watching drama, carrying measurer when jogging.

Besides the quest of using SBA to enhancing student learning, providing students with frequent informative feedback is another issue that teachers face. Feedback should be a key function on all forms of SBA. Adopting SBA in public examination has placed new responsibilities on teachers who are assumed to have a dual role of assessor and teacher (Donnelly et al., 1993; Yip & Cheung, 2005; Yung, 2001). Indeed, teachers are concerned about the method of uniformity with SBA in such a high stake

examination and the heavy workload imposed on them (PTU, 2006). In the worst situations, the formative functions of assessment were supplanted by the summative function and outcomes of assessment were not used to inform the process of teaching (Buchan, 1993; Yung, 2001).

Teachers, being involved in SBA section of public examination, play an important role in all forms of assessment. However, both teachers and public have reservations on this matter. Teachers view the SBA as additional work imposed on them. Taking the chemistry as an example, Yip & Cheung (2005) reported that the school-based practical assessment was time-consuming:

Many teachers view teacher assessment as additional work imposed on them by the authorities and, together with the lack of implementation skills and supporting resources, the scheme adds extra workload and pressure to their routinely busy timetable.

In an open-ended survey, a sample of 53 teachers expressed a wide range of worries (e.g. my ability to design high-quality assessment tasks, whether SBA will affect teacher-student relationship, assessment method to be used) (Cheung, 2001). A more serious issue involving teachers in SBA is that the public does not trust teachers (IBM, 2003, p.34):

One reason put forward in the past for limiting school-based assessment is the public's ostensible lack of trust of teachers. This has been too readily accepted as received wisdom. It dates from a period before teaching was a trained profession, and it no loner fits the modern education system.

Numerous questions about the roles and judgments of teachers are raised, which are related to validity and reliability found in SBA (Chang, 2004; Hau, 2004). According to research and government document, problems of these questions are difficult to be tackled (Chang, 2004). Broadfoot & Black (2004, p.16) rightly perceived that teachers' role in summative assessment is not easy to be recognized.

Finally, the examination-oriented approach generally accepted in Hong Kong society is the biggest issue in SBA's implementation. This approach makes the society focus on assessment of learning. A high proportion of teachers and students emphasized on doing well in examinations and many are proud of their success (Cheng, 2004). This approach is not new. In 1982, a report that had an impact on Hong Kong educational development stated:

And they are [examinations] used to establish a ranking order among students as a basis for allocating a small number of places among a large number of applicants possessing the minimum qualification required. (Llewellyn Committee, 1982)

This situation has not changed and only the very best students who obtain high grades in public examinations could go to university for further education that prepared them for entering professions (Lau, 2005). Though the competition for tertiary places has been lessened in recent years, the emphasis on examination for selection purpose is still much stronger than in some other places (Biggs, 1996). This indicates that the main practical purpose of public examinations in Hong Kong is to select high-ability students for university admission (Chang, 2004). Thus, the wash-back effect on schools is great. They continue to make tremendous efforts to drill their students to prepare for the examinations, often at the expense of teaching and learning (Lau, 2005, p.195). Education in the classroom is largely affected by public examination (Fullilove, 1992). Choi (1999, p.412) indicated that students sometimes stop their teacher from teaching topics not closely related to examination content. Chang (2004) suggests that a fair and reliable norm-referenced public examination is still a "must" in Hong Kong society. It is extremely difficult to change these well-established values, habits and modes of operation in our society.

Suggestions of implementing SBA for learning

Examinations are potentially a great tool and can help student learning, so long as they are well-designed and used appropriately (Ho, 2005, p.16). They can provide a scale of achievement for students (assessment of learning) and be a reflective tool for teachers teaching and learners learning (assessment for learning). In this paper, it is argued that the implementation of SBA is helpful to integrate assessment of learning and assessment for learning. Yet much more needs to be done if this is to become a reality.

As for the purpose of assessment for learning, the assessment methods that teachers used need to be effective in promoting good learning when implementing SBA. In other words, teachers have to use assessment results to adjust teaching and learning and the grading practices need to emphasize personal improvement rather than competition, which is a significant aspect of any assessment that functions formatively (Black et al., 2004, p.9).

To strengthen the tie between assessment and utilizing assessment as a support to teaching, feedback needs to be seen as a key function in SBA. All SBA should involve new ways to enhance feedback between those taught and the teacher, ways which required new modes of pedagogy and therefore significant changes in classroom practice (Black et al., 2004, p.6). Teachers should also note that assessment feedback often has a negative impact, particularly on low-achieving students, who are led to believe that they lack the ability and are not able to learn (Black et al., 2004, p.9).

Thirdly, training and guidance are necessary if teachers are to be able to pursue the assessment possibilities that would benefit the learning of their students (Hargreaves, 2001, p.559). With the growing awareness for changing assessment practices in countries all over the world, the importance of changing ways teachers think about assessment are becoming increasingly apparent (Broadfoot, 1995). In this training, attention has to be paid to how to communicate the philosophy and intentions behind the new form of assessment with the teachers. Only when the personal beliefs of teachers are changed, can SBA start the process of changing assessment. Specifically, teacher education should focus on assessment results that point to the need for teachers to be aware of its potential for improving teaching and learning and of its side-effects (Yung, 2001).

Finally, an active public consultation and information campaign should be addressed when introducing the SBA in public examinations. The whole society, including teachers, has very strong existing beliefs in the moral and functional values of public examination. Principals, vice-principals, teachers must be consulted about the details of the SBA, and have their endorsement before the full scale implementation. Involving frontline teachers could be helpful to strengthen confidence in the proposed reforms (Cheng, 2004). Liaising with tertiary sector and relevant agencies about broadening university admission criteria and about other means of providing information on student achievement (e.g. portfolios) (CDC, 2001, p.83). Universities should join in the widened assessment base by widening their own admissions criteria. The exclusive use of the external examination marks for university admission should, in the longer term, be replaced by the more comprehensive assessment results (Chang, 2004; Hau, 2004; IBM, 2003, p.35).

Conclusion

It is imperative for the EMB to develop an assessment system that is not only reliable and valid from a technical point of view, but also helpful to enhance the teaching and learning in schools. The inclusion of SBA in public examination of Hong Kong is playing an important role for integrating assessment for learning and assessment of learning, but its implementation is still facing challenges from various parties of the society.

Reference

- Biggs, J. (1996). The assessment scene in Hong Kong. In J. Biggs (Ed.), *Testing: to educate* or to select: education in Hong Kong at the crossroads (pp.3-12). Hong Kong: Hong Kong Educational Publishing Co.
- Biggs, J. (1998). Assessment and classroom learning: A role for summative assessment? *Assessment in Education*, 5(1), 103-110.
- Black, P. Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). Assessment for learning: *putting it into practice*. Maidenhead: Open University Press.
- Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the black box: assessment for learning in the classroom. *Phi Delta Kappan, Sept.* 9-21.
- Broadfoot, P. (1995). Performance assessment in perspective: international trends and current English experience. In H. Torrance (Ed.), *Evaluating authentic assessment: problems and possibilities in new approaches to assessment* (pp.9-43). Buckingham: Open University Press.
- Broadfoot, P., & Black, P. (2004). Redefining assessment? The first ten years of Assessment in Education. Assessment in Education, 11(1), 7-27.
- Brown, S. & Knight, P. (1994). Assessing learners in higher education. London: Kogan Page.
- Buchan, A. S. (1993). Policy into practice: the operation of practical assessment in GCSE. *School Science Review*, 75, 7-15.
- Chan, K. K., & Cheung, W. M. (2006, Jan 15). School-based assessment (in Chinese). *Singtao Daily*, p.F02.
- Chang, L. (2004, Nov 27). Structural reform overdue but wisdom of new tests is doubtful. *South China Morning Post*, p. Edu4.
- Cheng, J. (2004, Nov 18). Listen to the voice of teachers. *South China Morning Post*, p.EDT17.
- Cheung, D. (2001). School-based assessment in public examinations: identifying the concerns of teachers. *Education Journal*, 29(2), 105-123.
- Choi, C. C. (1999). Public examination in Hong Kong. Assessment in Education, 6(3), 405-417.
- Clem, W. (2005, Oct 1). School-based tests 'going too quickly'. *South China Morning Post*, p. Edu3.
- Curriculum Development Council (2001). *Learning to learn: The way forward in curriculum*. Hong Kong: The Printing Department.

- Donnelly, J. F., Buchan, A. S., Jenkins, E. W., & Welford, A. G. (1993). Policy, practice and *judgement: school-based assessment of practical science*. Nefferton, East Yorkshire: Studies in Education.
- Education and Manpower Bureau [EMB]. (2004). *Reforming the academic structure for senior secondary education and higher education: actions for investing in the future.* Hong Kong: EMB.
- Education and Manpower Bureau [EMB]. (2005). The new academic structure for senior secondary education and higher education: action plan for investing in the future of Hong Kong. Hong Kong: EMB.
- Education Commission. (2000). Education blueprint for the 21st century: Learning for life, Learning through life - Reform proposals for education system in Hong Kong. Hong Kong: Printing Department.
- Fung, A., Broadfoot, P., Cheung, D. et al. (1998). *Review of public examination system in Hong Kong: final report.* Hong Kong: Hong Kong Baptist University.
- Hargreaves, E. (2001). Assessment for learning in the multigrade classroom. *International Journal of Educational Development*, 21, 553-560.
- Hargreaves, E. (2005). Assessment for learning? Thinking outside the (black) box. *Cambridge Journal of Education*, 35(2), 213-224.
- Harlen, W., & James, M. J. (1997). Assessment and learning: differences and relationship between formative and summative assessment. *Assessment in Education*, 4(3), 365-380.
- Hau, K. T. (2004, Dec 2). Better to change university entrance requirement than using school-based assessment (in Chinese). *Mingpao*.
- Hong Kong Examinations and Assessment Authority [HKEAA]. School-based Assessment (SBA): a brief introduction and response to major concerns. 20 Mar retrieved from http://eant01.hkeaa.edu.hk/hkea/topper_tas.asp?p_coverdown=tas_1.html
- Ho, L. S. (2005). Education reform: a socio-economic perspective. In L. S. Ho, P. Morris, & Y. P. Chung (Eds.), Education reform and the quest for excellence: the Hong Kong story (pp.9-22). Hong Kong: Hong Kong University Press.
- IBM. (2003). *Strategic review of Hong Kong Examinations and Assessment Authority*. Hong Kong: Hong Kong Examinations and Assessment Authority.
- Kennedy, K. J., Chan, J. K. S., Yu, F. W. M., & Fok, P. K. (2006). Assessment for productive learning: forms of assessment and their potential for enhancing learning. Paper presented at the 32nd Annual Conference of the International Association for Educational Assessment, Singapore, 21-26 May.
- Lau, C. K. (2005). Between egalitarianism and elitism: media perception of education reform in post-1997 Hong Kong. In L. S. Ho, P. Morris, & Y. P. Chung (Eds.), Education reform and the quest for excellence: the Hong Kong story (pp.191-216). Hong Kong: Hong Kong University Press.
- Llewellyn Committee (1982). A Perspective on education in Hong Kong: Report by a visiting panel. Hong Kong: Government Printer.
- Professional Teachers' Union [PTU]. (2006). School-based assessment: another EMB flop? *PTU News*, no. 129. 20 Mar 2006 retrieved from <u>http://www.hkptu.org/</u>
- Stiggin, R. J. (2002). Assessment crisis: the absence of assessment for learning. *Phi Delta Kappan, June,* 758-765.
- Yip, D. Y., & Cheung, D. (2005). Teachers' concerns on school-based assessment of practical work. *Journal of Biological Education*, 39(4), 156-162.
- Yung, B. H. W. (2001). Three views of fairness in a school-based assessment scheme of practical work in biology. *International Journal of Science Education*, 23(10), 985-1005.
- Yung, B. H. W. (2001). Three views of fairness in a school-based assessment scheme of practical work in biology. *International Journal of Science Education*, 23(10), 985-1005.