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Abstract

In the implementation of a 10-year educational reform since the turn of the century in Hong Kong, assessment has been one of the key areas of change. The importance of changing assessment practices in the process of teaching and learning has been discussed in various government documents since 1990. In the past, assessment practices were inclined to be mainly "assessment of learning" which was more summative in nature. In the reform, schools were encouraged to put more emphasis on "assessment for learning" which was considered more of a formative nature. On approaching the mid point of such reform, significant difference in its degree and scope of development can be seen in schools.

In this particular paper, the focus is assessment reform in the primary school sector. The two concepts in assessment are explored by a detailed documentary analysis of assessment policies written on basic education over the last decade. Together with reviewing the current developments on assessment change in primary schools, implications for more effective use of assessment for enhancing teaching and learning are made.

Assessment Reform in Basic Education in Hong Kong:

The Emergence of Assessment for Learning

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Introduction

Teaching has normally been perceived as a significant factor influencing the learning of students. Elton & Laurillard (1979), however, approached learning differently by pointing out the tremendous change *assessment* brought to *teaching and learning*. They suggested that "the quickest way to change student learning is to change the assessment system" (p. 100). Popham (2003) shared the same thought by stressing the close connection between testing and teaching. Students in Hong Kong have experienced such change over the last decade as the system has been in the process of undergoing a large-scale curriculum reform.

Before the expansion of compulsory schooling up to Junior Secondary level in 1979, the local assessment structure in Hong Kong had been criticized for its examination-oriented nature. The learning of students was jeopardized by highly selective and competitive assessment modes. The critical account Biggs (1996a) wrote about the selective schooling then can reflect the impact it had on learning.

At all stages, the curriculum, teaching methods, and student study methods, are focused on the next major assessment hurdles: the Secondary School Placement Allocation (SSPA), internally conducted at P5 and P6, and the externally conducted Hong Kong Certificate Education Examination (HKCEE) at S5, and Hong Kong Advanced Supplementary Level (HKAS) and Advanced Level (HKAL) at S6 and S7. (p. 5)

Biggs (1996a) pinpointed the core of the problem – "most students focus their learning on what they think they will be tested on: the test becomes the curriculum" (p. 8). When testing influences teaching, the effect is commonly referred to as "backwash" effect (Alderson & Wall, 1993; Cheng, 1998). Such "backwash" in the past has had negative effects on teaching and learning (Morris, 1985). Biggs (1996b) suggested that "we can't beat backwash, but we can make it work for us, constructively" (p. 313).

The need for assessment reform in Hong Kong has been increasing over the last ten years or so. The importance of changing assessment practices for improving teaching and learning has contributed to critical discussions in major reform policy documents. Curriculum change will not effect without making corresponding changes in assessment. These changes include more emphasis on "assessment for learning" than "assessment of learning". The former was characterized by its "formative" nature while the latter, the "summative" nature. It is generally believed that "the better the teacher knows her or his students, through processes of formative assessment, the less likely it is that the information is used to inform judgments made about the student" (Black & Wiliam, 2005).

Our study is timely because we are in the midst of a ten-year curriculum reform. It is time to make critical reflections on the effectiveness of assessment reform on the teaching and learning in basic education. The major content of this paper is made up of: (1) a background of assessment reform, (2) a new understanding of assessment: "assessment for learning", (3) the changing assessment practices in schools, and (4) the way forward in assessment: a balance across formative and summative assessments.

Background of Assessment Reform

Since 2000, the Government of Hong Kong has implemented a large scale educational reform in which a series of measures was employed to promote a new culture of assessment. Before the reform, the educational assessment was well-known for its highly competitive and selective nature (Biggs, 1996a). Such approach in assessment was criticized since free and compulsory education had been achieved for primary schooling in 1971 and junior secondary in 1979 (EC, 1990). There was less need for selection in basic levels of the schooling system. In the *Education Commission Report No. 4*, the reason for assessment reform was elucidated and its incentive was strong:

School examinations and other forms of internal assessment within schools have ... used a competitive and selective approach This practice has resulted in some students being continually discouraged by finding themselves towards the bottom of their class each year, even though they may have made progress. ... Moreover, if we are to develop an education system which provides for the different needs of students, we must be able to assess their

individual strengths and weaknesses. We therefore firmly believe that the time has come for the development of an assessment system that would serve a formative function and which would enable the performance of students to be measured against agreed targets. (EC, 1990, Section 5.2.3)

The assessment change recommended here has reflected a different need from the education system. Instead of performing the major selective role as in the past, assessment "should provide the information necessary to help teachers and students improve teaching and learning" (ibid, Section 5.5.1). More importantly, it should possess "a positive rather than a negative effect on teaching and learning" (ibid, Section 5.3.1).

New Understanding of Assessment: "Assessment for Learning"

Since the need for selection is lessened in the primary and junior secondary levels, the demand for change in assessment has become one hot topic in the discussion for improving teaching and learning. In the *Education Commission Report No. 4*, the Government specified the need to cater for individual differences in learning and to monitor assessment of outcomes:

... because [the] school system embraces the entire relevant age group, it should provide the education best able to meet the varying abilities and interests of the children within it. ... standards should be raised over time, by promoting improvements in learning and teaching, as well as in the monitoring and assessment of outcomes. (EC, 1990, Section 1.3.7)

The same concerns about improving teaching and learning were raised again in the *Report on Review of 9-year Compulsory Education*, with "formative assessment" as one distinctive direction for its development:

Assessment, in particular formative assessment, has been considered increasingly important in the teaching and learning process as it can provide more accurate and immediate feedback on pupils' achievement and help improving their learning. Nevertheless, assessment, particularly the modern types such as portfolio and authentic assessment, is an aspect that has not been given sufficient treatment in initial teacher education programmes. (Board of Education, 1997, Section 6.26)

Ever since, formative assessment was put in the spotlight of reform documents. With the influence of two reports made by Paul Black and Dylan Wiliam in 1998 and 1999 – *Inside the Black Box*² and *Beyond the Black Box*³, the idea of "assessment for learning" began to appear in local reform discussion more frequently in Hong Kong. These two reports were translated into Chinese and put on the website of the EMB. They were included as one of the major references in policy documents. The meaning of assessment was further extended to:

... collecting evidence of student learning. It is an integral part of the learning and teaching cycle rather than a separate stage at the end of teaching. It helps to provide information for both students and teachers to improve learning and teaching. (EC, 2000, p. 80)

Under the extended definition of assessment, teachers were encouraged to "use different modes of assessment to suit various purposes and processes of learning throughout the school years" (ibid, p. 81).

Based on the criteria recommended in the proposed reforms (EC, 2000), the Curriculum Development Council issued the *Learning to learn* (CDC, 2000) document which has been guiding the large scale curriculum reform in the next 10 years since 2000. Following *Learning to learn*, two other curriculum documents were issued: *Exemplars of Curriculum Development in Schools* (CDC, 2001) and *Basic Education Curriculum Guide* (CDC, 2002). The former illustrated ideas and recommendations for authentic assessment as exemplars while the latter compiled elaborated examples for reform actions in schools. Many of the assessment reforms were developed with close reference to these three key documents issued by the Curriculum Development Council.

The concepts of "formative assessment" and "summative assessment" were repeatedly defined in the reform documents. Here are two frequently used definitions:

Formative assessment can be used to collect evidence from time to time on student learning with a view to promoting better learning. (CDC, 2002,

² *Inside the Black Box* collected strong evidence showing the positive effect in learning brought about by formative assessment.

³ Beyond the Black Box further illustrated the idea of "assessment for learning" and promoted its effectiveness in classroom teaching and learning.

Section 5.3.3)

Summative assessment is often carried out through pen and paper tests and examinations at the end of a learning and teaching cycle. (ibid)

The idea of formative assessment also includes the conception of "assessment for learning". This new assessment concept has been made distinctive by making contrast to "assessment of learning". Any assessment for which the first priority in its design and practice is to serve the purpose of promoting students learning can be considered "assessment for learning" (Black et al, 2002).

Moreover, public assessment with solely selective functions like Academic Aptitude Test (AAT) was abolished. The removal of AAT in 2001 "reduced the drilling and examination preparation that tended to distort upper primary school education" (Carless, 2005). In line with the educational reform, Basic Competency Assessments (BCA), comprising of the Student Assessment⁴ and the System Assessment⁵ were introduced. As specified in the government document (CDC, 2001), BCA is considered a low-stake assessment programmed to improve the curriculum, teaching and learning in schools. These assessments will cover the key learning areas of Chinese, English, and Mathematics at the present stage, but maybe gradually extended to other areas in the future.

In practice, both formative and summative assessments may serve meaningful purposes for education (Brady & Kennedy, 2005). Biggs (1998) thinking in the same line, refused to see the two assessments grow on two different tress. He perceived the two at a wider angle conceptually. In many cases, in fact, it is the instrumental aspect related to the "sifting and sorting" function of summative assessments that has drawn criticisms from educators (Broadfoot, 1979; Brady & Kennedy, 2005). If these assessments are purposefully incorporated, they can both enforce meaningful teaching and learning.

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⁴ The Student Assessment is designed to help teachers better understand the learning needs and problems of students, so as to provide timely assistance to enhance students' learning effectiveness. It could be done at the discretion of schools.

⁵ The System Assessment is designed to provide the Government and school management with information on students' standards at the levels of Primary 3, Primary 6 and Secondary 3 on a territory-wide and school basis.

Changing Assessment Practices in Schools

Having reviewed the major policy documents, the practical implementation of the assessment practices used in three local primary schools in Hong Kong were studied. The focus is on finding out how traditional and non-traditional assessments are practiced in reality.

The table below summarized new assessment strategies the schools employed in assessing students learning in the latest three years by reviewing the school documents, mainly the School Annual Reports and School Development Plans. All three schools kept summative assessments in terms of testing and examinations for grading students by the end of different learning stages. In addition to "assessment of learning", the schools attempted to apply "assessment for learning" strategies aiming to stimulate more active learning among students. These new strategies serve a formative purpose.

Summary of attempts at "assessment for learning" strategies:

School A	School B	School C
Project Learning	Project Learning	Observation Report
InformationTech Folder	Self and Peer Evaluation	Self and Peer Evaluation
Book Report		Web-based Assessment
Critical Reflection		
Learning Portfolio		

The table above summarized the major attempts of using "assessment for learning" strategies in three researched schools. All of these schools still maintained the use of testing and examinations for grading students by the end of the school years though they have reduced the number of assessment strategies demanding memorization, e.g. dictations. They have gradually introduced formative assessment methods in different subjects. Project learning, self and peer evaluation were the most popular strategies used. The extent in applying new assessment strategies promoted in curriculum reform varied from school to school. More in-depth study about the quality of outcome is needed to judge the effect of these new assessment practices on students learning.

The Way Forward in Assessment: A Balance across Formative and Summative Assessments

We are in the mid-point in the 10-year educational reform which has begun since 2000. Observations from the current primary school contexts have informed us about the change in assessment practices. Increased application of formative assessment was evidenced. The effect of tests and examinations in directing teaching and learning has been weakened. Instead of the scoring, ranking, and grading that serve mainly summative assessment purposes, there is increasing demand on drawing a clear picture of students' learning progress among teachers, parents, and students (EC, 2000).

The space opened up by abolishing excessive examinations was encouraging. However, the territory-wide BCA has created new problems. The tests in BCA, especially the centrally administered System Assessment, though run in collaboration with schools on the surface, have threatened many primary schools. While the Government can get more information about schools from results of BCA, schools are put into a more vulnerable situation if their students have failed the system tests. Principals and teachers are worried about closing down of schools in consequence. The BCA first considered low-stake was not intended for excessive unproductive drilling but it has been interpreted as new public examinations by some schools. In many schools, unnecessary rehearsals are being practised.

As Black & Wiliam (2005) said,

there is no 'royal road' to an assessment system that effectively serves both formative and summative functions that each country could follow, but it seems likely that the idiosyncratic road that will need to be taken in each country will also be very hard going. (p. 260)

Our reform is still on-going, the road ahead is long. Assessments, no matter they are "formative" or "summative", have their unique roles in the teaching and learning process. We see the effective assessment mode an integration of the two. Assessment will only be effective when "learning" is put in the integral part of the process. We argue for the significance of seeing assessment a means to improve teaching and learning and assessment should be designed to promote learning among students.

References

- Alderson, J. C. & Wall, D. (1993). Does washback exist? *Applied Linguistics*, 14(2), 115-129.
- Assessment Reform Group (1999). Assessment for learning: Beyond the black box.

 Cambridge: University of Cambridge School of Education.
- Biggs, J. (1996a). The assessment scene in Hong Kong. In J. Biggs (ed). *Testing: To educate or to select* (pp. 3-12). Hong Kong: Hong Kong Educational Publishing Co.
- Biggs, J. (1996b). Review and Recommendations. In J. Biggs. (ed). *Testing: To educate or to select* (pp. 298-326). 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. & Wiliam, D. (1998). *Inside the black box: Raising standards through classroom assessment*. London: Kings College School of Education.
- Black, P., Harrison, C., Lee, C., Marshall, B. & Wiliam, D. (2002). Working inside the black box: Assessment for learning in the classroom. London, UK: King's College, London School of Education.
- Black, P. (2003). Formative and summative assessment: Can they serve learning together? Paper presented at AERA held at Chicago.
- Black, P. & Wiliam, D. (2005). Lessons from around the world: How policies, politics and cultures constrain and afford assessment practices. *Curriculum Journal*, *16*(2), 249-261.
- Brady, L. & Kennedy, K. (2005). *Celebrating student achievement: Assessment and reporting*. (2nd ed.). Frenchs Forest, N.S.W.: Pearson Education Australia.
- Board of Education. (1997). *Report on review of 9-year compulsory education*. Hong Kong: Printing Department.
- Broadfoot, P. (1979). Assessment, Schools and Society. London: Methuen.
- Broadfoot, P., & Black, P. (2004). Redefining assessment? The first ten years of Assessment in Education. *Assessment in Education*, 11(1), 7-26.
- Carless, D. (2005). Prospects for the implementation of assessment for learning. *Assessment in Education*, 12(1), 39-54.

- Cheng, L. (1998). How does washback influence teaching? Implications for Hong Kong. In S. Philip & P. Morris (Eds.), *Curriculum and assessment for Hong Kong: Two components, one system* (pp. 325-350). Hong Kong: Open University of Hong Kong Press.
- Curriculum Development Council (CDC). (1999). A holistic review of the Hong Kong school curriculum: Proposed reforms consultative document. Hong Kong: The Council.
- Curriculum Development Council. (2000). *Learning to learn: The way forward in curriculum development consultation document.* Hong Kong: The Council.
- Curriculum Development Council. (2001). *Exemplars of curriculum development in schools*. Hong Kong: The Council.
- Curriculum Development Council. (2002). *Basic education curriculum guide: Building on strengths.* Hong Kong: The Council.
- Education Commission (EC). (1990). Education Commission report no. 4: The curriculum and behavioural problems in schools. Hong Kong: Government Printer.
- 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.
- Education and Manpower Bureau (EMB). (2001). *Quality education: Enhancing quality and opportunity promoting all-round development*. Hong Kong:

 Government Printer.
- Elton, L. R. B., & Laurillard, D. M. (1979). Trends in research on student learning. *Studies in Higher Education*, *4*(1), 87-102.
- Morris, P. (1985). Teachers' perceptions of the barriers to the implementation of a pedagogic innovation: A South East Asian case study. *International Review of Education*, 31, 3-18.
- Popham, W. J. (2003). Test better, teach better: The instructional role of assessment. USA: ASCD.

Appendix

List of major reports issued on reforming assessment:

Date and Organization of	Reports	Major Themes
Publication		
November 1990, Education	Education Commission Report	- evaluate the curriculum and
Commission (EC)	No. 4	behavioural problems in
		schools
October 1997, The Board of	Report on Review of 9-year	- review of the implementation
Education	Compulsory Education	of 9-year free and compulsory
		education
October 1999, Curriculum	A Holistic Review of the Hong	- reflect on the school
Development Council (CDC)	Kong School Curriculum	curriculum proposed reforms
	Proposed Reforms	
September 2000, EC	Reform Proposals for the	- formulate an education
	Education System in Hong	blueprint for the 21 st century
	Kong	and promote "learning for
		life – learning through life"
June 2000, CDC	Learning to Learn - The Way	- promote "learning to learn:
	Forward in Curriculum	life-long learning" and
	Development	"whole-person development"
September 2001, CDC	Exemplars of Curriculum	- set exemplars to illustrate the
	Development in Schools	ideas and recommendations in
		the report (June 2001) with
		authentic local experiences
October 2001, Education and	Quality Education: Enhancing	- enhance quality and
Manpower Bureau (EMB)	Quality and Opportunity	opportunity promoting
	Promoting All-Round	all-round development
	Development	
Mid 2002, CDC	Basic Education Curriculum	- a series of 15 booklets for
	Guide - Building on Strengths	reform actions in schools