

Holistic Assessment Implementation in Singapore Primary Schools – Part I: Using Assessment to Support the Learning and Development of Students

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Abstract

In 2009, the Primary Education Review and Implementation (PERI) Committee made a series of recommendations to enhance primary school education. The intent was to realise a more holistic primary education and prepare our young for the future. One of the recommendations was to use Holistic Assessment (HA) to support student learning and development.

HA refers to the ongoing gathering of information from various sources on different facets of a child's learning and development. The key features of HA implementation include schools adopting a more balanced assessment system, the use of appropriate assessment methods and a balanced assessment communication system to support and report student learning.

This paper discusses the approach and strategies used to implement HA in all primary schools and the capacity building and resource support provided to school leaders and teachers. It also discusses the progress of implementation and some preliminary findings and observations.

Key Words

PERI, Holistic Assessment, Assessment Literacy, Assessment Competency, Holistic Education

BACKGROUND

In October 2008, the Ministry of Education, Singapore (MOE), appointed the Primary Education Review and Implementation (PERI) Committee to study and recommend the priorities, programmes and resources needed to bring primary education to the next level. In March 2009, the PERI Committee made a series of recommendations in two broad areas to realise a more holistic primary education and prepare our young for the future. First, the Committee proposed to balance the acquisition of knowledge with the development of skills and values, through increased use of engaging pedagogy, a stronger emphasis on non-academic aspects within the curriculum and more holistic assessment to support learning. Second, the Committee recommended that more resources in the areas of manpower, funding and infrastructure be provided to support the proposed changes (MOE, 2009).

KEY RECOMMENDATIONS FOR HOLISTIC ASSESSMENT IMPLEMENTATION

Holistic Assessment (HA) is the ongoing gathering of information on the different facets of a child from various sources. A key purpose of HA is to provide feedback to support and guide the child's development. To achieve this, the PERI Committee recommended that for HA implementation, teachers be equipped with the skills (e.g. to use rubrics) to assess and provide pupils with richer and more holistic feedback on their development and skills acquisition. Schools are also encouraged to provide parents with a more comprehensive "Holistic Development Profile" which captures a fuller picture of their child's progress and learning throughout the year. MOE will continue to provide clear guidelines on the learning outcomes for each subject at the end of every level to facilitate teachers' design of appropriate assessment tasks and ensure students' continued mastery of foundational skills. Schools are encouraged to move away from an overly strong emphasis on examinations in Primary 1 and 2, and explore the use of bite-sized forms of assessment to help build pupils' confidence and desire to learn (MOE, 2009, pp. 4–11).

STRATEGIES FOR IMPLEMENTING HOLISTIC ASSESSMENT

The key strategies for implementing Holistic Assessment are

- developing an approach and plan for implementation;
- building the capacity of school leaders and teachers;
- providing resource support; and
- engaging stakeholders to support implementation.

Holistic Assessment Implementation Approach and Plan

MOE adopted a **three-stage** approach for HA implementation.

Stage 1: Prototype Phase (2009 – 2010)

- partner with schools to prototype HA implementation (starting in 2010)
- co-develop assessment resources and practices with prototype schools

Stage 2: Roll-out Phase (2011 – 2013)

- build understanding of HA
- implement HA core features

Stage 3: Deepening Phase (2014 – 2016)

- enhance teachers' assessment competency

- raise quality of assessment in tandem with pedagogy and curriculum changes

In 2010, MOE partnered with sixteen primary schools to prototype the implementation of HA. The objective was to co-develop assessment practices and to use the experience and knowledge gained to facilitate HA implementation across all primary schools. During the Roll-out Phase (2011 – 2013), the remaining primary schools in Singapore embarked on HA in three phases to implement its core features. In the Deepening Phase (2014 – 2016), implementation will focus on enhancing teachers’ assessment competency and raising the quality of assessment in tandem with pedagogy and curriculum changes.

Core Features of Holistic Assessment Implementation

The core features of HA implementation (Figure 1) are informed by the principles of assessment balance, assessment quality and student-involvement (Chappuis, Commodore & Stiggins, 2010). These features guide schools in developing school assessment systems to increase student motivation and success in learning (Black & Wiliam, 1998; Hattie, 2009; O’Connor, 2009; Stiggins et al., 2006). To ensure that implementation is systemic and sustainable, in the Roll-out Phase, schools implemented HA across one grade level at a time, starting at Primary 1 and expanding implementation to the next grade level with each year. Furthermore, all schools are supported with self-evaluation tools and resources to enable them to review their school assessment systems at the middle of the year and the end of the year, and refine their assessment processes, structures and practices.

Figure 1: Core Features of Holistic Assessment Implementation

<ul style="list-style-type: none"> • Whole school approach, <u>level-wide</u> implementation
<ul style="list-style-type: none"> • Emphasise <u>Assessment for Learning</u> • Strengthen <u>Assessment of Learning</u>
<ul style="list-style-type: none"> • Adopt <u>appropriate</u> assessment methods and modes
<ul style="list-style-type: none"> • Use assessment information to <u>improve student learning</u> • Use assessment information to <u>improve teaching</u>
<ul style="list-style-type: none"> • Adopt <u>holistic reporting</u> and communication
<ul style="list-style-type: none"> • <u>Review and refine</u> assessment systems and structures

Assessment Balance and Quality

HA implementation focuses on achieving greater balance and quality in the school assessment systems to ensure student success. Emphasis is given to assessment for learning to support ongoing student development and improve student learning, as well as strengthening the process of using assessment to verify and certify learning (assessment of learning). The implementation also focuses on strengthening school capacity to use appropriate assessment methods, and design and deliver sound assessment to support good decision making. Teachers will use assessment information to diagnose student needs, plan the next steps in instruction, provide students with targeted practice, and offer effective feedback to move the students forward in their learning. There will also be greater student involvement in the assessment process. Students will learn to clarify learning targets and use assessment information to offer each other effective feedback, self-assess, set goals for improvement, and track and communicate their progress (Black & Wiliam, 1998; Stiggins et al., 2006). “When

students become involved in the assessment process during their learning and have the opportunity to watch themselves improve over time, their confidence, motivation, and achievement also improve.” (Chappuis et al., 2010, p. 22)

Holistic Reporting

To communicate and report student learning and development, schools are guided by the principles of sound grading and reporting (Guskey & Bailey, 2010; O’Connor, 2009).

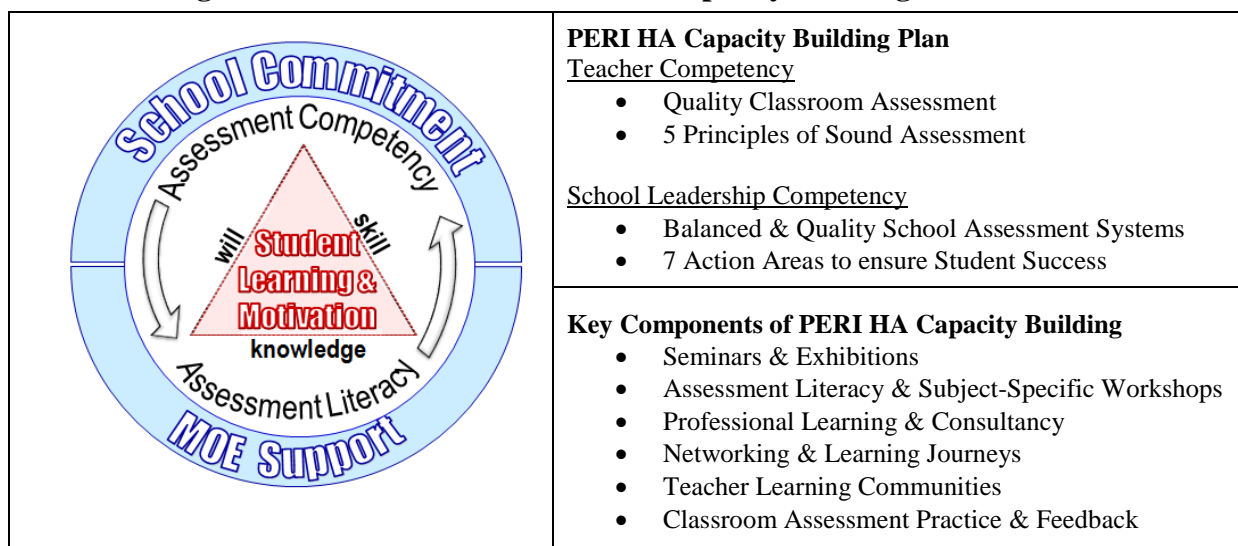
Schools develop a Holistic Reporting System to provide parents with a fuller picture of their child’s holistic development throughout the year. The system comprises the various types of reporting tools such as the holistic report card, progress report and student portfolio. These tools report the students’ learning, holistic development and achievement¹. Schools are encouraged to involve students in the assessment communication process, for example, through Parent-Child-Teacher Conferencing. During the conferencing sessions, students can share with their parents what they have learned and achieved, their learning reflections and their goals. They can also discuss with teachers and parents how they could be better supported in their learning and development.

PERI HA Workplan Guide

In 2011, school leaders and teachers of nine primary schools and MOE jointly developed the PERI HA Workplan Guide to support all primary schools in implementing HA systematically. It guides schools in their planning, implementation and review of HA. It highlights the roles of the school leaders and teachers in the implementation and indicates the timeline, necessary actions and resource support for the various key aspects of HA implementation. This includes aspects such as assessment planning at school and subject levels, assessment design and communication, holistic reporting, monitoring and review, and capacity building.

Capacity Building of School Leaders and Teachers

Figure 2: PERI Holistic Assessment Capacity Building Framework

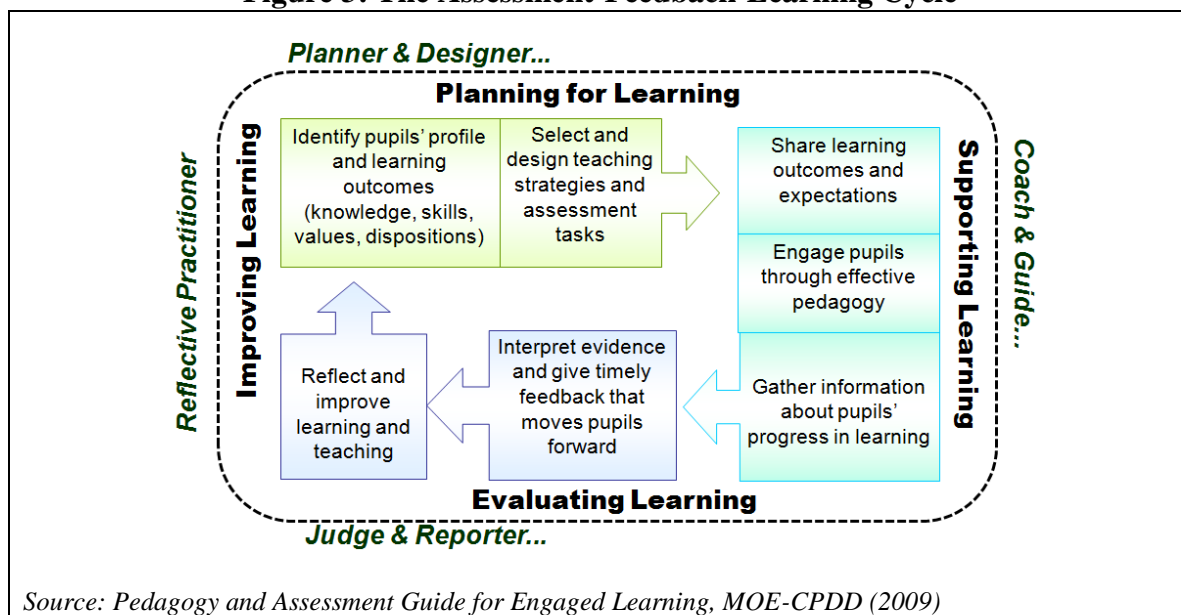


¹ The information provided to parents includes the three areas: “*Product*” (e.g., achievement and performance), “*Process*” (e.g., learning attitudes, dispositions and personal qualities) and “*Progress*” (e.g., how much improvement students have made over a period of time) (Guskey & Bailey, 2010).

The fundamental purpose of PERI Holistic Assessment capacity building is raising teachers' assessment literacy and competency² to improve student learning and motivation, and helping school leadership teams develop balanced and quality school assessment systems to ensure student success (Figure 2: PERI Holistic Assessment Capacity Building Framework).

The process is based on the principles of quality classroom assessment and the roles teachers play in the Assessment-Feedback-Learning Cycle (Figure 3). Key capacity building components like seminars, learning journeys, exhibitions, subject-specific workshops and networks, teacher learning communities, and school consultancy and visits, are aligned to the four contexts of how teachers learn (Chappuis, Chappuis & Stiggins, 2009). Capacity building for sustainable implementation requires both school commitment and MOE support.

Figure 3: The Assessment-Feedback-Learning Cycle



Resource Support

Resources are provided to schools in four key areas: planning and implementation of HA; capacity building of school leaders and teachers; communication and engagement of key stakeholders; and school review and self-evaluation of their implementation progress. Besides the PERI HA Workplan Guide, a rubrics gallery, subject-specific assessment guides, tools and resources are developed for schools to support their assessment planning, design and delivery. Professional books, learning guides and videos are provided to support the capacity building of school leaders and teachers.

A dedicated PERI HA website was launched in mid-2010. The website serves as a one-stop portal to track the HA journey and implementation, provide access to HA resources and tools, encourage professional discourse and exchange of ideas among the HA community, and engage hearts through inspiring *aHA! Stories* from schools and teachers. School leaders and teachers can also access the HA video gallery for videos developed with local schools on the

² Assessment Literacy: Knowledge and conceptual understanding of the principles of sound assessment. Assessment Competency: Consistent practice of high quality student-involved assessment principles to maximise student motivation and achievement (Chappuis et. al, 2010).

use of assessment in the classroom to support student learning, as well as learning videos from lectures, keynotes and workshops conducted by assessment experts.

Stakeholder Communication and Engagement

A multi-channel outreach approach to engage and educate stakeholders was adopted to communicate PERI HA intent and key messages, and celebrate the progress of its implementation. In addition to public seminars and exhibitions and the “Parents-in-Education” website, the “PERI HA Communication Pack” was developed. It comprises video clips, presentation slides, information brochures in four languages³ and Frequently Asked Questions, and helps schools to provide teachers and parents with a better understanding of HA implementation and its impact on children’s learning.

IMPLEMENTATION PROGRESS AND IMPACT

Curriculum Officers⁴ from MOE work closely with the school leaders and teachers on the implementation and review of Holistic Assessment. A formative evaluation is conducted annually to gather feedback on HA implementation so as to refine interventions and improve their effectiveness. This includes the evaluation of key processes and strategies of HA implementation and the impact on school assessment systems, school leaders, teachers, students and parents.

By 2013, all existing 187 primary schools had come on board PERI Holistic Assessment implementation. All schools have started implementing the core features of Holistic Assessment, at least at Primary 1 (Figure 4).

Figure 4: Holistic Assessment Implementation Schedule

2018	<i>P1 - P6</i>	<i>P1 - P6</i>	<i>P1 - P6</i>	P1 - P6
2017	<i>P1 - P6</i>	<i>P1 - P6</i>	P1 - P6	P1 - P5
2016	<i>P1 - P6</i>	P1 - P6	P1 - P5	P1 - P4
2015	<i>P1 - P6</i>	P1 - P5	P1 - P4	P1 - P3
2014	P1 - P6	P1 - P4	P1 - P3	P1 - P2
2013	P1 - P5	P1 - P3	P1 - P2	P1
2012	P1 - P4	P1 - P2	P1	-
2011	P1 - P3	P1	-	-
2010	P1 - P2	-	-	-
	Prototype (16 schools)	Phase 1 (67 schools)	Phase 2 (54 schools)	Phase 3 (50 schools)

³ The four languages are English, Chinese, Malay and Tamil.

⁴ The Curriculum Officers come from the Curriculum Planning and Development Divisions, Curriculum Policy Office and Student Development Curriculum Division, representing all primary school subject areas (English, Mother Tongue Languages, Mathematics, Science, Character and Citizenship Education, Physical Education, Art, Music and Social Studies).

To sustain the implementation of HA beyond its Roll-out Phase (2011 – 2013), Teacher Learning Communities (TLC) were set up in schools with the support of MOE to further enhance teachers' assessment literacy and competency (William, 2009). In their TLC, teachers develop knowledge and learn to make more effective use of formative assessment strategies in the classroom, through learning collaboratively, practising in the classroom and engaging in peer observation and feedback in a structured manner.

In 2013, Teacher Learning Communities were piloted in 72 primary schools, involving more than 1,000 teachers. In 2014, the number of primary schools that have opted to set up TLC has increased to 125, involving more than 3,000 teachers from all subject areas.

At the early stage of HA implementation, as the assessment literacy of teachers was low⁵, they had misconceptions about what formative assessment and holistic reporting were. Many teachers were also spending substantial amounts of time focusing on designing and implementing a wide variety of assessment tasks that were not fit for purpose. It was observed that they were more focused on operationalising the various assessment techniques, than actually using the assessment information gathered to help students learn better. This has also been observed in studies like those conducted by Mary James and her colleagues in the UK; teachers who are making use of new assessment techniques in the classroom could be implementing the “letter” rather than the “spirit” of assessment (as cited in Stobart, 2008, p. 149). These teachers are using assessment techniques mechanistically rather than using assessment with a clear understanding of how those techniques should be used to improve student learning.

Aside from some initial challenges, such as the low assessment literacy of teachers and other teething problems, the implementation of HA in schools has been proceeding well. The TODAY newspaper article, “No exams, no worries – ‘Yes’ to P1, P2 Holistic Assessment” (Sreedharan, 2012, February 13), reported that parents and teachers gave a “thumbs up” to the implementation of HA “despite initial reservations”. Parents interviewed said that they were initially worried about the lack of examinations at Primary 1 and Primary 2 levels but are less anxious now that they have seen the positive effects of HA on their children. With HA, there is greater communication between parents and teachers, and parents are able to support the children better in their learning and development.

Many teachers shared that through HA implementation, their students became more confident and motivated to learn, were more aware of their strengths and areas for improvement and took greater ownership of the learning process.

With HA implementation, [my] pupils look forward to coming to school and are more passionate about learning ... They are more involved in their learning process because they are able to track and self-reflect on their progress. This allows them to be self-directed learners who take a greater sense of ownership for their learning.

Primary 2 Teacher, Princess Elizabeth Primary School

Pupils have a better understanding ... through regular feedback and rubrics. Pupils are also more aware of the learning targets and what is expected of them.

Primary 1 Teacher, River Valley Primary School

⁵ One key contributing factor to the low assessment literacy of teachers in Singapore is that there was very little pre-service training and only ad-hoc in-service training in this aspect.

My pupils are more aware of [what they need to learn]. By stating learning outcomes and articulating them to the pupils, it helps them to understand the expectation of their learning (goal setting). The pupils are also aware of their strengths and weaknesses. This is very important and essential to allow a more meaningful learning experience.

Primary 3 Teacher, Ang Mo Kio Primary School

Pupils are motivated in their learning. They take ownership of their learning as they're able to assess not only themselves, but also their peers (peer assessment) ... They are clear about the teacher's expectations of them for each task.

Primary 2 Teacher, Concord Primary School

My pupils have benefitted from understanding their expected learning outcomes and receiving more descriptive feedback. They are motivated and show progress in targeted areas.

Primary 3 Teacher, Convent of the Holy Infant Jesus (Kellock)

My pupils are now more aware and clear about what they are learning. They are engaged and will ask questions when they do not understand a concept. Pupils are also more confident.

Primary 2 Teacher, Jurong Primary School

With HA, pupils ... are willing to explore their abilities and address the difficulties they might have. It has also given them more confidence as the feedback received is constructive, allowing them to focus on their areas for improvement.

Primary 2 Teacher, River Valley Primary School

The Straits Times newspaper article, "Pupils join parents in meeting teachers" (Teng, 2013, July 11), reported that students take greater ownership of their own learning and development. As a result of the feedback given by teachers, students are more motivated and clearer on the next steps that they have to take in moving their learning forward. In the article, Ms Lim Gek Wah, a teacher from Punggol Primary School, shared that she used to only look for right answers from her students, whereas now she also examines the wrong ones to understand where her students have erred. This allows her to give more targeted feedback to her students. At the Parent-Child-Teacher meetings, students communicate their learning to their parents and teachers, share the learning goals they set for themselves, and even give suggestions on how their parents and teachers can further support them.

Parents appreciated the regular feedback to support their child's learning and development. Parents also found that there was more emphasis on the holistic development of their child.

We were initially unsure about HA. However, after witnessing Darren's progress in school, I am pleased that he does not have to deal with the pressure from regular examinations during his foundation year and is enjoying the learning process. In fact, the focus on HA has developed in him a love for reading and a sense of confidence to express himself.

Mdm Eve Lim, Parent, St. Gabriel's Primary School

Holistic Assessment builds an early foundation for children by helping them to be more confident ... [The] feedback given not only helps my child understand his own strengths and weaknesses but also lets me have a comprehensive view of his progress.

Mdm Fong Sow Yeen, Parent, North View Primary School

I have begun to understand what is expected of my child. I am now in a better position to help my child. The immediate and specific feedback given has certainly helped my child grow.

Mrs Anbarasi, Parent, St. Anthony's Primary School

Holistic Assessment has provided an opportunity for the parent, child and teachers to come together to discuss the child's achievements and weaknesses ... it has definitely benefited my child as she learns to have a voice in her learning.

Mrs Pauline Goh, Parent, Haig Girls' School

Many teachers indicated that they are now more confident in implementing HA. They reported that they are providing more constructive feedback to their students. They have become more reflective about their teaching practices and are making refinements to their teaching to improve student learning.

Having taught the lower primary for quite a number of years, there is a tendency for me to do the same thing over and over again, because it is my comfort zone. But now ... I have started to question the way that I'm doing certain things in my class with respect to the progress made by my students, and how I make use of all the data that I've collected, the information that I've gathered on how the students are learning, to move them forward.

Mrs Sangeetha Siva, Teacher, Da Qiao Primary School

The implementation of HA helps teachers to be able to assess students holistically, in different areas of learning. Feedback given to the students is more specific in different learning areas.

Teacher, Convent of the Holy Infant Jesus (Kellock)

With the implementation of HA, I have become more reflective of my teaching. It has helped me gain a better insight into my students' learning and development ...

Teacher, Keming Primary School

[HA] helps me to be more aware of my students' learning progress and do the necessary refinements to my teaching to help the weaker ones.

Teacher, Xishan Primary School

CONCLUSION

The implementation of Holistic Assessment requires school leaders and teachers to make significant changes to the way they think and work. Time is needed to build their assessment capacity and change their existing beliefs and practices, as well as to gain the support of stakeholders. There may be an "implementation dip" (Fullan, 2010) as schools face teething

problems and take time to become accustomed to new practices and thinking⁶. John Bransford, Ann Brown and Rodney Cocking write, “We need to create time and space for teachers to reflect on their practice in a structured way, and to learn from mistakes” (as cited in Wiliam, 2012). Dylan Wiliam emphasises that focusing on practice will require a long term commitment.

Teaching is such a complex craft that one lifetime is not enough to master it, but by rigorously focusing on practice, teachers can continue to improve throughout their career. From teachers, therefore, we need ... a career-long commitment to the continuous improvement of classroom practice, and an agreement to develop in their practice in ways that are likely to improve outcomes for their students.

(Wiliam, 2011)

Holistic Assessment requires systemic implementation over a long period. As HA scales up, involving more teachers and levels, MOE will need to place greater emphasis on the depth, sustainability, spread and shift of ownership of the implementation (Coburn, 2003). MOE will continue to work with school leaders and teachers, building their capacity to use assessment effectively to support students’ holistic development and increase students’ confidence and motivation to learn.

If we can use assessment to affirm our children’s progress, we can ignite their passion and confidence in their ability to learn. This early positive experience can set children on the right path for their subsequent years of schooling, and for life.

(MOE, 2009, p. 37)

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⁶ “When we try something new, even if there has been some pre-implementation preparation, the first few months are bumpy. New skills and understanding require a learning curve ... focus on capacity building at this critical stage ... demonstrate persistence with flexibility but never stray from the core purpose.” (Fullan, 2010, pp. 21–22)

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