

Dear readers,

SEAB was honoured to be invited to the Inaugural International Conference on Examinations and Assessment organised by the Shanghai Municipal Educational Examinations Authority (SMEEA) to share the Singapore experience on the GCE A-Level Curriculum and Examinations with school administrators and educators. The sharing was on Singapore's emphasis on holistic education and that examinations served as a checkpoint rather than an end point. The Chinese media company covering the event featured SEAB's presentation in their local print and broadcast media. It was a fruitful experience for SEAB representatives to learn more about China's Gao Kao through school visits and interactions with the SMEEA.

SEAB is committed to raising the assessment literacy of teachers through various platforms as the alignment of pedagogy, curriculum and assessment form the basis for deep learning in students. In November last year, Ms Tan Lay Choo, Chief Executive of SEAB, spoke about the place of large-scale standardised testing amidst the changes in the assessment landscape at an educator's symposium. SEAB representatives also took the opportunity to debunk the myths surrounding grading in national examinations in the recent 2018 Holistic Assessment Professional Learning Series organised by MOE's Curriculum Policy Office in May. Catch up on the details of these events in this issue.

In 2018, we also organised the Assessment Seminar and launched Assessment in Singapore, Volume 3, containing essays that are targeted at raising the assessment literacy of fellow educators.

A write-up of the seminar highlights and the various publications by SEAB can be found on page 03 and 20.

And there's more! In this series of "Demystifying National Examinations", we debunk common myths about "hand-me-down" calculators, return of national examination scripts, and what happens to results of candidates who fall sick during the examinations.

What are the examination arrangements for candidates who have learning or physical needs? Can candidates who are physically injured still sit for the national examinations? Will the certificates and result slips of candidates who sat the examinations under special arrangements be annotated? We answer these questions and many more in an article on Access Arrangements on page 17.

On our homefront, we also bring updates about SEAB's redevelopment at Jalan Bukit Ho Swee, our sharing with personnel from the Singapore Accountancy Commission, the 2018 SEAB Day and lastly, upcoming training programmes for the educators in the second half of 2018.

Read on and we hope you enjoy issue 24.

If there are topics that you would like us to feature or if you have any suggestions for us, simply drop us an email at SEAB_SEABLink@seab.gov.sg.

Meng Lee,

On behalf of the SEAB-link Editorial Team



CONTENTS

03

**2018 SEAB
Assessment Seminar
Making Connections:
Principles and
Good Practices in
Assessment**

07

**Keynote Address on
'The Place of
Standardised
Examinations in
Education for the
Future'**

08

**2018
Holistic Assessment
Professional Learning
Series**

10

**Shanghai Study Trip:
Understanding the
Gaokao Reforms**

13

**Sharing Experiences,
Learning Best
Practices**

14

**Demystifying National
Examinations (Part 2)**

17

**Access Arrangements
for National
Examination
Candidates**

19

**Planned Questioning
as an Assessment
Tool to Enhance
Learning**

20

**SEAB Publications
- Assessment in
Singapore Series**

23

SEAB Day 2018

26

**Redevelopment of
SEAB Headquarters**

28

**Training Calendar
2018
Career Opportunities
in SEAB**

2018 SEAB Assessment Seminar

Making Connections: Principles and Good Practices in Assessment



On 18 April 2018, SEAB brought together some 600 educators to re-examine how we could make meaningful connections between assessment principles and school-based assessment practices to improve student learning at the 2018 SEAB Assessment Seminar.

In her keynote address, Ms Tan Lay Choo, Chief Executive of SEAB, addressed the audience's beliefs about large-scale standardised testing by first debunking the myth that our national examinations are graded on the curve. She clarified that Singapore's examination system is grounded on desired learners' outcomes prescribed in our national curriculum and thus, students' performance is referenced to sound educational standards. This shift in the understanding of national examinations should dovetail with adjusted pedagogical practices in the classroom to focus on teaching students to acquire age-appropriate skillsets needed for progression from level to level.

To strengthen the notion on good classroom assessment practices, she brought up learning points from her observations of the consequences



Ms Tan Lay Choo delivering her keynote address.

of pre-mature preparation to help students ace in examinations. Such common ground practices are often a trade-off for nurturing values in our students and helping them to acquire life-long skills needed for the future. In order to create better schooling experiences for our young charges, she urged teachers to have a good blend of fit-for-purpose assessments that could yield useful learning-related information to enable teachers to progress the learners. When this is achieved, the assessment culture in schools will be shaped to one that has high validity in the use of assessment results to drive positive impact on teaching and learning.



Mr Yue Lip Sin presenting 'Understanding Standards-referenced Assessment'.

Mr Yue Lip Sin, Deputy Chief Executive and Director of SEAB, led the audience to delve into the concept of standards-referenced assessment. The audience were both enlivened by his interactive quiz and enlightened by the applicability of the concept in Singapore assessment contexts. In relation to the new PSLE Scoring System which will report students' academic achievements by Achievement Levels tied to learning outcomes stipulated in the national curriculum, he highlighted the need for schools to achieve a high degree of comparability in their school-based results reporting with that of PSLE.

He illustrated how the standard for each grade threshold was determined to emphasise the importance of close alignment of curriculum, pedagogy and assessment in a standards-referenced system. This is critical so as to ensure that the grade achieved by the student would be a true reflection of his/her level of mastery. To help schools gain greater clarity on how close their pitching of standards in their school-based preliminary examinations is compared to the established standards of PSLE, he assured schools of SEAB's support in providing them with comparative data sets that will be given to individual schools from the 2018 PSLE onwards. The comparative data sets will help schools to make purposeful calibration at threshold levels for every subject. With the additional performance reports, he envisioned a change in the way professional development of teachers will be conducted during post-examination discussions – to enhance assessment practices for more accurate reporting of student attainments for subsequent examination cycles. This is all done in the hope for a smooth transition to the new PSLE Scoring System in 2021 for our stakeholders.

CONCURRENT SESSIONS: CONTEXTUALISING ASSESSMENT CONCEPTS IN CLASSROOM SETTINGS

15 Assessment Specialists delivered 13 discipline-specific paper presentations during the concurrent and plenary sessions.

English Language



From left to right: Ms Adeline Teng, Ms Alicia Yeow, Mr Syed Mohamed s/o Abdul Gafoor, Ms Cheong Yin Yuen

While Mr Syed Mohamed s/o Abdul Gafoor presented on ways to reduce construct-irrelevant variance in language achievement tests, Ms Adeline Teng, Ms Alicia Yeow and Ms Cheong Yin Yuen shared their perspectives from observations on students' gaps in writing and comprehending visual texts.

Papers presented:

- What to value in students' writing at primary levels
- How to bridge students' gaps in Situational Writing
- Reducing construct-irrelevant variance in language achievement
- Interpreting Visual Texts – Understanding and assessing the construct

Science



From left to right: Ms Sharon Tan, Mr Fong Yick Chee, Mr Tan Lee Sze and Dr Rajenthiran Sellan

What strung Ms Sharon Tan's, Mr Fong Yick Chee's and Mr Tan Lee Sze's presentations together was the attempt to surface misconceptions in the learning of Science for early intervention. Dr Rajenthiran Sellan gave his overarching view on the linguistic features generally associated with science texts.

Papers presented:

- Use of constructed-response items for assessment in primary Science
- Structure of Observed Learning Outcomes (SOLO) – Identifying learning gaps through scaffolding questions in primary Science
- Assessment strategies that could surface misconceptions in primary Science for intervention
- Language use in the learning and assessment of Science

Mathematics

The aim of the two presentations on Mathematics was to help teachers look deeper into students' errors to make better inferences on the possible underlying causes for more effective instructional adaptations.

Papers presented:

- Students' errors in Mathematics Problem Solving: What can they tell us?
- Unmasking gaps in students' Mathematical Reasoning



Mrs Chen-Theng Geak Seng (left) and Dr Alwyn Pang (right)

Mother Tongue Language

Mdm Too Jye Yuin and Mdm Chua Lay Keng shed light on the construct of Mother Tongue Language Spoken Interaction tasks which could be better elicited with good questioning techniques. Mdm Premalatha d/o Parasuraman defined what constitutes higher-order thinking skills in reading comprehension tasks.

Papers presented:

- Understanding and assessing Mother Tongue Language Spoken Interaction skills at the upper primary level
- A tool for assessing higher-order thinking skills for Mother Tongue Languages reading comprehension



Mdm Premalatha d/o Parasuraman (left) and Mdm Too Jye Yuin (right)

Connecting Assessment and Learning

In his presentation on 'Assessment of Skills', Dr Leong See Cheng, Lead Assessment Specialist, introduced Miller's Pyramid to explicate how assessment of skills could differ from assessment of knowledge due to the former's dependence on the context attached to performance tasks. The awareness of the nature of performance tasks is the first step to address its implication on teaching and learning. To help students acquire the skillsets, teachers have to create many varied opportunities for internalisation of procedural knowledge. To accurately assess students' learned skills, task developers have to be mindful to control the contexts presented to allow students

to demonstrate what they can do. With frequent feedback and practice, students would be able to hone their skills in an environment conducive for learning.



Dr Leong See Cheng

ENGAGING THE AUDIENCE THROUGH PANEL DISCUSSION



From left to right: Mr Pang Chong Han (Director, Exam Operations), Ms Tan Lay Choo (Chief Executive), Mr Yue Lip Sin (Deputy Chief Executive & Director, Assessment Planning and Development), Mr Lee Ah Huat (Director, Assessment Planning and Development), Ms Selena Yeo (Director, Corporate Services) and Mrs Cheah Mei Ling (Director, Research and Development)

The seminar concluded with a panel discussion chaired by Mrs Cheah Mei Ling. The panel addressed the questions posed by the audience.

“

FEEDBACK FROM SEMINAR PARTICIPANTS

The content delivered by the CE and Director were very good and made me think deeply.”

The keynote speakers and presentations were good and insightful.”

Keep up the good work, SEAB! I have benefitted from your fruitful sharing that brings about greater clarity.”

I really enjoyed ALL the sessions the whole day, including the Q&A. This session has given me a better understanding of SEAB's function in our educational landscape.”

I think there was a good range of topics covered for the seminar and I have gained some good insights into the issue of assessment.”

Keynote Address on ‘The Place of Standardised Examinations in Education for the Future’

Ms Tan Lay Choo, Chief Executive of SEAB, was invited to share her thoughts on the place of large-scale standardised testing amidst the changes in the assessment landscape at an educators’ symposium on 10 November 2017.

To an audience of 345 educators, Ms Tan spoke about how large-scale standardised testing played a pivotal role in the education systems of many countries, including Singapore. Due to the multiple uses of examination data at the individual, school and system levels, she highlighted the consequential tensions which might work against the original intent of educating the child. Ms Tan cited examples from local and overseas contexts to illustrate some of these tensions and the consequences

on learning. She also discussed how countries leverage the strengths of their examination systems to deliver the promise of preparing their students for the future.

Ms Tan cautioned against focusing on massive generation of data in this data rich era, and advised that data collection should be complemented by sense making of the data. More importantly, there should be a strong resolution to implement assessment solutions in accordance with what the data reveals to the users. She further shared her insights from her years of experience as an educator to present a balanced view on complementing data analytics with meaningful qualitative information to make the best inferences about students’ performance.

“

It was great hearing from Ms Tan and many of us gained fresh perspectives from the sharing. It was very heartfelt in tone, form and content. In ways big and small, it dispelled several myths that many educators have of SEAB—first and foremost, as a rather ‘inaccessible and detached’ organisation that is beyond ‘reproach’! Ms Tan’s sharing added a human dimension to the complex work done by SEAB.”

- Feedback from participant who attended the symposium

2018 Holistic Assessment Professional Learning Series

The 2018 Holistic Assessment Professional Learning Series organised by MOE's Curriculum Policy Office was held on 9 and 10 May at the Singapore Chinese Cultural Centre. A total of 555 primary school leaders and teachers attended the seminar.

Mr Yue Lip Sin, Deputy Chief Executive and Director, Assessment Planning and Development Division, and Dr Leong See Cheng, Lead Assessment Specialist, Assessment Services Division, each held a 2-hour plenary session with the participants on both days.

Understanding Item and Test Demands

At the morning session, Dr Leong spoke on the topic: "Understanding Item and Test Demands". Through a mix of personal anecdotes and practical examples gleaned from more than three decades of experience, Dr Leong explained what made question-answering easy or hard. He also provided teachers with a step-by-step guide to developing a mark scheme:

1. Prepare a mark scheme as the item is set
2. Write down a list of acceptable and unacceptable responses
3. Before marking, sample scripts across the ability range to look for unexpected responses
4. Add unexpected acceptable and unexpected unacceptable responses
5. During marking, note the frequency of the responses
6. After marking, review observed unexpected responses and infrequent expected responses
7. How can item writing be tightened?

In the third part of his presentation, Dr Leong offered tips on how teachers could maintain overall test demand by using parallel versions of tests and ensuring that the tests assessed the same construct. Wrapping up his presentation,

he spoke about the principles of assessment design which are used for the PSLE. He urged schools to set the standard of their preliminary exam paper as comparable as possible to the actual PSLE. He also reminded teachers to check that all items in the test and the mark scheme measured the same construct and to use as many items in the preliminary exam paper as the actual PSLE paper.



Dr Leong speaking on both days of the seminar.

Applying Standards-referencing in National Examinations

Mr Yue held an interactive session with the participants in the afternoon on the topic: "Standards-Referencing: Towards Meaningful Assessment and Reporting of Achievements". He started out by explaining what standards are and how they are expressed. He explained that in order to give meaning to test scores, various referencing systems such as the Norm-referenced system, Criterion-referenced system and Standards-referenced system are used as frames for interpreting marks. He shared that our national examinations are Standards-referenced and grades are not awarded on a curve. In a standards-referenced system, a grade awarded reflects a student's own level of achievement and is a more meaningful way to assess and report student achievements.



Mr Yue speaking on both days of the seminar.

In his presentation, Mr Yue also addressed questions of whether SEAB fixed the distribution of grades and the cut-off mark for each grade. To both questions, he shared that the percentage of each grade is not fixed and cut-off marks for grades are provided as a reference. When awarding grades, these cut-off marks are not mindlessly applied. The Grading Committee, which is chaired by DGE, comes to an informed decision based on multiple sources of evidence.

As he went on to talk about the new PSLE scoring system that would take place in 2021, Mr Yue assured schools that SEAB would support them by providing PSLE data in Achievement Level format beginning with the 2018 examination. Schools could then use the data to better align their school-based examination to the PSLE. He ended off his presentation by reminding teachers of the importance of a balanced approach in teaching as over-drilling will lead to negative consequences on students' learning.

Positive Reception by Participants

A participant at the seminar, Mrs Rabia Shahul, Principal of Evergreen Primary School, said,

“

It was a highly informative sharing by Dr Leong, especially on understanding demands.

I now have a better understanding of validity, reliability and fairness, and how these principles are critical in developing sound assessments at the school level. Mr Yue's presentation helped debunk many myths we have on the PSLE. I found his sharing so relevant and timely as we move into the new PSLE scoring system. The information on enabling schools to be able to align our preliminary exams to that of PSLE is very useful and meaningful. I am very glad I attended this session and now look forward to sharing with my Key Personnel my learning and takeaways from the seminar. Well done! Looking forward to more of such sessions.”

Shanghai Study Trip: Understanding the Gaokao Reforms

Shanghai is the most cosmopolitan and largest city by population in China. At the forefront of educational reforms in China, its top rankings in consecutive rounds of the Programme for International Student Assessment (PISA) in reading, mathematics and science for 15-year-olds administered by the OECD in 2009 and 2012 attest to its high achievements in education.

The year 2017 marked the 40th anniversary of the reintroduction of the Gaokao examination (national college entrance examination) after the end of the Cultural Revolution in 1977. Concomitantly, the International Conference on Examinations and Assessment, organised by the Shanghai Municipal Educational Examinations Authority (SMEEA), reported on the successful implementation of the Gaokao reforms in Shanghai in 2017.

SEAB's participation in the International Conference on Examinations and Assessment

SEAB participated in the two-day international conference held on 18 and 19 Oct 2017. The conference was attended by 150 school administrators from China as well as overseas educators from UK, USA, New Zealand and Switzerland. It was an honour for Mr Yue Lip Sin, Director, Assessment Planning and Development, to be invited to speak on "Singapore's Journey in Preparing Students for a Fast-Changing Global Landscape: The A-Level Curriculum and Examinations" at the conference. His presentation focused on how Singapore's A-Level curriculum and examinations prepare students to be future-ready.



Mr Yue Lip Sin speaking at the International Conference on Examinations and Assessment in Shanghai.



SEAB participants at the conference: Mr Yue Lip Sin and Ms Christine Goh, Assessment Specialist (Humanities), Assessment Planning & Development Division.

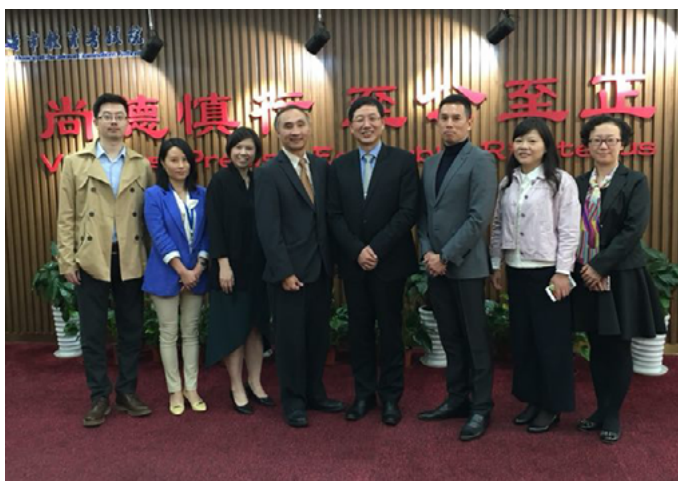
Visits to SMEEA and School

For the SEAB participants, the study trip to Shanghai was an invaluable opportunity to find out more about the Gaokao examination and the recent reforms. Apart from attending the conference, the SEAB participants visited SMEEA for a professional exchange, hosted by President of SMEEA, Mr Zheng Fangxian and his assessment team. President Zheng shared on the Shanghai's mid to long term development plan, equal access in education, quality education, educational evaluation and reforms in the Gaokao examination.



Visit to the Shanghai Municipal Educational Examinations Authority: Mr Yue Lip Sin presenting a token of appreciation to President Zheng Fangxian.

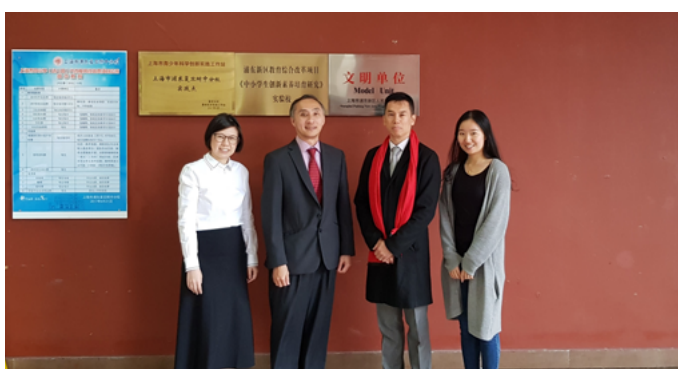
The SEAB participants also visited the High School Affiliated to Fudan University (Pudong Campus) to better understand how the Gaokao reforms were being implemented.



Group photo of visit to the Shanghai Municipal Educational Examinations Authority: SEAB participants and SMEEA assessment specialists.



Visit to the High School Affiliated to Fudan University (Pudong Campus): Mr Yue Lip Sin presenting a token of appreciation to Ms Song Yu, the teacher who facilitated the visit.



Group photo of visit to the High School Affiliated to Fudan University (Pudong Campus).

Understanding the Gaokao Examination and its reforms

The Gaokao examination, taken by 9.5 million senior high school students, is arguably the most important examination for students in China. Taken over three days in June, it is often regarded as the toughest examination in the world with fierce competition to get into top universities and consequently having the potential to set the course of students' life chances in China. In 2014, the State Council announced reforms to the Gaokao examination and admission to higher education to develop a broader range of competencies in students and a more well-rounded education. The reforms that were first piloted in Shanghai municipality and Zhejiang province would inform the implementation of the reforms in the rest of China by 2020.

In Shanghai, the reforms led to the broadening of student choice and expansion of educational evaluation. Underlying these reforms is the need to change the social mindset of "one mark determining one's entire life". To this end, the key reforms were as follows:

Firstly, replacement of the 3+1 system (3 mandatory subjects: Chinese, Mathematics, English + 1 elective subject from either the Sciences or Humanities) with 3+3 system (3 mandatory subjects + 3 elective subjects that could be chosen from across the Sciences and Humanities). The removal of division between the Sciences and Humanities gave students autonomy in learning, pursuing academic interests and charting career trajectories.

Secondly, rationalisation of the Gaokao requirements to ensure that students would have an all-rounded education across a broad range of subjects on graduation from last year of senior high school. The requirements comprise the following:

- Qualifying tests for 13 subjects to be taken before students qualify for the Gaokao examinations. The 13 subjects are Chinese, Mathematics, English, Physics, Chemistry, Biology, Politics, History, Geography, Information Technology, Practical Skills, Arts and Physical Education.
- Level examinations for 3 out of 6 elective subjects: Physics, Chemistry, Biology, Politics, History, Geography.
- Gaokao examinations for 3 mandatory subjects: English, Mathematics and Chinese.

Thirdly, while computation for university admission was previously based on a single Gaokao score, grades are now given for each elective subject and converted into points for inclusion in the overall Gaokao score. In addition, students' achievements in community and social service, research projects and other co-curricular would be included in a report card for profiling of comprehensive competencies for university application. This meant that schools had to broaden curriculum and education beyond a narrow focus on the Gaokao examinations.

Other reforms include the provision for students to take the English examinations twice, once in January and once in June to reduce examination pressure. Online oral and listening comprehension examinations for English had also been successfully implemented.

The aforementioned reforms effectively expanded educational evaluation with far reaching impact on admission to higher education for both the students and the universities. Students could choose their subjects based on the entry criteria of their preferred faculties in universities. The universities could no longer use a single score for admission, as each student's score had a different meaning, depending on the choice of subjects. Students' individual strengths would need to be recognised. Universities such as Fudan University and Shanghai Jiaotong University are now taking into consideration students' performance at admission interviews and holistic reporting of performance, in addition to the Gaokao scores. At a macro level, the Gaokao reforms are in tandem with China's spectacular economic growth in the last few decades that has put pressure on an increasing demand for diversity of talents and broad range of competencies to meet the needs of an increasingly complex and sophisticated economy.

Shanghai is not resting on its laurels – having completed the monumental task of implementing the Gaokao reforms, it would be focusing on formative assessment to raise the overall quality of education.



Sharing Experiences, Learning Best Practices

SEAB welcomed a group of personnel from the Singapore Accountancy Commission on 15 January 2018.

A statutory board under the Ministry of Finance, the Singapore Accountancy Commission (SAC) wanted to understand more about SEAB's processes on the conduct of national examinations as the agency administers examinations to certify Chartered Accountants.

The team of four was led by Ms Low Ying Yih, Head of Professional Qualifications & Development. They were welcomed by Mr Pang Chong Han, Director of Exam Operations and team.

It was a vibrant discussion during the near two-hour visit, where both teams candidly exchanged experiences and shared the challenges in the administering of examinations.

On behalf of the group, Ms Low wrote:

“

Thank you for the comprehensive sharing.”



Mr Pang Chong Han, Director of Exam Operations sharing the SEAB experience with Ms Low Ying Yih of SAC.



Group photo of the SAC and SEAB team.

Demystifying National Examinations (Part 2)

Comics were created using Comics Head app

#4 "RETURN MY ANSWER SCRIPT"



MYTH

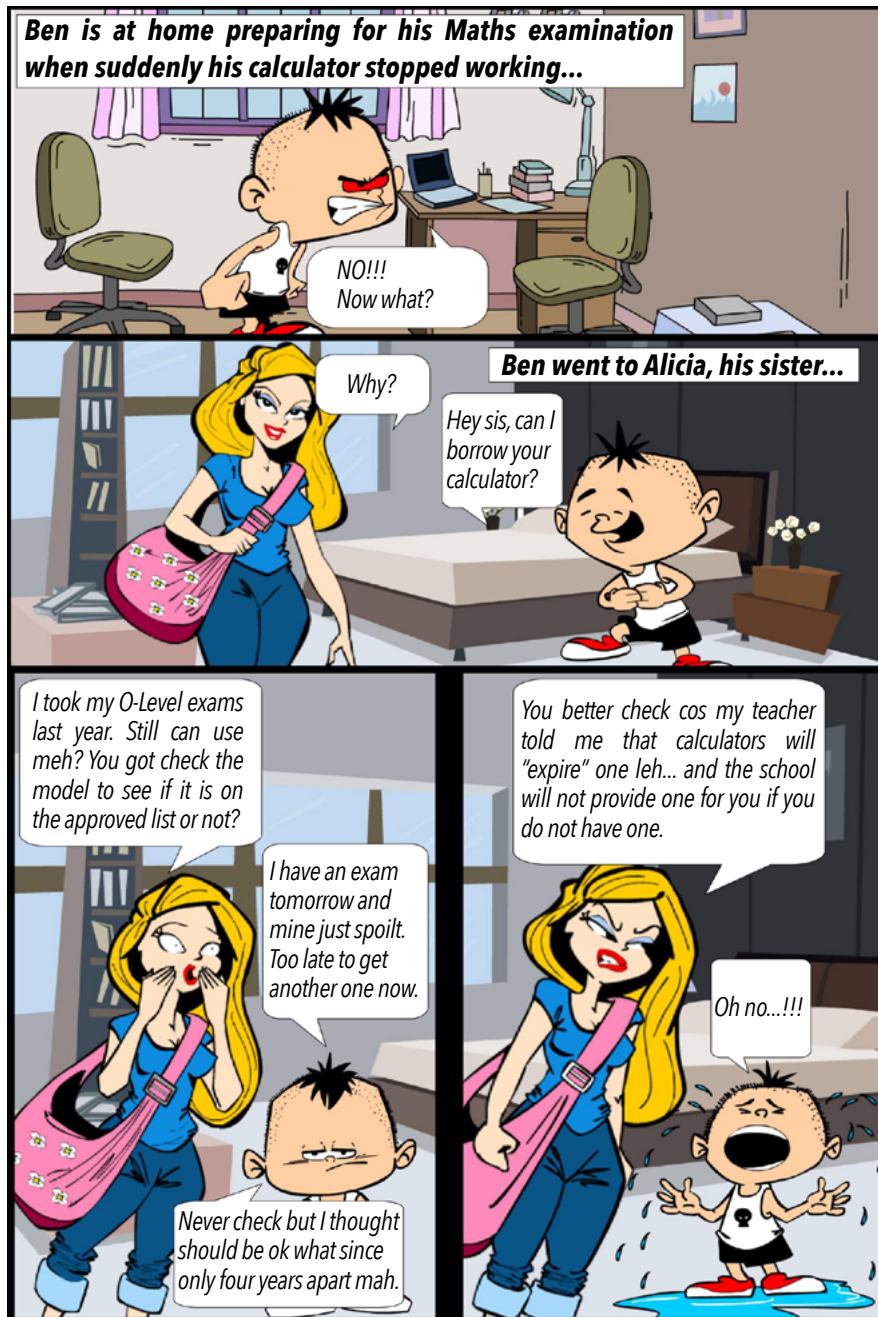
Answer scripts submitted for the national examinations can be returned to candidates or released for viewing.

FACT

As all examination materials, including answers scripts, are confidential documents under SEAB's property, they are not returned to candidates. We also do not release marked scripts for viewing as grading is confidential. Further, the marked examination scripts can only be meaningfully interpreted by experienced markers who have undergone the required training to ensure that they have understood the mark scheme and are able to apply it accurately and fairly.

Please be assured that SEAB has a rigorous process of reviewing results. All appeal cases will be reviewed and checked thoroughly by independent senior examiners to ensure that the marks awarded are accurate.

#5 "HAND-ME-DOWNS"



MYTH

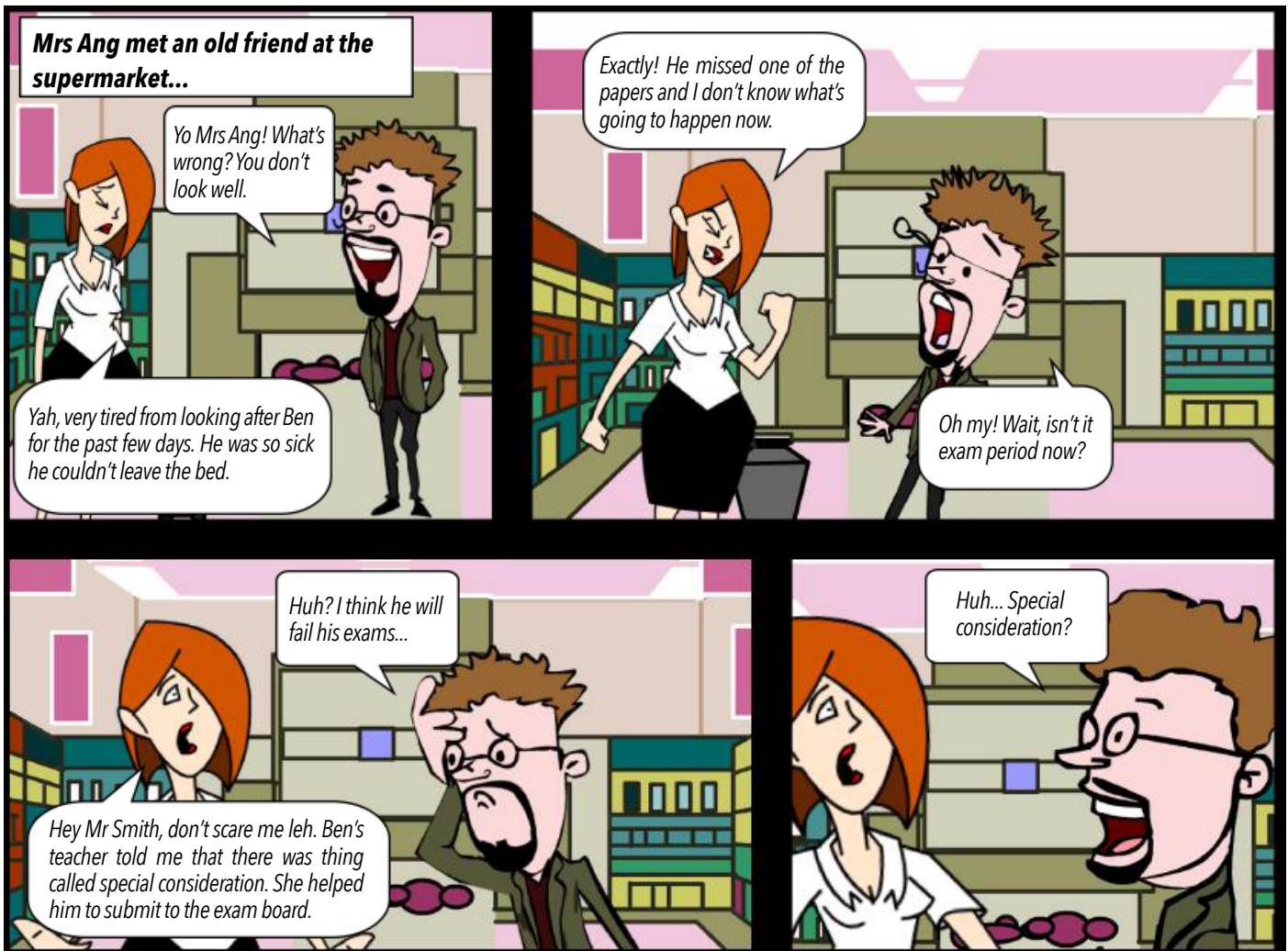
Candidates can continue to use the calculators/dictionaries if the validity period is over.

FACT

The validity period is in place as certain models might be withdrawn from the list, when there are changes in policy, syllabus or examination format. For calculator models where the validity period is over, schools have been informed that candidates can continue to use them for national examinations so long as there is no change in policy, syllabus or examination format. Where there is a change under any of these situations, these models might be withdrawn from the list.

Schools and the public will be notified at least two years in advance if there is any change in policy with regard to the use of calculators in national examinations.

#6 "WORRIED SICK"



MYTH

Candidates will be marked absent or not given a grade if they miss their papers due to medical reasons.

FACT

There are existing measures in place to assist candidates who fall sick during the examination. Candidates who are unwell but have been certified medically fit to take their examinations, may have arrangements made for them to take their examinations in a separate room. However, if they are not able to proceed with their examinations, they will not be forced to do so. Should a candidate feel unwell or need assistance during the examinations, he/she should immediately raise this with the invigilator.

Candidates who missed papers with valid reasons (e.g. medical) should inform SEAB through their schools. Candidates must submit supporting documents to the schools for the application of Special Consideration.

SEAB will take into consideration the circumstances of the situation, the candidates' performance in the school preliminary examination, their performance in the other papers of the subject, and the cohort's performance in the assessment of these candidates to ensure that they are neither disadvantaged nor advantaged.

Access Arrangements for National Examination Candidates

Access Arrangements are special examination arrangements provided for candidates with specific learning and/or physical needs to enable them to sit for the national examinations without compromising assessment objectives. They can include candidates with Special Educational Needs, medical conditions or those who have physical disabilities. Access Arrangements can also be provided to candidates who have sustained physical injuries prior to the examinations.

Access Arrangements aim to provide these candidates with a fair chance to demonstrate their skills, knowledge and understanding of the subject, but they are not intended to give the candidates an unfair advantage over others in the same examination.

How to apply for Access Arrangements?

School candidates who require Access Arrangements for the national examinations can submit their applications, through their schools, to the Singapore Examinations and Assessment Board (SEAB). Private candidates can download the application form from the SEAB's website and submit their application to SEAB directly, together with the supporting documents required.

Candidates are required to produce evidence to support their Access Arrangements request(s), which includes input from medical professionals. For candidates with learning disabilities, the medical reports should include a diagnosis of the learning disability and a current profile of needs. Educational input is also required from the school for school candidates.

Applications for Access Arrangements should reach SEAB by the submission deadline. Candidates can expect to receive their outcome in about three months after the date of submission.

For candidates who are injured due to unforeseen circumstances just before the examination, SEAB is also prepared to accept these requests for Access Arrangements so long as there are supporting medical documents available.

How are Access Arrangements applications evaluated?

Every Access Arrangements request is evaluated carefully by the SEAB panel, guided by the principle of providing access to the examinations for candidates with specific learning and physical needs, while maintaining fairness for all other candidates. The evaluation panel considers the following guidelines in approving the provision of Access Arrangements:

- (a) All candidates are assessed according to the same marking criteria, so that grades and certificates have the same validity.
- (b) All candidates are assessed for what they know and can do, not for what they might have achieved, had circumstances been different.
- (c) Access Arrangements must not give the candidate an advantage over the other candidates.
- (d) Access Arrangements should not interfere with the integrity of the assessment and will therefore be restricted to certain syllabuses.

While SEAB oversees the application and approval of Access Arrangements for the National Examinations, individual schools administer the application and approval of Access Arrangements for school-based assessments. While schools may take guidance from the recommendations provided in medical and other professional reports on the Access Arrangements provisions, schools may also evaluate the candidate's need for Access Arrangements against observed difficulties encountered by the candidate in school examination settings.

The provision of Access Arrangements also forms part of the overall support for candidates with Special Educational Needs and is coordinated with support and therapies provided by school personnel (e.g. subject teachers, Allied Educators, school counsellors) and/or external professionals (e.g. doctors, psychologists, therapists).

Will the provision of Access Arrangements be annotated on result slips and certificates?

In cases where there is significant modification of the examination conditions, there will be annotations on the candidates' result slips and certificates for the subject(s) in which Access Arrangements were provided. Examples of significant modification includes exemption from components of a subject (e.g. oral examination, extended time, and special assistance from readers or scribes).

The annotation indicates that a candidate has taken the examination under conditions that are different from those who take the examinations under the standard prescribed conditions. However, no details of the candidate's condition and approved Access Arrangements will be indicated on the result slip and certificate.

For slight modifications of the examination conditions such as sitting for the examinations in a separate room and enlarged print on question papers, the candidate's result slip and certificate will not be annotated.

There are two types of annotation symbols reflected on result slips and certificates, and the explanations of these symbols are provided on the documents:

- Exemption Symbol (#)
'The candidate was exempted from satisfying the full range of assessment objectives in this subject.'
- Access Arrangement Symbol (+)
'The candidate sat the paper under access arrangements'

These annotations generally do not affect candidates' progression to the next level of studies.




Planned Questioning as an Assessment Tool to Enhance Learning

It is common for teachers to ask questions to facilitate learning in the classroom. In fact, asking questions “on the fly” during lessons is second nature to teachers. While the quantity of questions asked is important, the quality of the questions is even more important to enhance learning. The quality of the questions asked could be raised if teachers plan the questions they will ask in the classroom so that the questions can better serve the purpose of eliciting evidence of learning or gaps in learning. In this way, Planned Questioning is an effective form of *Assessment for Learning* strategy.

Planned Questioning builds on a questioning framework called LEADS. LEADS is an acronym for a five-part questioning strategy comprising Link, Establish, Ascertain, Determine and Support as seen in the table below.

<u>L</u> ink	Link questions to broad themes of prior knowledge
<u>E</u> stablish	Establish how well students are learning through their explanations of the relationships among ideas or information
<u>A</u> scertain	Ascertain the level of engagement of your students at the end of the lesson
<u>D</u> etermine	Determine the pace of learning for different groups of students by hypothesising the underlying causes of learning gaps
<u>S</u> upport	Support the students who are in need of guidance to level them up to be on par with their peers



LEADS hinges on preparing questions based on common observed errors and misconceptions teachers often see in their students’ work in the course of learning. The aim is to plan questions to surface learning gaps and to bridge these gaps at every opportunity. During daily lessons, partial understanding and misunderstanding may happen at any instance. Such gaps in learning would then become the underlying causes leading to a lack of understanding and misconception of the topic taught. If teachers plan their classroom questions adequately to surface learning gaps so as to bridge them promptly, it could potentially smoothen the path of learning for the students.

Readers who are interested to find out more about the LEADS framework may refer to Chapter 14 “Planned Questioning framework – Evidence of learning in the classroom” in the 2016 SEAB publication, *Assessment in Singapore Volume 2: Strategies and Methods for Classroom Practice*. Information on how to purchase the book is available on SEAB’s website at www.seab.gov.sg.

SEAB Publications - Assessment in Singapore Series

Over the last six years, SEAB officers have written several articles on assessment in three publications. The first publication entitled, *Assessment in Singapore: Perspectives for Classroom Practice*, was published in 2014. The second publication, *Assessment in Singapore Volume 2: Strategies and Methods for Classroom Practice*, was published in 2016, and the most recent publication, *Assessment in Singapore Volume 3: Concepts and Tools for Classroom Assessment*, was published in 2018. These publications were written to help educators raise their assessment literacy and enable teachers to effectively develop appropriate test items for our students as well as interpret the test results meaningfully to bridge gaps in teaching and learning.

The following are broad threads of Assessment Literacy that have appeared in the three publications: test development; assessing constructs; and marking, use and interpretation of test results.

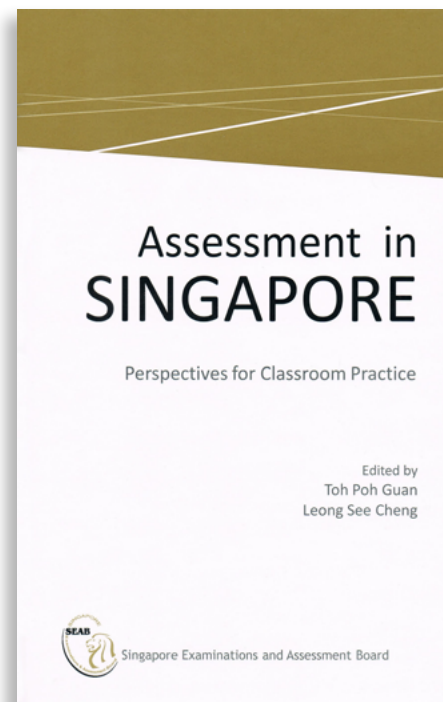
Broad thread	Articles	Publication
Test development	<ul style="list-style-type: none"> How to set open-ended questions Where do the ideas for primary Science questions come from? How to use the Revised Bloom's Taxonomy (RBT) to develop primary Science questions How to vet test papers 	Volume 1
Assessing constructs	<ul style="list-style-type: none"> Assessment of problem solving in Mathematics Assessing humanities achievements Subjectivity in assessing writing 	Volumes 2 and 3
Marking	<ul style="list-style-type: none"> What should be considered in developing mark schemes? What to value in students' writing at the primary levels Considerations for marking of written scripts and assessing performance 	Volume 3
Use and interpretation of results	<ul style="list-style-type: none"> How can teachers make better use of information from an item analysis? How to make the reporting of test results more meaningful Using two-tier multiple choice instruments to promote deeper understanding in the sciences 	Volumes 1 and 2

Specifically, Volume 3 addresses issues on assessing constructs and marking, which completes the continuum of topics under assessment.

The full list of the titles in all three volumes are listed below. If you are interested to augment your knowledge and literacy in assessment, you may visit [Toppanleefung](#) to purchase a copy of the publications.

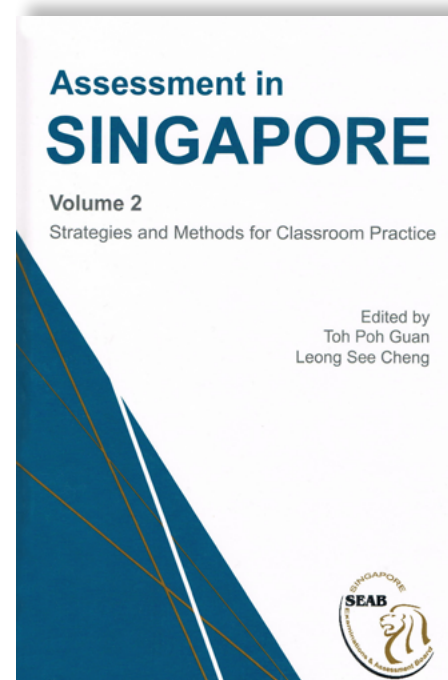
Assessment in Singapore: Perspectives for Classroom Practice

- What do we do when we assess achievement?
- What are the main ideas of “Assessment for Learning”?
- What can the Taxonomy of Learning Gaps tell us about learning and assessment?
- How can teachers implement “Assessment as Learning” in the classroom?
- What validity is and isn’t
- How to vet test papers
- How can coursework be meaningful and manageable in schools?
- How to set open-ended questions
- How to reduce subjectivity in marking open-ended responses
- What are the issues teachers should address to enhance students’ skill of constructing explanations for upper secondary Social Studies?
- What is a good essay?
- Where do the ideas for primary Science questions come from?
- How to use the Revised Bloom’s Taxonomy (RBT) to develop primary Science questions
- How to review primary Science questions
- What are some key ideas of school-based assessment of science practical skills?
- What tools can I use to design comprehension questions of varying cognitive demands?
- Why passage-based questions for Literature are assessed holistically
- How effective are source-based questions in testing higher-order thinking?
- How to ensure that the items or tasks developed to assess oral skills do indeed assess the intended skills
- What should be considered in developing mark schemes?
- Synoptic Assessment – Why and How
- How can we maintain comparable demands of Humanities examination papers over the years?
- How to judge demands in test items
- How can teachers make better use of information from an item analysis?
- How to make the reporting of test results more meaningful
- How to better align classroom assessments to the changes in the English Language Functional Writing tasks at primary level



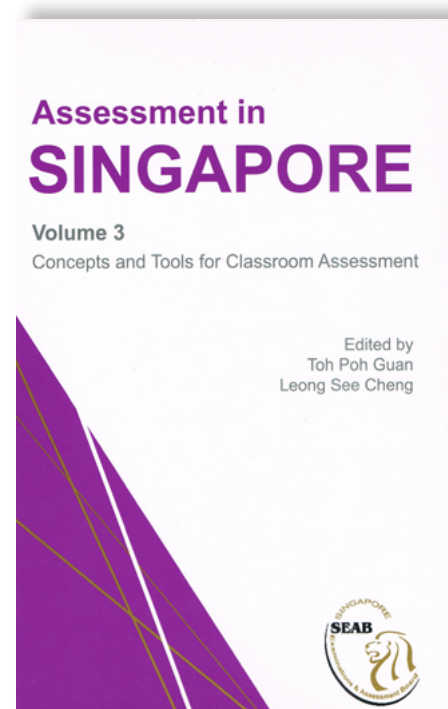
Assessment in Singapore Volume 2: Strategies and Methods for Classroom Practice

- Assessment of problem solving in Mathematics
- Developing good listening comprehension tests
- Subjectivity in assessing writing
- Choice in Literature examinations: boon or bane?
- Reflecting on assessment of the Humanities for better classroom practices
- What e-examinations can or cannot do
- Considerations in the design of Science e-assessment items
- Ethics in classroom assessment
- Teacher guidance in the conduct of coursework
- Classroom assessment - Set it right!
- How to develop scoring rubrics for assessment
- Selecting appropriate formats for your assessment
- What do we mean by standards?
- Planned Questioning framework – Evidence of learning in the classroom
- Assessment and Science of Learning
- Using the Writing Portfolio to assess broader educational outcomes
- Loop of active practice – Adapted from Bloom’s and SOLO Taxonomies
- Aligning assessment practices with curricular changes in the context of globalisation
- Using two-tier multiple choice instruments to promote deeper understanding in the sciences
- The 4i strategy for developing item writing skills



Assessment in Singapore Volume 3: Concepts and Tools for Classroom Assessment

- The roles of assessment in the education system
- The context of assessment – Purpose of education and nature of curriculum
- Alignment of curriculum, instruction and assessment
- Standards-referenced assessment
- Principles of assessment: validity, reliability and fairness
- How construct maps help in the construction and evaluation of tests
- Reducing construct-irrelevant variance in assessing language achievement
- What to value in students’ writing at the primary levels
- Assessing humanities achievements
- Basic statistics for assessment
- Converting marks to grades
- Considerations for marking of written scripts and assessing performance
- Use of constructed-response items for assessment in primary science
- What really is assessment for learning?



SEAB Day 2018

SEAB's 14th anniversary was celebrated on 29 March 2018. The theme for 2018 SEAB Day was **Celebrating L.O.V.E., Creating Magical Moments**. SEAB staff were all well-dressed for the occasion in red and gold as part of the dress code for the event. It was not only a day for all staff to celebrate SEAB's success together but also to affirm them for **Living Our Values Everyday** that has created magical moments for themselves and SEAB!



Laughter in L.O.V.E.

The celebration began with a hearty laughter therapy session by Joyologist, Dr Yvonne Looi. In this segment, everyone had an enjoyable time being enlightened and engaged in hands-on activities that demonstrated that laughter therapy can be used to enrich our lives and improve our health.



Love and joy were in the air as all attendees were engaged in an appreciation activity using the gratitude cards and stickers provided by Dr Looi. It was indeed heartwarming to see SEABlings showing their appreciation for their fellow colleagues.

At the end of the segment, a video montage on staff's thoughts on 'What SEAB meant to them' and 'What they appreciated most about SEAB?' was shown. It was definitely a touching moment for all to hear what some of us had to say about the SEAB family.



Speeches by SEAB Chairman and Chief Executive

In her Opening Address, Ms Tan Lay Choo, Chief Executive of SEAB, shared that SEAB had indeed created magical moments with our achievements in 2017. Some of these achievements included the attainment of significant milestones in SEAB's e-Examinations journey, outreach to teachers through workshops and development of new assessment instruments such as CATalytics Fractions, a Computerised Adaptive Test that customises a test to each student's knowledge of Fractions.

In 2017, SEAB also launched our very own Knowledge Management System, which was targeted at encouraging greater interaction and collaboration while, promoting a culture of knowledge creation and sharing within SEAB. In engaging our stakeholders, SEAB has also been taking steady steps. One example is SEAB's collaboration with the National Institute of Education to tap on both their Management and Leadership in Schools Programme and

Teacher Leaders Programme to engage Head of Departments, Subject Heads and Senior Teachers of primary, secondary schools and junior colleges.



Ms Tan also shared that 2020 will be a “highlight” year as SEAB will move back to our brand new home which will cater to the needs of both staff and our stakeholders.

Concluding with words of wisdom on change management, Ms Tan emphasised the need for staff to be part of the change. She said “A true change cannot happen just by changing things or by changing how we do things. We can only embrace change when we are part of the change”.

We also had the honour of having SEAB Chairman, Ms Ho Peng join us for the occasion. In her speech, Ms Ho congratulated SEAB for a year of achievements and commended SEAB for living up to its core values of Integrity, Professionalism, Commitment, Teamwork and Valuing People.

Citing the Re-development and Re-design of the SEAB building at Bukit Ho Swee as one of SEAB’s major ongoing achievements, Ms Ho shared that she was pleased with the involvement of all SEAB staff in the envisioning exercise as these inputs and insights were invaluable to the conceptualising of the purpose-filled new

site. Ms Ho also commended SEAB’s efforts on the smart harnessing of technology in enabling examination operations to be future-ready through the development of the iExams 2 system.



While congratulating SEAB for being visionary, innovative, inventive and forward-looking in our spirit, Ms Ho also advised all staff to push our boundaries even further while being resilient to overcome challenges.

Joy, Laughter and Heart-warming Performances

A day filled with joy and sumptuous food, the celebration’s highlight was the staff’s enthusiastic performances, which thrilled everyone in the audience. Written and performed by staff, the first-ever SEAB Song, ‘Walk with Me’ took everyone’s breath away. The deep meaning of the song resonated with all present and the performers were requested to perform a second time.



Besides songs, there were also enchanting Erhu musical performances, storytelling, videos and musical skits which captivated everyone's attention throughout the day.

In line with the theme of the celebration related to magic, the audience were also treated to a heap of various close-up and stage magic tricks which won their hearts and minds.



Blowing out the Candles

The strong spirit of all SEAB was felt during the cake-cutting ceremony. Led by Board Members, senior management and one of the longest serving staff in SEAB, all staff gathered in a melodic tune of the birthday song with love and pride!



Indeed, SEAB Day 2018 created magical moments for all staff, and this day will surely remain in their hearts for they experienced enjoyment, appreciation, entertainment and inspiration.

Everyone's brains were also put to the test with Brain Gym activities that quizzed their memory and motor coordination, which injected great fun and laughter!



Redevelopment of SEAB Headquarters



SEAB headquarters at Jalan Bukit Ho Swee.

Since its inception in 2004, the site at Jalan Bukit Ho Swee has been SEAB's headquarters and humble abode for more than a decade.

History of SEAB's Headquarters

The buildings at Jalan Bukit Ho Swee had a long history starting from the early 1960s. Constructed as a school, batches of students studied in these buildings until they were refurbished into office spaces for SEAB's operations sometime in 2003.

With more than 50 years of history, there was a need to redevelop the site and buildings for safety reasons, as well as to meet the current and future demands of the national examinations and assessment services.

Besides the headquarters at Jalan Bukit Ho Swee, SEAB had also been conducting national examination operations at Lower Delta Road and West Coast Road. The redevelopment will see a consolidation of three sites at Jalan Bukit Ho Swee. The site at West Coast Road has already been returned to the Singapore Land Authority in 2017.

Demolition of Existing Buildings at Jalan Bukit Ho Swee

To pave the way for the construction of the new SEAB headquarters, the demolition of the existing buildings at Jalan Bukit Ho Swee had commenced in March 2018.

A demolition ceremony was held on 19 March 2018 to commemorate this milestone moment in SEAB's history. The ceremony was officiated by Ms Tan Lay Choo, Chief Executive of SEAB and attended by SEAB staff. Sharing her thoughts at the ceremony, Ms Tan said,

“

We look forward to the day when SEAB will have a purpose-built building to house all our examination operations on one consolidated site. Our new home which is designed to house the next generation examination processes will be a key enabler of the next phase of SEAB future growth and development.”



Ms Tan addressing staff at the demolition ceremony on 19 March.

Outfitted in helmets and armed with hammers, Ms Tan and SEAB Directors lined up behind an erected brick wall, took aim and knocked down the wall as a sign of kicking off the demolition works. This was indeed a ground-breaking juncture in the history of SEAB as it also signified a better, brighter future with the building of our new home.



Ms Tan and SEAB Directors all poised and ready to knock down the erected brick wall.



Ms Tan and SEAB Directors kicking off the demolition works.

Redevelopment Plans for SEAB site

The redevelopment of the SEAB headquarters, from demolition to the construction of the new building, will take approximately 2 years. In the interim, SEAB will be operating from two sites located at 3 Geylang Bahru Lane and 8 Lower Delta Road (Tiong Bahru Examinations Centre). The Geylang Bahru site operates as SEAB's headquarters during this period.

With the amalgamation of three sites into one

at Jalan Bukit Ho Swee site, the new SEAB headquarters will make use of vertical height to achieve the required office space for conducting our core functions efficiently and effectively. As a purpose-built development, the new building will adopt green and environmentally friendly measures to save energy, minimize waste and cut down costs to ensure long term sustainability.

It is targeted for SEAB to be fully operational at the Jalan Bukit Ho Swee site in 2020.



A group photo to commemorate the moment before the building goes.

Training Calendar 2018

FOR MOE PRIMARY SCHOOL TEACHERS

WORKSHOP TITLE	DURATION (DAYS)	DATE OF TRAINING
Introduction to Assessment for Beginning Teachers – Chinese Language	1	Class 1 : 27 Jul 2018
P4 Assessment Literacy – English Language	1	Class 1 : 26 Jul 2018

FOR MOE SECONDARY SCHOOL TEACHERS

WORKSHOP TITLE	DURATION (DAYS)	DATE OF TRAINING
Assessment – Malay Language	1.5	Class 1: 16 Aug 2018 (Full Day) 28 Aug 2018 (Half Day)
Assessment – Tamil Language	1.5	Class 1: 15 Aug 2018 (Full Day) 29 Aug 2018 (Half Day)

For more information about the above trainings, please refer to TR AISI.

Career Opportunities in SEAB

SEAB offers a rewarding and challenging career. We are looking for suitable candidates to fill the following positions.

- Assessment Officer, Chinese Language
- Assessment Officer, Malay Language
- Assessment Officer, Chemistry
- Assessment Officer, Mathematics
- Research and Development Officer, Assessment Research and Technology
- Research and Development Officer, Measurement and Analytics
- Senior Manager (Exam Systems)

Please refer to [SEAB's Career page](#) for more information.





Singapore Examinations and Assessment Board

Our Vision:

A trusted authority in examinations and assessment,
recognised locally and internationally.

Our Mission:

We assess educational performance so as to certify individuals, uphold
national standards and advance quality in assessment worldwide.

Our Values:

Integrity | Value people | Commitment | Professionalism | Teamwork