



**OUM Seminar Series**

**17 October 2017**

---

**Smart School Evaluation**

**Soon Seng Thah**

# Presentation Outline

- 1 Introduction**
- 2 Evaluation Methodology**
- 3 Roles and Responsibilities**
- 4 Instrumentation**
- 5 Findings and Star Ratings**
- 6 Strategy for Sustainability**
- 7 Way Forward**

# Introduction: Smart Schools

***Student-centred teaching & learning***  
***Catering to different learning styles***

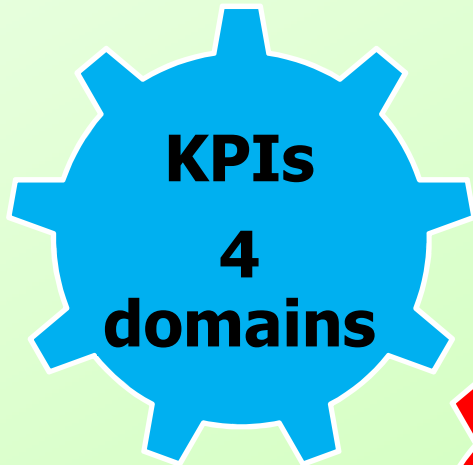
***Students exhibit Higher-Order Thinking Skills***  
***Self-paced***  
***Self-accessed***  
***Self-directed***

***Teachers, and Administrators skillful in using ICT in daily tasks***

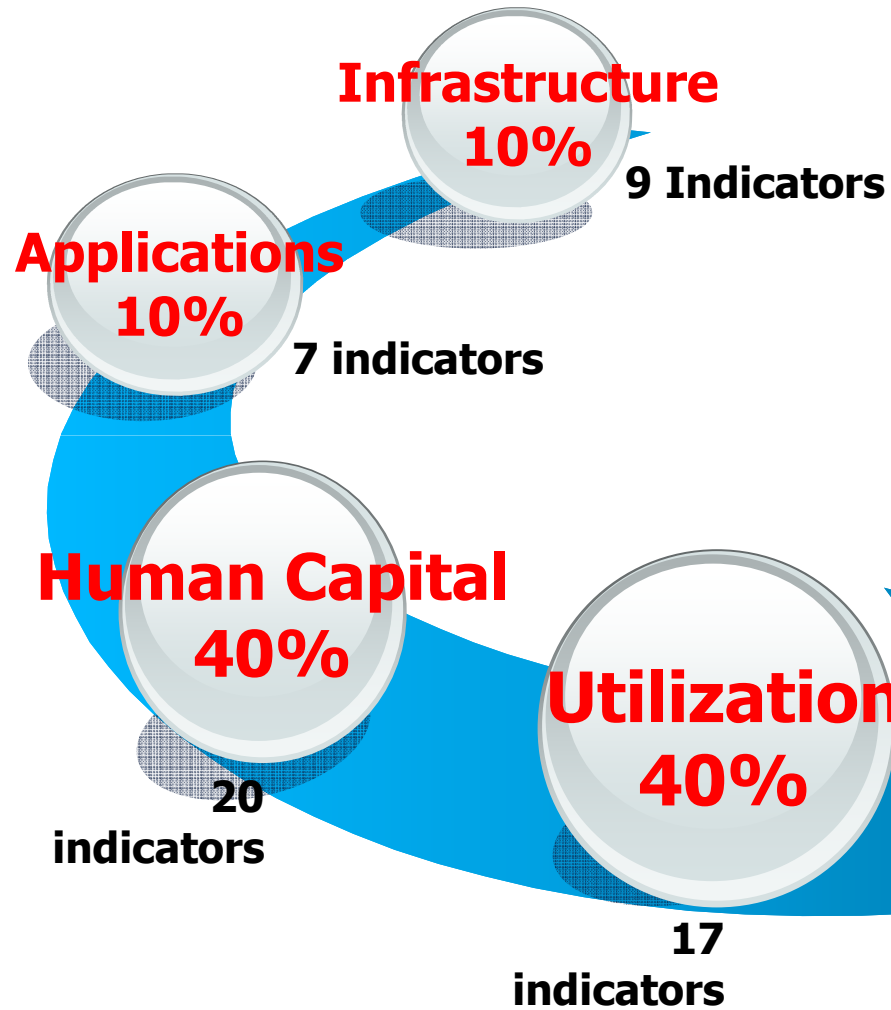
***Creative and innovative teachers using ICT as enabler and accelerator for better teaching and learning***

***Smart partnerships with various agencies***

# Evaluation Methodology



# SSQS DOMAINS



**Making All  
Schools  
Smart**



# SSQS ONLINE SYSTEM

<http://ssqs.moe.edu.m>

The screenshot shows the SSQS Online System website in a Windows Internet Explorer browser window. The browser's address bar displays the URL <http://ssqs.moe.edu.my/ssqs/index.php>. The website header features the logo of the Ministry of Education Malaysia and the text "KEMENTERIAN PELAJARAN MALAYSIA" in large, bold letters. The date and time "24 Mac 2009, 12:52:25 PM" are displayed in the top right corner.

The main content area is divided into several sections:

- LOGIN:** A section for user authentication with fields for "Kod Organisasi" and "Kata laluan", and buttons for "Masuk" and "Batal". Below the fields, it says "Lupa Kod / Kata laluan? Sila hubungi PKG."
- PAUTAN:** A section with links for "Soalan Lazim", "Hubungi Kami", and "Muat turun dokumen".
- Pengumuman:** A section with a notice: "TERKINI Sila ambil perhatian, tarikh tutup pelaksanaan Sistem Pemantauan ICT Sekolah telah dilanjutkan kepada **30 Mac 2009**. Harap maklum."
- PENGENALAN:** A section with a heading "PENGENALAN" and a paragraph: "Portal ini dibangunkan bertujuan untuk menempatkan aplikasi-aplikasi pemantauan yang akan digunakan di sekolah bagi membolehkan pihak Kementerian Pelajaran, khususnya di Bahagian Teknologi Pendidikan mendapatkan maklumat terkini berkaitan ICT di sekolah. Setakat ini, terdapat dua aplikasi utama telah ditempatkan di dalam portal ini iaitu Sistem Smart School Qualification Standards dan Sistem Pemantauan Penggunaan ICT." Below this, there are two sub-sections:
  - Sistem Smart School Qualification Standards (SSQS):** "Aplikasi ini bertujuan untuk mendapatkan maklum balas berkaitan pembudayaan dan penggunaan ICT di sekolah. Bermula penggunaan secara manual di 88 buah sekolah bestari kini aplikasi ini yang telah dibina berasaskan web akan diperluaskan bagi membuat penarafan di semua sekolah seluruh Malaysia."
  - Sistem Pemantauan Penggunaan ICT Sekolah (SPPICTS):** "Bahagian Teknologi Pendidikan (BTP), Kementerian Pelajaran Malaysia (KPM), telah dipertanggungjawabkan untuk memantau dan melaporkan tahap penggunaan semua inisiatif ICT serta peralatan berkaitan yang telah dibekalkan di sekolah-sekolah seluruh negara. Sehubungan itu, Sistem Pemantauan Penggunaan ICT Sekolah (SPPICTS) diwujudkan bagi membolehkan pihak sekolah mengemaskinikan maklumat terkini. Segala maklumat yang diperolehi akan dianalisa dan dibentangkan kepada pihak pengurusan tertinggi KPM bagi membuat keputusan tentang halatuju serta penambahbaikan berkaitan penggunaan ICT di sekolah."

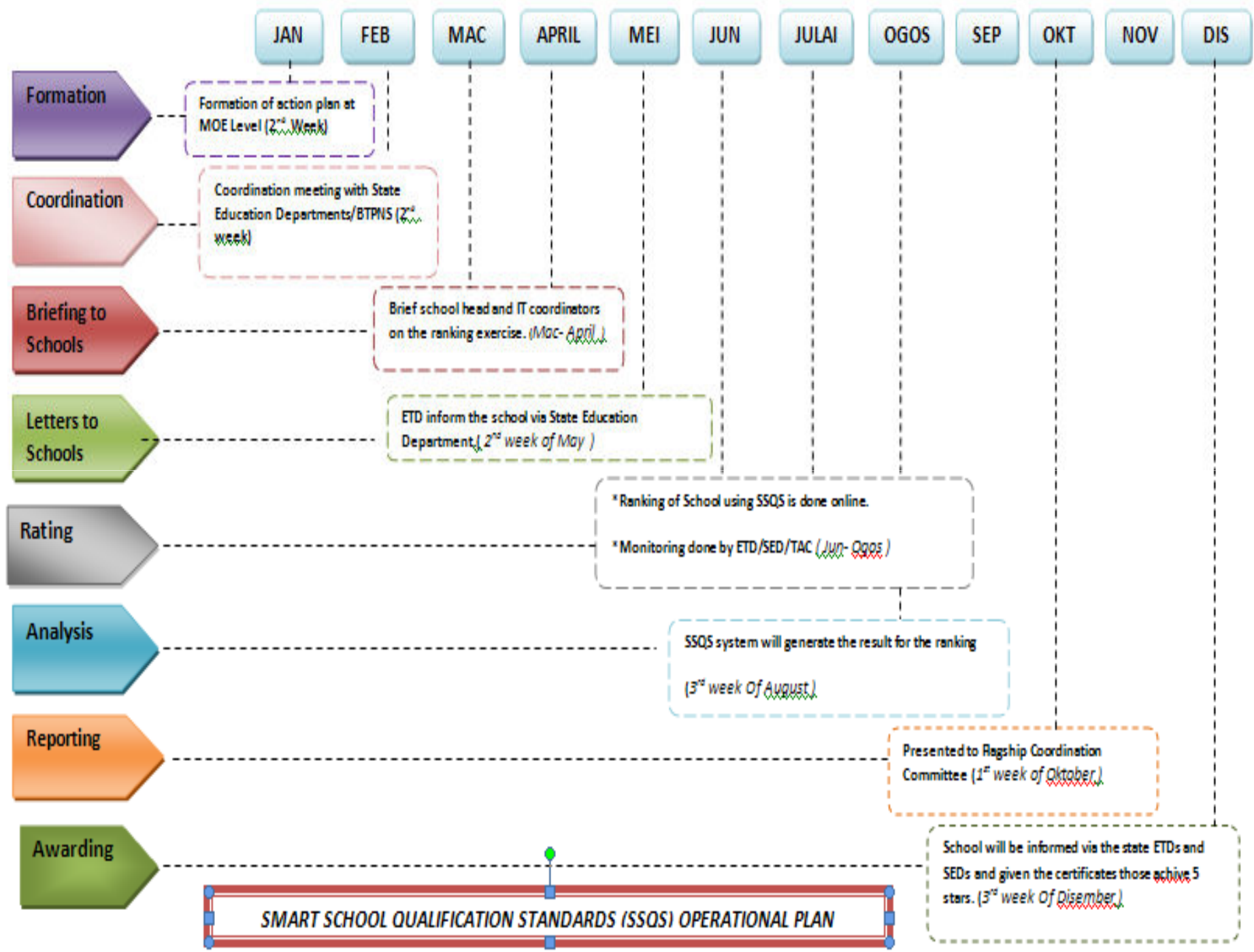
The browser's taskbar at the bottom shows several open applications: "start", "BTP - Lawatan ke Kol...", "Portal ICT KPM - Win...", "http://www.prestaria...", "SSQS\_Mesyuarat PP...", and "Microsoft Excel - Cat...". The system clock shows "12:52 PM".

# RESPONDENTS AT THE SCHOOL LEVEL

- ✚ **1 Administrator**
- ✚ **1 IT Coordinator**
- ✚ **30 Teachers**
- ✚ **30 Students**

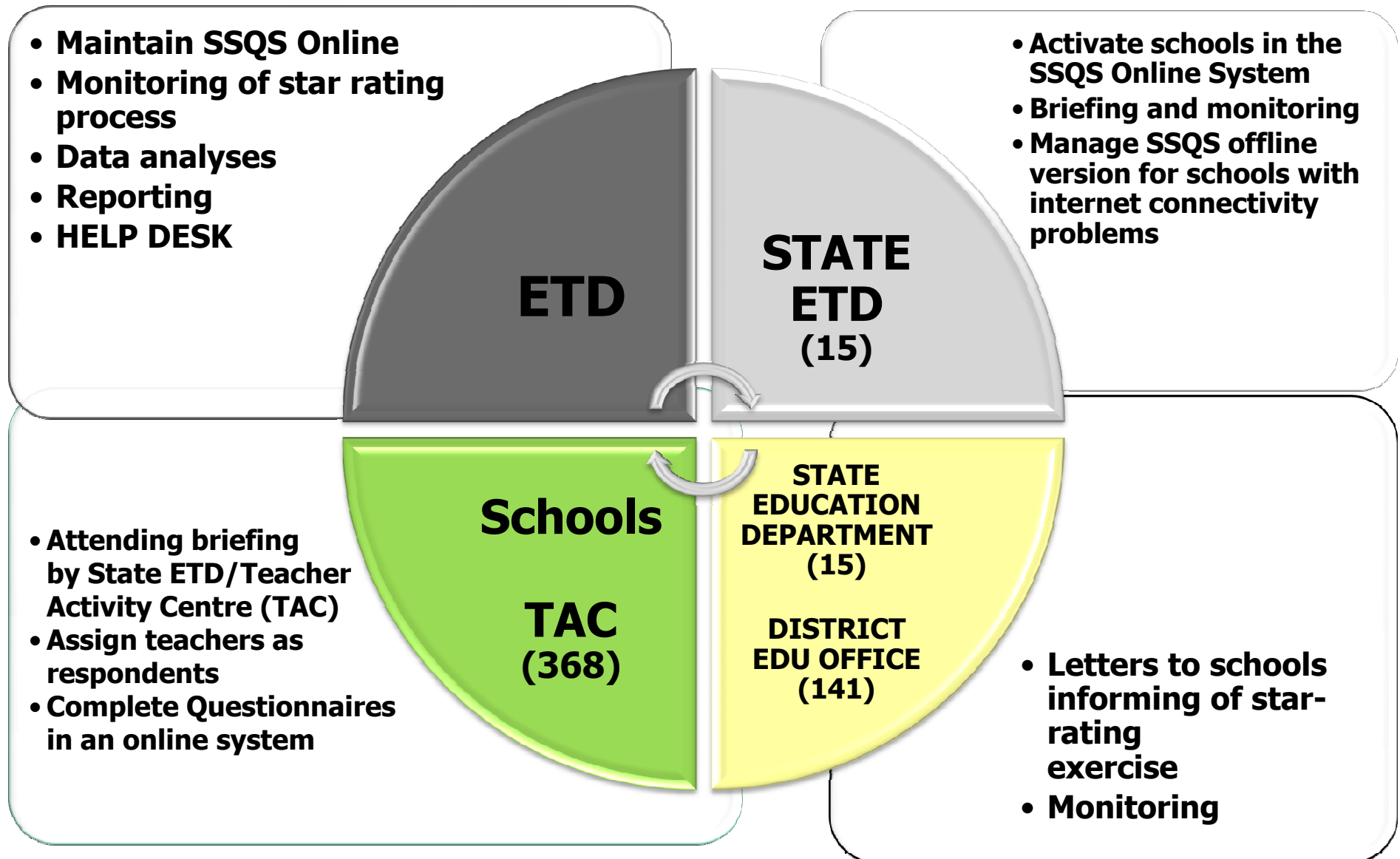








# ROLES AND RESPONSIBILITIES



# Instrumentation

Smart School Qualification Standards (SSQS)

Smart School Indicators	School Ranking	Indicators	BASIC ★ (0 < x < 20%)	BASIC PLUS ★★ (20% ≤ x < 40%)	MEDIAN ★★★ (40% ≤ x < 60%)	ADVANCED ★★★★ (60% ≤ x < 80%)	ADVANCED PLUS ★★★★★ (x ≥ 80%)
<b>UTILIZATION (40%)</b> – ICT integration in teaching, learning and school administration		1. Usage of ICT-based applications by administrators in school management	1 application	2 applications	3 applications	4 applications	≥ 5 applications
		2. Usage of Web-based School Management System/other ICT-based system by administrators in school management	once a month	once in 3 weeks	once in 2 weeks	once a week	daily
		3. Usage of ICT equipment (other than computer) by administrators in school management	once a month	once in 3 weeks	once in 2 weeks	once a weeks	daily
		4. Usage of electronic tools (email, SMS, etc) for dissemination of information by administrators	once a month	once in 3 weeks	once in 2 weeks	once a week	daily
		5. Integration of courseware or ICT-based teaching materials by teachers in teaching & learning for each subject	≤ 1 period per month	2-3 periods per month	4-5 periods per month	6-7 periods per month	≥ 8 periods per month
		6. Usage of Learning Content Management System by teachers in teaching & learning	≤ 60 minutes per month	61-120 minutes per month	121-180 minutes per month	181-240 minutes per month	≥ 241 minutes per month
		7. Usage of Educational TV content by teachers in teaching & learning	1 period per month	2 period per month	3 periods per month	4 Periods per month	≥ 5 periods per month
		8. Usage of educational technology equipment (other than computer & TV) by teachers in teaching & learning	1 period per month	2 period per month	3 period per month	4 periods per month	≥ 5 periods per month
		9. Usage of internet by teachers for seeking information in teaching & learning	≤ 60 minutes per month	61-120 minutes per month	121-180 minutes per month	181-240 minutes per month	≥ 241 minutes per month
		10. Usage of ICT-based content by teachers to develop new teaching materials	Once in 2 months	Once a month	Once in 3 weeks	Once in 2 weeks	Once a week
		11. Student-PC contact hours during school hours for any subjects	≤ 60 minutes per month	61-120 minutes per month	121-180 minutes per month	181-240 minutes per month	≥ 241 minutes per month
		12. Usage of Learning Content Management System by student	1 assignment per month	2-3 assignments per month	4-5 assignments per month	6-7 assignments per month	≥ 8 assignments per month
		13. Usage of self-learning modules by student	1 title per month	2-3 titles per month	4-5 titles per month	6-7 titles per month	≥ 8 titles per month

# Instrumentation

Smart School Indicators	School Ranking	Indicators	BASIC ★ (0 < x < 20%)	BASIC PLUS ★★ (20% ≤ x < 40%)	MEDIAN ★★★ (40% ≤ x < 60%)	ADVANCED ★★★★ (60% ≤ x < 80%)	ADVANCED PLUS ★★★★★ (x ≥ 80%)
<b>UTILIZATION (40%)</b> – ICT integration in teaching, learning and school administration	14.	Student-PC contact hours after school hours for learning purposes	≤ 60 minutes per week	61-120 minutes per week	121-180 minutes per week	181-240 minutes per week	≥ 241 minutes per week
	15.	Usage of Resource Centre/Access Centre for ICT-related work by student	Once a month	Once in 3 weeks	Once in 2 weeks	Once a week	Daily
	16.	Update of activities and data on the relevant modules by IT Coordinator in Web Based School Management System/ other ICT-based system	Once a year	Once in 6 months	Once every 3 months	Monthly	Weekly
	17.	Update of school portal by IT Coordinator	Once a year	Once in 6 months	Once every 3 months	Monthly	Weekly
<b>HUMAN CAPITAL (40%)</b> – ICT competency of Administrators, Teachers, IT Coordinators and Students	1.	ICT competency level of Administrator	Very Low	Low	Average	High	Very High
	2.	Number of ICT-related courses attended by Administrator in the last 3 years	1	2	3	4	≥ 5
	3.	Frequency of ICT Smart-partnership programme with community	once a year	twice per year	6 times a year	monthly	weekly
	4.	Number of in-house ICT training courses conducted	1-2 per year	3-4 per year	5-6 per year	7-8 per year	≥ 9 per year
	5.	Frequency of dissemination of information regarding ICT by Administrator	once a year	twice a year	6 times a year	monthly	weekly
	6.	Frequency of change management conducted by Administrator	once a year	twice a year	4 times a year	6 times a year	monthly
	7.	Number of types of ICT-related support from the community	1 per year	2 per year	3 per year	4 per year	≥ 5 per year
	8.	Number of innovative programmes conducted in schools	1 per year	2 per year	3 per year	4 per year	≥ 5 per year
	9.	ICT competency level of teachers	Very Low	Low	Average	High	Very High
	10.	Additional ICT competency level of teachers	Very Low	Low	Average	High	Very High
	11.	Number of ICT-related courses attended by teachers in the last 3 years	1	2	3	4	≥ 5



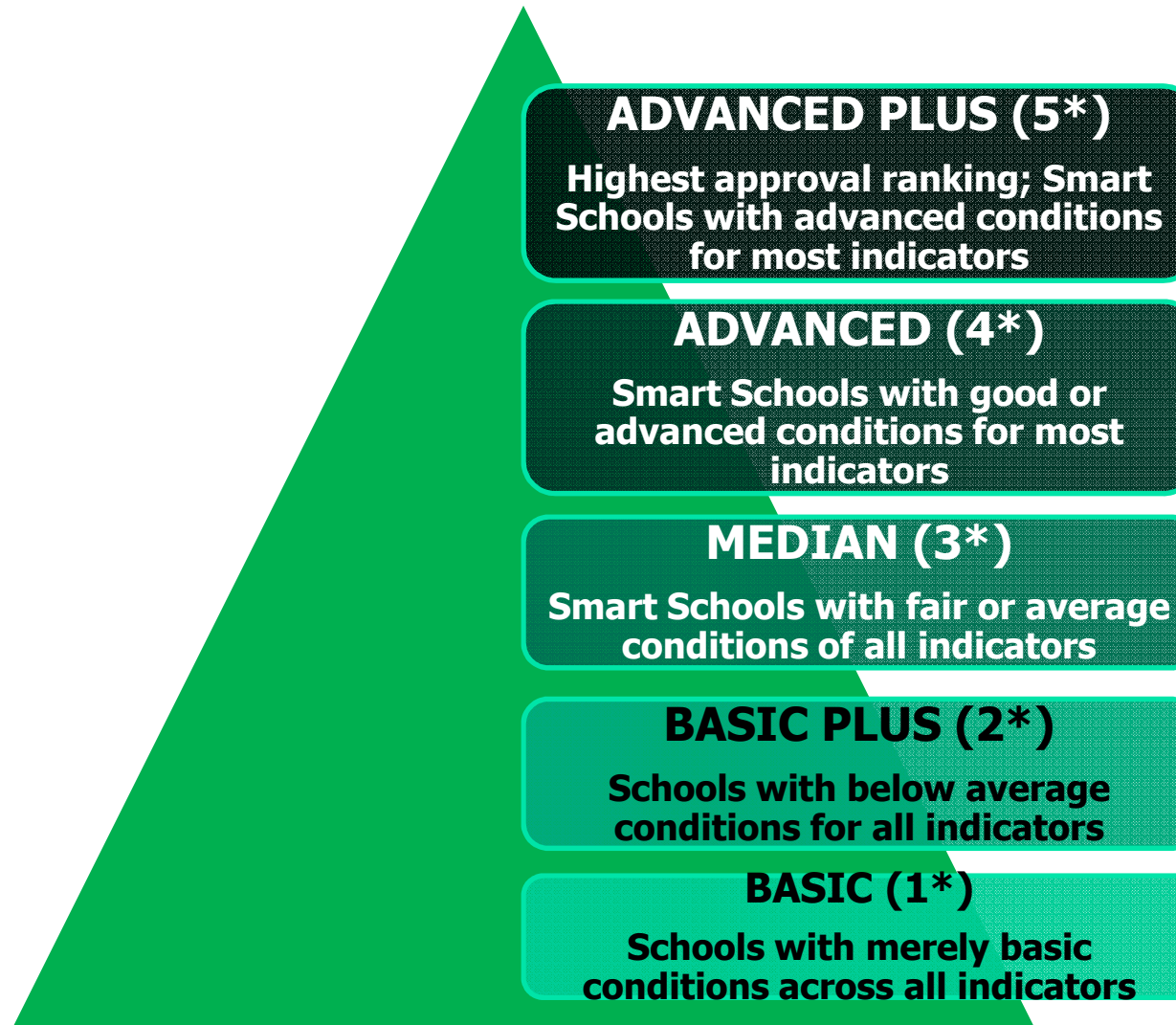
# Instrumentation

Smart School Indicators	School Ranking	Indicators	BASIC ★ (0 < x < 20%)	BASIC PLUS ★★ (20% ≤ x < 40%)	MEDIAN ★★★ (40% ≤ x < 60%)	ADVANCED ★★★★ (60% ≤ x < 80%)	ADVANCED PLUS ★★★★★ (x ≥ 80%)
<b>HUMAN CAPITAL (40%)</b> – ICT competency of Administrators, Teachers, IT Coordinators and Students	12.	Number of in-house ICT training courses conducted by teachers	1 per year	2 per year	3 per year	4 per year	5 per year
	13.	Frequency of dissemination of information regarding ICT by teachers	once a year	twice a year	6 times a year	monthly	weekly
	14.	ICT competency level of IT Coordinator	Very Low	Low	Average	High	Very High
	15.	Number of ICT-related courses attended by IT Coordinator in the last 3 years	1	2	3	4	≥ 5
	16.	Number of in-house ICT training courses conducted	1-2 per year	1-4 per year	5-6 per year	7-8 per year	≥ 9 per year
	17.	Frequency of dissemination of information regarding ICT by IT Coordinator	once a year	twice a year	6 times a year	monthly	weekly
	18.	ICT competency level of students	Very Low	Low	Average	High	Very High
	19.	Additional ICT competency level of students	Very Low	Low	Average	High	Very High
	20.	Number of sources Student refers to for ICT-related knowledge	1	2	3	4	5
<b>APPLICATION (10%)</b> – IT Coordinator for the schools	1.	Must have modules for school management	3	4	5	6	> 6
	2.	Must have application for the school	1	2	3	4	> 4
	3.	Must have a system to manage learning content for teaching and learning	1	1	1	1	1
	4.	Must have software for the development of teaching and learning materials	1	2	3	4	> 4
	5.	Must have courseware/ICT-based learning material	1 type	2 types	3 types	4 types	> 4 types

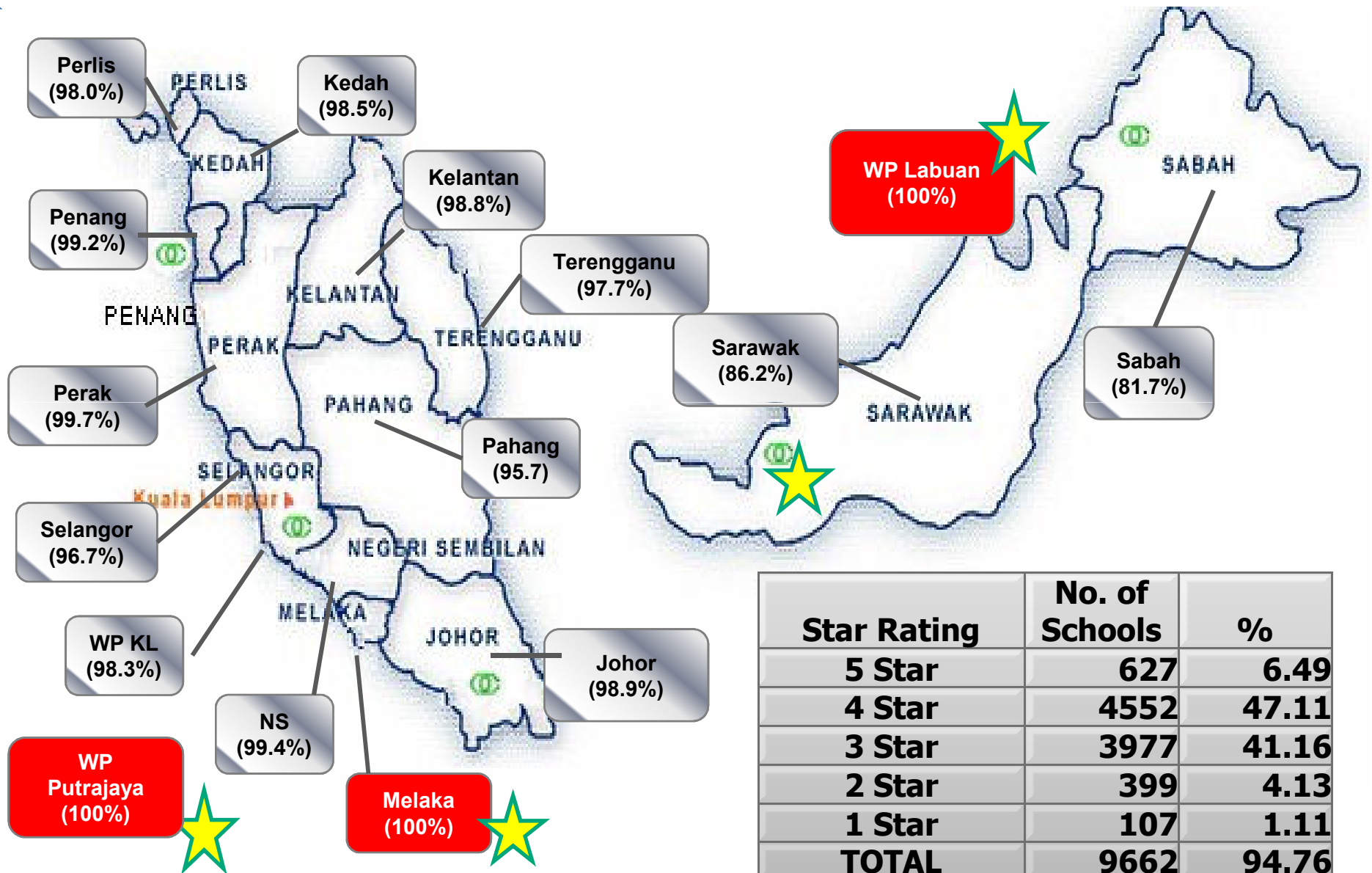
# Instrumentation

Smart School Indicators	School Ranking	Indicators	BASIC ★ (0 < x < 20%)	BASIC PLUS ★★ (20% ≤ x < 40%)	MEDIAN ★★★ (40% ≤ x < 60%)	ADVANCED ★★★★ (60% ≤ x < 80%)	ADVANCED PLUS ★★★★★ (x ≥ 80%)
APPLICATION (10%) – IT Coordinator for the schools	6.	Must have a website for the school	One website	One website and updated	One website, updated with one of the following criteria: • maintained • interactive • downloadable materials	One website, updated with two of the following criteria: • maintained • interactive • downloadable materials	One website, updated with all of the following criteria: • maintained • interactive • downloadable materials
	7.	Must have an email application for the school	Email application	Email application	Email application	Email application and directory for the school	Email application, directory and email groups for the school
INFRASTRUCTURE (10%) – Administrators and IT Coordinators	1.	Number of functioning computers in the school	5-10	11-15	16-20	21-30	≥31
	2.	Computer: Pupil ratio	1:>12	1: 10-12	1: 6-9	1: 3-5	1: 2
	3.	Computer/Notebook: Teacher Ratio	1: >8	1: 6-8	1: 4-6	1: >2-4	1 ≤ 2
	4.	LCD Projector: Class Ratio	1:>20	1: 16-20	1: 11-15	1: 5-10	≤ 5
	5.	Accessible computer locations	1	2	3	4	5
	6.	Percentage of Computers not working more than 24 hours	≥ 50%	30% - < 50%	20% - < 30%	10% - < 20%	< 10%
	7.	Local Area Network connectivity	≤ 2	3-4	5-6	>6	≥7 & wireless
	8.	Standard maximum downtime	>7 times/week	5-6 times/week	3-4 times/week	1-2 times/week	0 time/rarely
	9.	Internet accessibility	1 location	2 locations	3 locations	4 locations	≥5 locations
	10.	Maintenance activity	Once a month	Once every 3 weeks	Once every 2 weeks	Once a week	Daily

# SSQS Star Ratings



# Findings for Star Awarding System



Star Rating	No. of Schools	%
5 Star	627	6.49
4 Star	4552	47.11
3 Star	3977	41.16
2 Star	399	4.13
1 Star	107	1.11
<b>TOTAL</b>	<b>9662</b>	<b>94.76</b>



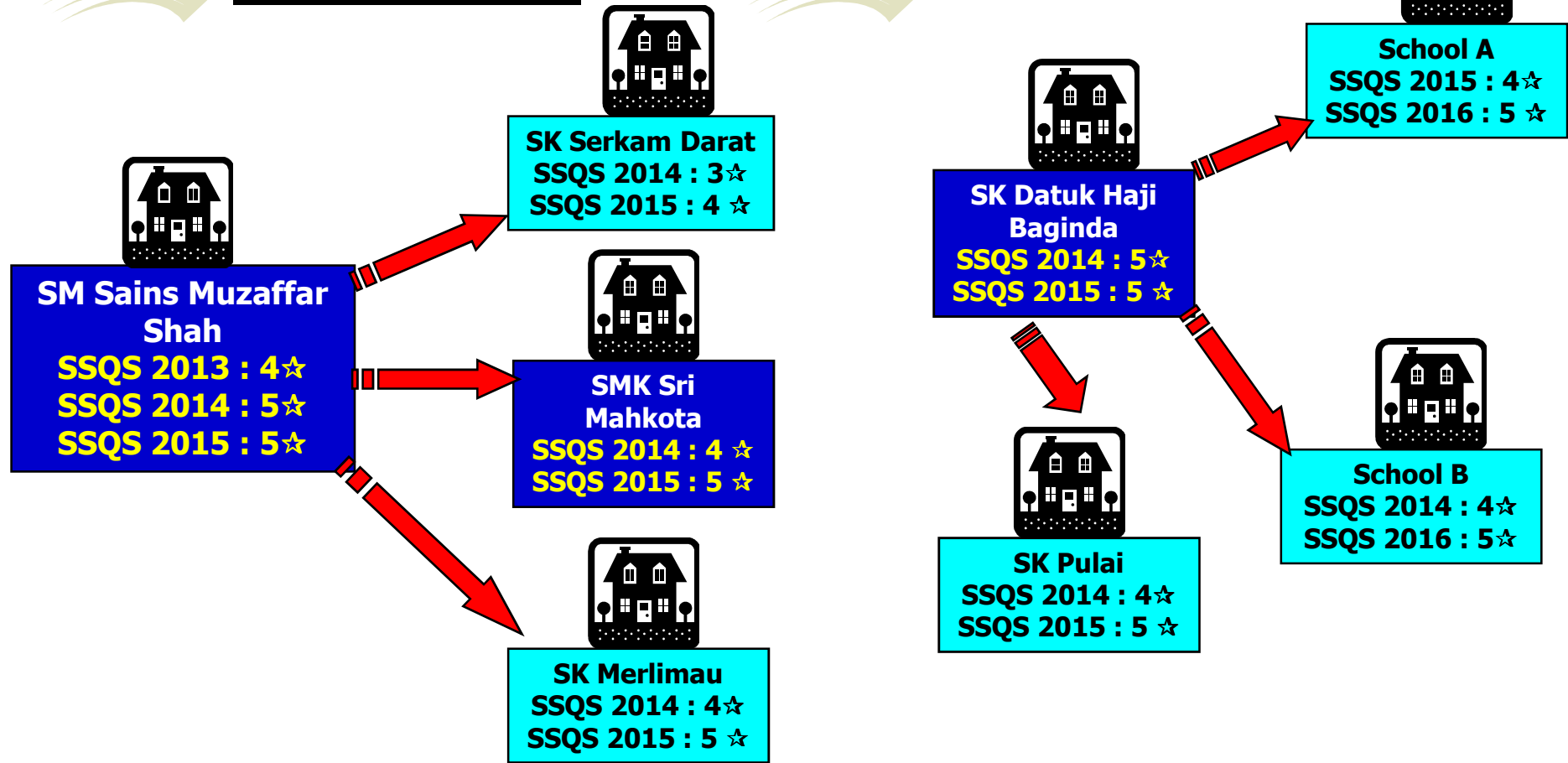
# Strategy For Sustainability



**BATU BERENDAM**  
Teacher Activity  
Centre



**SERKAM**  
Teacher Activity  
Centre



**2013**

**2014**

**2015**

**2016**

# Way Forward

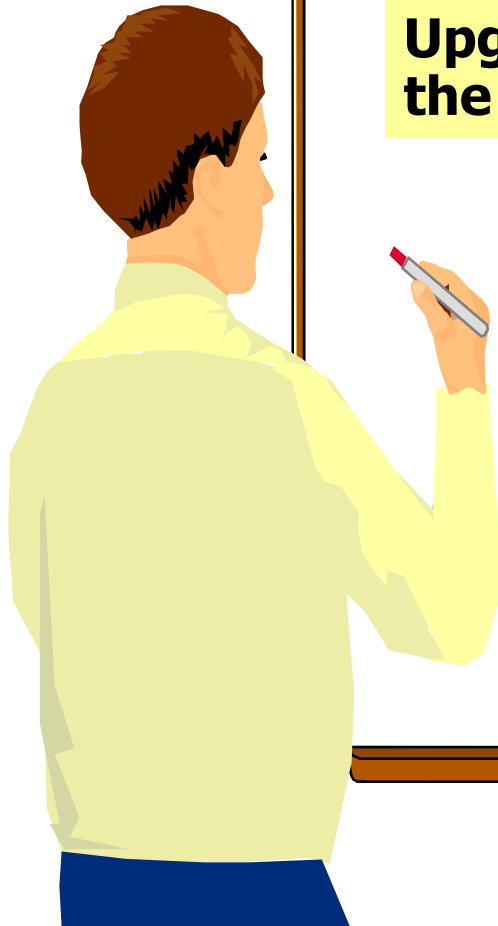
**Continuous monitoring and coaching of innovative use of technology in schools**

**Upgrading of infrastructure such as the broadband and hardware**

**Instilling the ownership of the Smart School initiatives among stakeholders**

**Changing the mindset of teachers and stakeholders**

**Alignment of objectives at all levels required, within the Ministry and between Ministries/agencies**



Thank You  
Email: [soon@oum.edu.my](mailto:soon@oum.edu.my)