# PRINCIPIA



Mrs. Liza George Former Principal (1967-90) St. Margaret's School

Past Voices: Mrs. Liza George

Ratnasingam Selvarani Former Principal (2000-09) Canberra Primary School

Ratnasingam Selvarani: Leading FutureSchools @Singapore



Mr. Tan Chee Siong Ang Mo Kio Secondary School

Mr. Teoh Tiong San Principal: Jurong Secondary School Mrs. Wai Yin Pryke St Andrew's Junior School

Round Table: Models of Leadership





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# LEADERS PAST, FUTURE & PRESENT

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ACADEMY OF PRINCIPALS (SINGAPORE)

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President's Message



Colleagues like Rani leave me breathless in their wake. Her work envisioning a Future School with her staff, industry partners and what could have been intimidating ministry support, illustrates just how great an impact a leader's can-do spirit has on the community that she leads. This is adventure without needing to be Indiana Jones! It is not so much that ICT is with us, unrelenting, permeating the way we teach, learn, discover and communicate, as that Canberra's story shows us just what can be done when a humble player dares to ride the wave with a dream where education not technology dominates.

PRINCIPIA Round Table presents the contributions of three young leaders, confidently finding their leadership styles and voices. They express and explain the choices that many of us have had to make in our own contexts, at different times, between leading for meaningful and sustainable change, and rolling up our sleeves to undertake a pedagogic task we believe in - between leading at the front and on the side. Indeed, we are reminded that it never just boils down to one model - the process is indubitably complicated and complex, and never completely figured out! It is a thrill to see the younger generation of our peers embrace their leadership endeavour with such clear and present sensibilities.

As for the pioneers, the enduring examples from the past, their voices ring with disconcerting clarity. We would do well to heed Liza George's call to value and chronicle the continuing legacy of our predecessors in an age where the present rules with loud imperatives and the future sweeps us off our feet.

Here's wishing you all a bold, creative and memorable 2010.

## **Belinda Charles**

President of Academy of Principals (Singapore)

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Past Voices: Mrs. Lisa George

Liza George was the 14<sup>th</sup> Principal of St. Margaret's, the oldest girls' school in Singapore if not all of the Malay Peninsula. She retired in 1990 having faithfully served for 23 years as the school's exemplary leader, a term exceeded only by the legendary and redoubtable Miss Sophia Cooke. During her tenure, Singapore was being transformed, irrevocably, just as was St. Margaret's, the secondary school having been relocated in 1960 to Farrer Rd. with further expansion in the plans. During her principalship, Liza's role as custodian of the school's history took on greater urgency. With her characteristic diligence and eloquent pen, Principal George saw to it that a proper publication was produced to commemorate the 140<sup>th</sup> anniversary of St. Margaret's founding.

How fortunate that was for us. Last year, Liza generously received PRINCIPIA into her home and shared her only copy of St. Margaret's 1982 yearbook, permitting us to draw from it (and other documents in her personal files) words and pictures for use in this Past Voices column.

As times change, as school buildings come and go, those unopened boxes which often



hold irreplaceable history, languish in the oddest of places, are shuffled, misplaced, or all too often simply discarded on impulse. Along with such 'lost' archives go the voices of school leaders whose experiences hold timeless value. What follows are excerpts from messages crafted by Mrs. George some 25 years ago.

By way of introduction, we have included a portion of Mrs. George's evocative account of the founding of St. Margaret's and its early years, followed by two of her "Principal's Messages" taken from the school's annuals.

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## A GREAT HERITAGE

#### Humble beginnings — The work of Pioneers

Ct Margaret's, the oldest girls' school in Singapore, was truly founded in the spirit of 'Love thy neighbour'.  $\mathcal{N}$ 140 years ago, in the year 1842, Singapore Island was semi-jungle and the centre of all activity was a village and trading post situated by the mouth of the Singapore River. Singapore had been ceded to Great Britain and the London Missionary Society was one of the first missions that were active on the island. Mrs. Dyer of the Society was moved to start a boarding school for homeless girls when she saw some pathetic little Chinese girls, known as 'Mui Tsai', on display in the streets. The girls were being auctioned as slaves for the homes of the rich. In true Christian spirit, Mrs. Dyer asked the Governor for permission to start a home for such girls. The Governor, glad that a woman had the courage to undertake such work, consented and a tiny house in North Bridge Road became a boarding house for orphan girls in Singapore.

In 1843, the school had its first principal in Miss Grant, a member of the Society for the Promotion of Female Education in the East. She was perhaps the one who saved the school from being closed in 1847 when the London Missionary Society left for China which had opened its doors to foreigners after the Opium War. The school continued because no other Protestant Missionary Society was operating at that time in Singapore to continue the work of the L.M.S. There were only 20 girls then, mostly children whose Chinese fathers had married Malay women. Miss Grant loved them dearly and wrote home, "They are a joy to me, and I trust these flowers offered in the bud God will Himself accept as no mean sacrifice."



#### Sophia Cooke -42 years of Devotion

n 1850 the school was moved to River Valley Road and Miss Sophia Cooke arrived in 1853 to take charge. She was to stay for 42 years, during which time she built up the school. Miss Cooke, who also established the Young Women's Christian Association in Singapore, was thus synonymous with the Chinese Girls' School, as it came to be known.

Many of Miss Cooke's charges were poor little Chinese girls, sold by heartless parents to Malay sailors for a paltry sum. On their arrival in Singapore, the lucky ones were rescued by the police and brought to the school.

As the number of pupils increased, the need for larger premises resulted in the school being shifted several times. Finally in 1861, it found a home at 134 Sophia Road, where the Primary School is situated today. A boarding house was built in its grounds.

The pupils of the school were trained to be good homemakers, excelling in needlework and cookery. Besides these, they were given an elementary education with subjects like English, Geography, History and Scripture. Christian instruction and character-building were emphasised and the fame of the school spread so that many young men, some from as far away as China, wrote to the school in search of Christian wives.

Extract from St. Margaret's 140<sup>th</sup> Commemorative book

## PRINCIPAL'S MESSAGES

. in South-East Asia and founded in the spirit of love and service was designed to impart general education based on Christian principles and to prepare girls for a life of usefulness at home and in society.

The change in values and outlook on life which the whole world has undergone over the past decades did of . course affect our school also. When life has become preoccupied with the pursuit of material gains and the whole atmosphere of educational institutions is examination orientated, time and opportunities are limited for activities outside the curriculum. The extramural programme which forms an integral part of our educational system is so organised to contribute towards the development of all round personalities and to unearth hidden talents and endowments in individual pupils.

Participation in a stage production offers opportunities to cultivate aesthetic talents and to develop the art of public speaking. Members of the cast as well as helpers behind the stage while involved in this great endeavour are unconsciously acquiring valuable attributes of character such as initiative and leadership. I am very appreciative of their efforts and I congratulate them heartily.

I must acknowledge with gratitude the unstinting service rendered by our teachers who sacrificed their time and energy without which it would never have been possible to venture this project. To parents and well-wishers of the school who have been of assistance and support we are ever indebted...



**1** 985 is the international year of the youth. It is during the adolescent phase of life that different faculties of L the individual personality may develop to the highest degree of perfection enabling one to do the greatest amount of good work one is capable of doing. Education is the preparation of mental, moral and physical powers for the performance of everyday duties.

A noble and all round character is neither inherited nor evolved by accidents. It is generated as a result of our continued efforts by utilising God given talents and powers. We have to be good and faithful stewards of the endowments God has committed to us and we are under obligation to do our part and present an account when we have completed the life in this world. The talents and abilities when properly used shall be strengthened and increased by the Almighty God. Slothful people who do not use their capabilities will find every unused faculty becoming weaker and weaker, ultimately deteriorating.

Of all the gifts God has given us, the one He requires the strictest account of is TIME. In order to make the best use of our time we have to have a keen awareness of the value of it. Time is priceless because we cannot buy it, no matter how rich we may be. Every moment is too precious to be trifled away because time squandered is irrevocable. Time lost is lost forever.

"Yesterday is a cancelled cheque. Tomorrow is a promissory note. Today is the only cash you have. Spend it wisely."

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Extracted from Mrs. Liza George's Principal's Message, St. Margaret's 140th annual, 1982

Principal's Message, Mrs. Liza George, St. Margaret's annual, 1985



# Ratnasingam Selvarani: Leading FutureSchools@Singapore

The guests from Singapore's West school cluster have arrived, at long last. Despite myriad channels of communication, wires still do get crossed and what was meant to be a morning tour of this Future School has instead been blended with the afternoon's scheduled visit by a delegation of teachers from South Asia. Never mind. The agenda's reprinted; the choral group's reassembled, and any tension that may have been visible in Principal Ratnasingam Selvarani's face is melting into a proud, make that a beaming smile as the animated 40-student ensemble starts belting out their latest original song: The Internet Boogie!

The guests Principal Rani and her team are about to show around the school are just a drop in what has been a steady stream of curious visitors. Ever since Canberra Primary School was selected to be one of six launching the FutureSchools@Singapore project, educators from both near and far have been eager to see for themselves exactly what a future school looks like, what it means, and what best practices they can take and apply back in their own school settings. There was a similar tour yesterday; another is scheduled for tomorrow; National Geographic is coming at the end of the month. When I am feeling low, I have a place to go. I just get online, Then I'm feeling fine.

Boogie, Internet Boogie, Surfing on the world wide web!

Boogie, Internet Boogie, Surfing on the world wide web. I do homework, talk to friends, play some games and more. I can even surf the web and never need a board! CHORUS

Mama won't go near it, Daddy runs the other way. So I boogie on the internet both night and day. CHORUS

I can just turn it on and then I'm not alone. There's a million things to do, and it's easy too! CHORUS

CHORUS (repeat 2x): Boogie, Internet Boogie, Surfing on the world wide web!

#### ICT IS EVERYWHERE!

What these visitors are finding is not so much a gleaming state-of-the-art facility as an unfolding process of integrating information and communication technologies (ICT) – school wide; and what they are hearing from Miss Rani is that teaching and learning are her central focus in that integration process.

There's no question: ICT is transforming our lives at a bewildering pace. Younger folks seem to be taking the relentless onslaught in their stride. For the rest of us, it's more like adapt or perish. Yet when it comes to

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kids and classrooms, many stakeholders question the role ICT should be playing in our children's education. Mention "schools" and "the future" in the same breath and you are likely to tap into controversy. It's little wonder. Just about everybody harbours strongly-felt opinions about the pros and cons of ICT; and when it comes to their children's education, the stakes are seen to be high.

In countries such as Canada, for example, the debate is still very much on. "Just teach our children the technical skills they need for the information age!" argue some, while others advocate using ICT to supplement established teaching methods and learning models. Those who see ICT as utterly revolutionary call for a major rethink of the traditional teacher/student dynamic – a paradigm shift; while still others feel that the 'anywhere; anytime' nature of ICT makes school-based learning obsolete. On the flip side, some even believe ICT should be kept out of the classroom entirely.

In Singapore, the question isn't whether but **how** ICT should be incorporated into our schools: how to get maximum benefit without compromising existing educational goals. Actually, in nearly all sectors of Singapore society – public and private – being proactive about incorporating 'infocomm' is understood to be crucial; a matter of economic survival.

Educators realize that ICT is not simply about the latest gadgets for retrieving or conveying information. Infocomm technologies are themselves often the means to enhancing innovation, productivity and entrepreneurship. As for educating the next generation, one can quibble about exactly which skills will be most critical to inculcate in our youth – especially given the volatile

The ideas and the commitment had to come from the teachers, because if it comes from me as 'the leader', it would eventually not work. If it comes from their commitment, their sense of responsibility and their passion about what they have crafted, they will want to see it through.

nature of both the world and ICT. But there's little doubt: proficiency in so-called 21<sup>st</sup> century skills will continue to count for much in the coming decades.

#### FUTURE ORIENTED SCHOOLS

Early in 2006, a call went out inviting the nation's schools to participate in a programme co-conceived by the Ministry of Education (MOE) and the Infocomm Development Authority of Singapore (IDA). Called FutureSchools@Singapore (FS@ SG), the project had grown out of IDA's Intelligent Nation 2015 or iN2015 - an infocomm master plan which aims to help ensure that Singapore remains economically relevant and dynamic across the various economic clusters through the effective use of emerging information and communication technologies, bringing benefits to people, businesses and the global community. One part of this 10-year master plan aims to position Singapore as "a centre of innovation in the use of infocomm technology and interactive digital media (IDM) for the education and learning sector."

#### BLUE-SKYING FS@SG

During the initial 'concept' phase of FS@SG, schools interested in submitting proposals were told not to constrain their thinking with concerns about how to finance their dream school. Just contemplate and come up with ideas of what a 'future school'– in particular, their own school – should be like, and submit a concept paper based on that scenario. Following a rigorous selection process, six of the most promising candidates, each with its own particular focus, were chosen to lead the FutureSchools@Singapore project. Once



the best proposals were selected, IDA then conducted a "call for collaboration" inviting companies in the infocomm industry to join as partners in the FS@SG project. After looking at the selected schools' proposals, the various would-be industrial partners formed into four consortia and came to give their own presentations to the FutureSchool whose particular vision they felt that they could help realize.

#### SEIZING THE MOMENT

For Canberra Primary School's principal, the timing was very good. Miss Rani saw the FS@SG project as an opportunity for her school to build on its natural strengths and interest in ICT integration, and her team shared that view. Although a primary school, and quite a young one at that, Canberra PS was already carving a niche for itself as a comer in the educational use of ICT. Participation in this project could catapult Canberra PS into a position of global leadership in the field. In fact, it seemed almost as if the FS@SG project had been designed to fit with what was already unfolding in this heartland school.

#### DOWNPLAYING THE CHALLENGE

Rather than playing up such heady implications of meeting this FS@SG challenge, Miss Rani and her Key Personnel (KPs) choose at first to downplay the potential significance of the project, introducing it to a small group of teachers more as a 'blue sky' activity to work on during their 'white space' time. This actually meshed quite naturally with curriculum and teacher development practices already in place at the school. By thus piggybacking onto existing 'routines', unfettered brainstorming could happen and some powerful ideas were generated. The results were presented to the school's ExCo as a preliminary draft, and with subsequent guidance and tightening by the school's leadership, the group of twelve teachers managed to shape their concepts into a compelling future scenario document. Entitled The Canberra Experience, the proposal underwent further clarification and fine tuning with feedback from MOE and IDA, whereupon a fully-fledged concept paper emerged that was hard to ignore. Canberra Primary School was suddenly on track to becoming a Future School; in fact, among the first, if not the very first established primary school in the world to be designated as such.

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**June Koh**, Deputy Director, IDA, plays a central role in this collaboration. As technology advisors to the FS@SG project, IDA provides a bridge linking educators to the infocomm sector: the people, technologies and development processes in those industries. June explains:

The FS@SG project – we first called it 'Schools of the Future' – was conceptualized in 2006 as part of our Master Plan together with Mrs. Tan Ching Yee, Permanent Secretary of the Ministry of Education, and chair of our iN2015 Committee for Education and Learning.

We are looking at **whole school transformation** – starting with 6 schools and then building up to 15 by the year 2015. These Future Schools will serve as **Singapore's exemplars**, showcases of innovation in the use of infocomm in education: in all subjects, at all levels and all aspects of school life. They will serve to guide other schools, like beacons; a path light; the key people to watch if you want to find out what's the latest in technology-enhanced teaching and learning.



We looked at two of Microsoft's "Schools of the Future" – in Philadelphia and Taipei – and realized that we wanted something similar, but different. We **actually wanted to put pedagogy** – the so-called 'business needs' of the school – **ahead of the technology**. So rather than starting work with industry partners to come up with the technologies, **we started by getting ideas from the schools. We wanted them to come up with the vision, and to own it.** In that sense it really was more painful: they had to struggle with the whole 'What is a future school?' idea. It's not easy to

internalize where you want to see yourself in four or five years time, and somehow make that commitment to get there despite your current constraints. At the end of the day schools like Canberra PS still have to deliver on PSLE – full of challenges! That's why we adopted the proposal approach: we wanted the schools to go through that thinking process before they put in their bid to become one of our 'Schools of the Future'.

Our selection process was quite rigorous: meticulous evaluation of the concept papers followed by intensive interviews, in this instance with Miss Rani and her staff. We felt the Canberra proposal, their vision, was very good; and it wasn't so far 'out there' that people would say, 'It's never going to happen in my school'. We were looking for shining exemplars, of course; but we also needed replicable models for other schools to implement. Canberra fit what we were looking for.

The name itself – Future School – is ironic, because actually we must constantly look beyond, towards the future, to continue being that forward thinker, that exemplary user, that showcase. You simply cannot stay stagnant. So, while working closely with the schools in terms of ironing out their issues, I think that one of the other roles IDA plays is to push ahead, to keep making that dream a reality. For example, right now we are working on an enterprise architecture exercise where we pull up common modules or pieces of the FS@SG project that we think other schools will likely want to pick up and implement further down the road. [Principals! Nota bene!] How can we make it easier for them, technically, to actually reach out and make that happen? We are also collating business models from the different consortium partners in order to help the next phase of schools to procure or to pilot their own new products in the future.



Shannon Quek is an Assistant Director at the Education Technology Division (ETD) of MOE. Along with her colleagues from Curriculum Planning and Development Division (CPDD), Shannon is on the front line of MOE's involvement in the FS@SG project.

**C**anberra PS has undertaken a large scale innovation in terms of integrating subjects to make learning more inter-disciplinary. ETD officers, as well as CPDD officers, work very closely with the teachers, the subject material and the learning goals, re-designing curricular practices and figuring out how technology fits into the learning and teaching. When teachers meet with their industry partners MOE officers are also present to help articulate the requirements and different features in the applications that are being developed.

Teachers and technology programmers or user interface designers have very different perspectives. Needing to fit in with the many demands on teachers' time is one thing that the consortium might not have expected. Culturally it's been an adjustment both for teachers and their industry partners.

I really appreciate how Canberra has a very open culture, keen to always be learning and to always do things better. On a novel project like FS@SG, that's the key to progressing. We don't know the answers, no one has done it before, and we've set ambitious goals for the project.

At this stage, FS@SG is very experimental. We've embarked on a co-discovery with the schools to figure out what being a Future School actually means. To do this, each of the Future Schools received a research grant from NRF to study the effectiveness of ICT/IDM in learning and teaching. In the case of Canberra PS, Miss Rani has been the Principal Investigator. It's also been a very support intensive project. MOE and IDA are studying how organizational factors like leadership and centralised support can be structured so that the project is sustainable and scaleable both within the FutureSchools as well as to other schools.

The principals and KPs involved in FS@SG agree: this project has been a great catalyst to raising teacher capacity, quickly, for their whole school. In terms of student learning I would say it's too early to tell. Things started, in earnest, in the middle of 2008 and a lot of the work since then has entailed sitting together discussing what needs to be built. It took several months to get the user requirements all down and we are only just beginning to see applications that could even be piloted in the classroom. We hope to have a better answer in a year's time.

Canberra PS science students track the Ph sensor's reading and consider a question posed by a visiting teacher.

According to Wilson Tan, Director of Singtel, what attracted the company to this FS@SG project was the approach being taken to technology integration.

Rather than deploying ICT for its own sake, this was looking first at how ICT can transform teaching and learning, starting with the students. I believe young people are the best technology adopters. It's easy for them. But, putting all the sexy technology hype aside, the interesting question is how technology can transform their learning and make them more engaged... whether students will actually benefit."

"My first impression of Rani was definitely not one of an IT type of person. But there was no mistaking her passion for education... the strength of this principal's vision; her



desire, and how proud she was to be changing Canberra from a small neighborhood school into a place that was already attracting students to travel from far off corners of the North. It's not your higher echelons of society... it's a heartlander school, with kids from different walks of life... who love going there. When we were evaluating the concept proposals and we first met Rani, she said to us, "If you're out to make a big difference to the students' lives, this is the best way." In many of the schools that I have been engaging, the vision may not be properly brought down to the staff to try implement. With Rani and her team, whom we've been working

with, you see that vision actually being quite consistent; and that is why it is no surprise that Canberra Primary was actually picked out of so many schools. It's not about one person driving this whole thing. It's one person inspiring a *team* of people.



Wilson points out that Singtel is no longer just a telco offering lines to customers. "We are also transforming ourselves, moving into an ICT space where we are building an ecosystem of technology partners, like Canberra Primary School." SingTel has obtained the services of a team of pedagogical experts headed by NIE Professor Philip Wong to undertake action research with vardsticks in place to measure before and after outcomes when any future school solution is implemented. "In our partnership with Canberra PS, we want to see whether game-based learning really improves learning outcomes."



Teaching and learning really is my focus. If you can make it very interesting without technology, carry on that way, if you think that is enough. But, if you think you can improve it even further with some technology coming in, then do that, to help the children learn better. As long as the learning is there, and it is fun, creative, then the children will remember what you have taught them. But the focus must always stay on teaching and learning.

66 When I started this school with less than 500 students and 18 teachers including myself we were really a small knit family. I knew the teachers well. Some of them had actually accompanied me from Swiss Cottage and so they already knew my expectations. But as the school became popular in this area and our enrolment increased right up to 2000, 2100 now, I just reflected and said to myself, 'I must not reach the point where I really don't know my teachers.

#### PREPARING THE GROUNDWORK AT **CANBERRA**

A look back at the school's 10-year history reveals several key factors which contributed to Canberra's readiness for the FS@SG challenge. Some of these factors relate to experience the staff had accumulated through their use of ICT – from rudimentary Lab Based Lessons focused on teaching basic computing skills, into a more experimental



I constantly remind my teachers, in whatever they do, to do their best, they are to give their best. 'We are in a people business with children as our direct customers. You have a very important task ahead of you: to mould the only resource that we have. You are moulding the future of our nation. Be the best teacher you can possibly be. Then, Singapore will flourish as a nation!

stage with open source programmes such as Moodle, Breeze or Interactive Resource, and later dabbling with blogging, podcasting, and applications such as spreadsheets in maths, art and drawing programmes like Inspiration, and ComicLife, and incorporating Interactive White Boards and Tablets PCs with Digital Inking.

But the salient characteristics that have proven truly conducive to alignment with the goals of the FS@SG project have much more to do with the school's 'culture' the open, sharing workplace atmosphere that Rani and her team have been able to foster and maintain at Canberra PS. Since 2000, the year when Miss Rani opened this newly established school in Sembawang neighborhood, the young, IT-savvy teachers working here have certainly been encouraged to pursue their interest in integrating ICT into



who doesn't want to eat. Do the parents say, 'OK, you don't want to eat? That's fine! No. The parents will start to sing, trying to distract, or even dance in front of their child, playing with them until they can guickly push a spoonful of food into their open mouths. They are thinking up and using different strategies. Why? So that the child will get nourishment and be healthy. That is what teaching is all about in the classroom where teachers have to think of ways and strategies to engage the pupils in learning.



their teaching practice. But in speaking with Rani, it becomes quickly evident that her primary concern lies not with the efficacy of this or that hardware or software, but rather with teaching and learning. She sees her role as helping wobbly beginners, newly graduated from NIE, to achieve professional excellence in less than 5 years and thereby to reach the greater goal: facilitating deep and effective learning in their students.

To that end, Rani was an early adopter of EPMS +1 - the Enhanced Performance Management System - a graduated framework that facilitates teachers improving mastery of their own subject and a strengthening of their teaching skills. "The '+1' component actively encourages teachers to develop innovative strategies," explains Rani. "As the teacher moves up to the next level, the '+1' target is different: moving

If a child doesn't understand, you don't persist with the same strategy. Try to think of a different approach or other strategies. I often give them an example of a baby

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When they first came back and spoke about their training in Learning Circles and the rest, we actually began practising that in our ExCo meetings, breaking into smaller discussion circles... and we did some follow up research and shared readings with the teachers. Actually, I enjoy learning alongside my teachers because I enrich my own professionalism in my own practices. I don't feel nervous at all. It's good actually because, when you are participating as a learner just like them, the teachers somehow view you differently: not as a distant leader. I really don't like that distance, very frankly.



from the classroom, to grade, then subject, and onto school-wide level and finally at the school cluster level. The first level is about innovation within the classroom. I will tell them, 'You have different types of learners within your classroom: for example, you have some who are really very weak in certain areas. So what strategies can you come up with to help this weak group of children? Make a proposal, implement it, and give us a report.' At the end of it, if someone's innovation is successful, I will tell the officer, 'Try and see if you can sell this idea, this concept, to two or three of your colleagues. Find out if they're interested in doing what you have done."

#### FOSTERING A SHARING CULTURE

To allow time for the type of reflection and sharing that contribute to a culture of innovation, Rani introduced early on what is now referred to as TTT: timetabled time. "This was quite a while before it was implemented in other schools. I started by embedding one hour into the timetable and today they have an hour and a half of curriculum time. That means that teachers can be free for three periods at a stretch: to meet collectively, as a level; to reflect; to talk with peers about innovative practices." In fact, Rani and her KPs have embedded structured time for teachers to learn about and adopt a whole range of strategies that build on a co-operative approach: Learning Circles, Lesson Study; Action Research - all centered on teaching and learning. Through other training and development processes teachers are exposed to work attachments, to conferences and to training sessions aimed at broadening mindsets; and they are encouraged, indeed expected to bring back

Active involvement was already the culture at Canberra. Teachers had been imbued with being proactive, especially in pursuing excellence in teaching and learning. The structure is there for them to put up their proposals. It's initiative driven. Take the use of Tablets, for example, or podcasting: we approached it by first exposing teachers, through observing the way other people are using these technologies. Then, by setting aside timetabled time for them to meet, to discuss, to explore – letting them think about how they can put ideas into practice – it is more a discovery process where sharing gets reinforced.

So in that sense, when the call for proposals for the FS@SG project came around we had already built the readiness of the staff. The same processes were easily applied. We formed a team led by our Level Head for IT to think about the concept. If they had fully understood what a bold step was being considered at the leadership level they probably would have been apprehensive about their part in such a huge undertaking. Instead we casually said, "Look, here is the FutureSchools opportunity; based on what we've already been doing, we feel we're ready to develop a proposal. See what you can come up with." They were immediately excited about it. But it's because they were used to being actively engaged in the development



very easy for them to come on board and start thinking creatively about it, to work together and come up with a proposal that was then presented to the school leadership.

of what happens at Canberra, so it was

Mr. Shoeb Burhanuddin, Vice Principal, Canberra Primary School



those experiences to their colleagues in the school to share and implement.

Rani does a lot of reading on her own, and during monthly contact sessions with her whole staff she enjoys sharing certain interesting strategies, for example, introducing Mind Mapping workshops as early as Primary 1, and nurturing that technique into a useful, lifelong skill. Rani has also managed to establish lesson observations whether by herself or her KPs, as a regular and, remarkably, much-valued feature of the school's culture. Remarkable because Rani insists that each observation be videotaped, a level of scrutiny teachers are understandably uncomfortable with, and not just the newly graduated beginners. "At first it was a challenge so I really had to keep selling the idea of video as a tool to improve their teaching, assuring them it was strictly confidential. But, of course, teachers slowly became more comfortable being taped and then with sharing tapes within the school. I remind them. 'In each of us there are strengths. So if I want to quide a beginning teacher to see your video on Classroom Management, do I have your permission?' There are times the Ministry has asked to view ... " Rani glances at the shelf that holds the video archive. "In fact 9 DVDs are out! I still haven't got them back..." The initial resistance has evaporated and teachers have 'bought in' to a culture of sharing through peer observation.

If it helps further her young teachers' development, Rani doesn't hesitate to draw on her extensive network of colleagues. "Some have been used to coach and mentor teachers. A retired officer very strong in Mathematics and English goes in offering developmental observation, to guide Et

help the teachers enrich their process with different approaches, like cooperative learning strategies. She'll handhold them, help them with implementation and to improve their own mastery of their subject." Rani has a long list of flexi/adjunct teachers, many retired HODs amongst them, who are happy to answer her call and share what they can.

"My task, very frankly, is to develop excellent teachers - first-class teachers. That would be wonderful. It is a challenge, a journey, and to some extent we've been succeeding... I say that because many of my teachers have progressed in their careers within the education service..." Thanks to the structures and processes in place at Canberra PS, many of these teachers are quite proactive. They grab the initiative, a quality most school leaders are always looking for in their teachers.

#### THE CANBERRA EXPERIENCE

So it was with this school culture as backdrop that Canberra PS moved into the Future School limelight. Word-of-mouth had already spread about the caliber of the education happening at this neighborhood school and enrolment had grown from 480 to over 2000 in under 6 years. With the growing popularity of the school over the years, there have been far more applicants than places in the school, forcing Principal Rani to introduce balloting. And while being designated a Future School has created lots of extra attention, what makes Canberra PS a really special school remains its values.

The euphoria after being chosen and receiving National Research Foundation funding quickly gave way to an exhausting

set of added demands on time and energy - something that probably nobody involved could have fully anticipated, least of all Miss Rani. After all, the everyday demands of running a primary school and preparing students for the all-important PSLE have not evaporated. The FS@SG project requires that a whole range of new relationships be forged and schedules be planned and followed. It's a complex production and the cast includes officers from MOE's Education Technology Division (ETD) as well as those from the Curriculum Planning and Development Division (CPDD); a Singtel-led consortium of industry partners meet who with teachers to work out the technology requirements, plus IDA advisors and project managers guiding the process. In addition to teachers' own action research, the Canberra team is contending with a barrage of researchers from MOE and NIE, to name just a few, keen to gather empirical evidence that this investment is worthwhile. Add to that the press, and the constant stream of colleagues from other schools near and far, all of whose questions and curiosity need to be addressed. It's amazing that any new curriculum and technology is being developed at all!



"It takes up a lot of my teachers' time." Rani admits. "I will ease the teaching load a little bit for those who are heavily involved in curriculum re-design and pedagogical aspects so that they have the time to meet, discuss and plan the curriculum integration. If I don't, I know it will be very heavy on them."

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#### VALUES COME FIRST





Early in her own career, Rani drew inspiration from Seagal's *Human Dynamics* which sees human functioning in terms of three universal principles of the Physical, Mental and Emotional – a paradigm she continues to find very useful in understanding and meeting everyday challenges. Human Dynamics along with Character Development and Values Education are for Rani the rocks on which her educational philosophy and her school stand. "The foundation of education is values," Rani insists. "If you get that right, everything else falls in line."

In that respect, her mother was a profoundly formative influence – not merely as the architect of values in the home but also at the convent school Rani attended, where her mother was also her kindergarten teacher. She was by all accounts, quite strict, and determined to provide her students, many of

whom neither knew their alphabet nor numbers, with a proper start to their education. Values were also stressed in the classroom. "We were constantly reminded to do our best in whatever we undertake." Needless to say, Rani was impressed, and somewhere between nature and nurture the possibility of becoming a teacher seemed like a pretty good bet. She had quite literally been taught at her mother's knee both at home and in school, and decided to follow in those footsteps.

When Rani finished her education in the late 1960s there wasn't much question about priorities: the emphasis was to get a job – and quickly. She had actually contemplated and applied for an interview in the nursing field. Both professions had respectability, and provided opportunity for women to develop in their careers – but teaching was her first interview and she took the offer. To this day she still sees teaching and nursing as careers that offer the deepest rewards in terms of making a profound difference to peoples lives.

After two years of training, Rani began her teaching career. As is so often the case for those who show natural leadership qualities, her principals kept steering more responsibility her way to see how well she could multi-task, manage others and deal with stress. After a short stint as VP she was posted to Elling Primary School where she had a large number of Nepalese students mixed in with her Singaporean cohort. She found that a fascinating experience in which the manifold benefits of cross-cultural sharing became quickly evident. A few years later she took over at Swiss Cottage Primary School with its truly cosmopolitan student population, further confirming her sense that having a healthy mix of perspectives is a bonus. Rani also made a compelling observation: "Most of my overseas students had never been discouraged from speaking in class; rather, they were comfortable speaking in front of their peers or taking up the microphone – a sharp contrast to the timidity shown by many local students." This is one reason Rani puts great stock in language arts and underscores one of the aspects of ICT-enhanced learning which she finds particularly enabling – the way technology can be used to facilitate communication, making it fun for children.



Over at IDA, June Koh recognizes what a challenge this project is for teachers. "Every day, teachers have to deal with students, parents, grading... and then on top of all that going through the user requirements exercise with industry partners? It's been huge... because of time constraints. But I have noticed how this exposure to industry has given teachers the ability to see things differently. Their perceptions of what industrial partners are able to offer have changed. They begin to understand and appreciate the benefits that infocomm technology brings to them and their students. Plus they can do "IT speak" so much better! Where they were very focused on teaching and learning, they now seem able to view and to articulate what they're doing in a much broader way. 'I may just teach science, but it's very important to get it right. My small part actually plays a significant role in the 'future school' experience.' For me that is amazing. The teachers I've met in our future schools are very strong in relating what they do every day to that larger vision. I think that's very difficult to find ... in any country." Of course they are strong! They have a leader who believes in that strength.

#### TOMORROW AND TOMORROW

In a recent interview, American writer/ broadcaster Garrison Keeler admits that he is always anxious "to prove that the faith of his teachers... was not misplaced," adding that "The kindness of teachers (was something) we spend our lives trying to live up to..." Keeler then shares a great secret about his own creative success. "The true path to innovation and invention is not forward, but through the past."

It is easy to appreciate the wisdom of Keeler's words when reflecting on the values which, clearly, have guided Miss Rani from her mother's knee to leading a Future School @ Canberra. Throughout her career, Rani has always drawn on her network of colleagues, many of them retired, to share their own



experience and time-tested values with the coming generation of teachers and leaders.

As the FutureSchool@Singapore project moves inexorably into... the future, it's seems likely those who inherit the reins will likewise choose to draw on the benefit of past experience – and in particular that of Miss Rani who, as this goes to press, has just embarked on the retirement phase of her career. Who better to inspire tomorrow's educators toward their next innovation? If their goal is the betterment of teaching and learning, Rani will surely heed the call.

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achieve and the ways to reach these goals. For transformational leadership, once the directions had been set and people could see how I worked (and would like work to be done), my emphasis shifted: to increasing the capacity of others in the school to produce first-order effects on learning; and to 'people effects' i.e. changing the perspective of staff, inviting them along the journey to produce lasting changes that are investments in the capacity of the staff rather than the charisma or direction of the leader.

#### **Tiong San**

I approach my role as a school leader from the larger perspective on life: whatever we do should be life-affirming. Work in the office (school) must be seen in the context of the larger meaning of life. My role as a leader is to help make my officer a better human being rather than merely a more productive officer. Of course, a good human being makes a better officer, and a good, productive officer will be a better person. Ultimately, when viewed from the deathbed, personal life - family, friends, personal fulfillment - is more important than office work. I am guided by complexity theory that views an organisation as a living system which allows its members to connect with each other and make meaning. Collective meaning-making then becomes the shared vision of the organisation. Thus a leader's job is to create conditions that enable the organisation to find meaning so that a culture that evolves is the result of the interactions among its members. This approach, which is a more humanistic one, sits better with a transformative style of leadership. How a leader approaches his job, of course, depends on the context. He needs to observe and sense what might be appropriate at a given point, and act accordingly.

#### Chee Siong

"In the Core Theory of Success, guality thinking affects actions taken which in turn determines results achieved. To achieve lasting improvement, good planning is necessary. It is necessary to have a framework for planning to ensure that this important first step is done systematically. I

adopt a bottom-up approach using the IDEAS process (Initiating, Discovering, Envisioning, Actioning, and Sustaining) for strategic planning. After scanning the environment, I set broad directions. As teachers have different experience and the nature of the subjects they teach are different, I believe teachers need to define their own starting point in relation to the directions that the school wants to pursue. By starting from their strengths and then gradually aligning their own focus with the desired future that we share, resistance to **change lowers.** Managing change is a huge part of leadership especially in this complex time of globalisation which means that the education enterprise must prepare students for a whole new world.

#### **ON CONTEXTUAL FACTORS, READINESS** AND CULTURE

#### Wai Yin

I feel that there is nothing to reconcile between the two approaches. These two leadership styles are more a continuum rather than opposing forces. All leaders need a 'toolkit' of approaches which they can use at various times, shifting back and forth from instructional to transformational and vice versa.

From experience, the **contextual variables** that have determined my approach are:

A. **Time** – sometimes tight deadlines do not allow for a consultative approach and the urgency of a situation dictates the use of instructional leadership.

B. **Readiness** – there are times when transformational leadership has its limitations because people are not quite ready to take on a consultative approach, especially in new, untried areas. In these cases, they prefer instructional leadership where the leader is clear about where to go, and how to get there. When they become more comfortable with the changes and have built their capacities, transformational leadership will take the whole team further because everyone is at a level where they can give meaningful inputs, no longer relying on the leader to do the thinking alone.

C. Complexity of the task – for complex and lasting changes, transformational leadership is needed. This is because any reform that

**Models of Leadership** 

"Principals play a pivotal role in our ability to achieve our desired outcomes of education... Not only must our Principals be good CEOs, they must also be instructional leaders, driving a culture of professional excellence."

> from a speech by Dr Ng Eng Hen, Minister for Education, and Second Minister for Defence, at the 11th Appointment Ceremony for Principals on Tuesday, 30 December 2008

For those long enough in the tooth to remember, Minister Ng's words echo a point in the 1980s when Singapore's principals were similarly encouraged to adopt a model of Instructional Leadership. By the 1990s interest had very much shifted onto models that emphasised vision, mission, strategic plans, developing an identity for our schools through niche pursuits roughly called Transformational Leadership.

Lately, there has been a call to see educational leadership as leading teachers in understanding how students learn and how to assess their learning - roughly referred to as Pedagogical Leadership. MOE seems to be moving in this direction with the emphasis on assessment for learning as versus assessment of learning, on Teaching for Understanding (TFU) and Understanding by Design (UBD).

In Leading Educational Change, a paper\* published in Cambridge Journal of Education (2003), Professor Philip Hallinger offers his "reflections on the practice of instructional (pedagogical) and transformational leadership" after briefly reviewing some of the research that has been conducted from these two perspectives on school leadership.

\*http://www.philiphallinger.com/papers.html

#### We invited three Principals, Mr. Tan Chee Siong of Ang Mo Kio Sec School; Mrs. Wai Yin Prvke of St Andrew's Junior School and Mr. Teoh Tiong San of Northland Primary School to have a look at Hallinger's paper and to share with PRINCIPIA's readers their own reflections about how these two models have served in their leadership experience. Some of their views will strike a familiar chord; some may offer perspectives both new and stimulating. All views have been offered in a spirit of collegial sharing.

PRINCIPIA began with these questions:

- What has been your approach to leadership in your school?
- What ingredients of the two models have you emphasised in your leadership?
- How have you sought to reconcile the 2 approaches?
- Has your experience so far affirmed your approach? Have you changed your approach as the school evolved? Which contextual variables determined your choice of an approach?

#### Wai Yin

"My approach has generally been transformational leadership although at times I use instructional leadership. A lot depends on the context. For instructional leadership, the main ingredients emphasized are 'Managing the Instruction Programme' and 'Promoting a Positive Culture of Learning'. This was more so at the beginning of the leadership journey when as a new leader it was important to be very clear about the goals we as a school wanted to



hopes to have lasting effects needs to reside with more than the leaders: the more people share the vision and catch the fire, the more these will come alive and last beyond the stay of any one leader."

#### Tiong San

I would add to that, the culture and challenges of the organisation. When I took over as Principal of Unity Primary, the school was barely 5 years old, still evolving, searching for its identity. I had my own ideas of what my ideal school was, but I resisted being too directive because of my beliefs about organisational leadership. As I once told my staff – I came not to boss the organisation but to dance with it. The established culture was one where staff were more used to taking directives and keeping within clearly set margins, so initially, my more consultative approach moving away from a hierarchical to a more networked structure - actually created confusion and messiness - a real breakdown in communication and confusion over the lines of authority. Notwithstanding, I persisted and things gradually got better because, through many conversations, we got to know each other, our level of trust grew and we soon came to be on the same page regarding our values and beliefs about education. Eventually, a more caring and supportive culture evolved.

#### Chee Siong

Changing mindsets - which requires many ongoing formal and informal conversations - is critical to helping teachers see the benefits of embracing change both for their sense of professional well-being and for the interests of students. Managing change after it has started is key. By celebrating their successes, big and small, staff feel appreciated and more confident - they're in control and are making a difference - especially when their efforts result in improved (and sustainable) learning outcomes for their students.

When managing change, it's not realistic for leadership to insist on having the whole team on board from the start. I aim to have more people board the train at later stations, particularly once the success of their colleagues convinces them that it's

worthwhile to take the plunge, to grapple with uncertainty. Helping the team stay focused until progress is really evident is a big leadership challenge.

PRINCIPIA: Hallinger identifies key similarities in the two leadership models. What do the principals think? In which of these dimensions have you met success and which pose challenges?

#### Wai Yin

1. Creating a shared sense of purpose in school: I've seen some success here, having focused on Teaching and Learning as the big block, concentrating teachers' energies towards their core business. Most teachers want to be **skilful professionals**, and appealing to their main interest has generated buy-in from teachers.

2. Focus on developing a climate of high expectations, a school culture focused on the improvement of teaching and learning: **This is an on-going process**, if nothing else, because the targets are moving all the time. There is never an end state to expectations and ensuring the school climate and culture support these expectations.

3. Shaping the reward structure of the school to reflect goals set for staff and students:

We have been more successful in generating good reward structures for students than staff. For students we have incentives for academic and non-academic outcomes, including a '5-mark challenge' that encourages students to aim for improvement by 5 marks or more from assessment to assessment. For character outcomes we have the RICH Award that aligns conduct grades with daily class behaviour. One issue for structuring staff rewards is that the teachers in my school are far less motivated by extrinsic rewards than intrinsic ones. We need to constantly think of ways to motivate staff by helping them see the rationale of what we are doing, and gain their buy-in.

4. Organizing and providing a wide range of activities aimed at intellectual stimulation and development for staff: This is one area we can do better. We have been thinking about a dilemma that many schools will also face: while we want our students to be curious, confident and cooperative, we have a generation of teachers who have come through the system at a time when curiosity was not necessarily encouraged, and where preparing for exams consumes the teachers' time and attention more than whether there is deep learning.

How do we then, as a school, and even at the national system level, move our people towards intellectual stimulation and development? How do we structure common learning times together to focus issues which have both breadth and depth? It's not just about professional knowledge, but interest in issues and causes of the world around us.

5. Being a visible presence in the school, modeling the values that are being fostered in the school: This is something that all principals will want to get right, myself included. All I can say is that I try very hard in this area, creating 'touch points' throughout the day when I can stop by and chat with teachers, in the course of which picking up on their concerns and how the school can help meet these. **People also tend to do what they see you do**, not what they hear you say so the constant challenge is in 'walking the talk', as well as 'talking the walk'.

#### **Tiong San**

One major goal I have is for a change toward a more distributed leadership, in two aspects: first, a greater sense of shared ownership and purpose among the members of the community; and, second, an enhanced capacity of members that gives them the confidence to have that ownership. Besides the extensive use of conversation as a vehicle to communicate the concept of distributed leadership, there must be active and conscious effort to develop staff, especially the KPs. But professional development need not be via formal workshops, sharing, etc; one of the most powerful types of learning is 'at the feet of the guru' i.e. through day-to-day interactions, informal conversations at the watering hole, and just-in-time teachable moments. This is similar to apprenticeship learning for it is in such informal interactions that tacit knowledge, attitudes and values are caught. After all, leadership is more about being

#### Princi**pia**

than doing, so there's a lot of learning when one is in the presence of a leader.

That's not to say the leader's role is redundant in a distributed leadership model. The role shifts from directing to inspiring. The leader brings to the organization new perspective, hopefully visionary enough to enthuse and guide the organisation in its journey into new territories of growth. **The leader must also be the resource-maker:** providing support, and tapping into his networks, looking for resources like people and money.

#### Chee Siong

For schools to sustain what we have been doing well, it is important that we pay attention to developing our staff so that even if the original team moves on, there will be capable successors who can carry on with the next lap. Succession planning is therefore a critical part of any successful organisation. Part of that succession planning must include testing out its people in real assignments. Sharing leadership instead of concentrating leadership in a few individuals allows more people to be developed and tested on their suitability and readiness to take on higher responsibilities. Shared leadership then is about not concentrating authority in a few people but rather empowering individuals with the responsibility to make decisions, give input & execute decisions.

PRINCIPIA: The differences between the 2 models lie in (1) the target of change (firstorder and second order effects); (2) the extent to which the principal emphasizes a "coordination and control" strategy versus an "empowerment" strategy, (3) the degree to which leadership is located in an individual, or is shared. Given the assumption that "principals must find the style and structures most suited to their own local situation", could you elaborate on how you determined which approach suits your school best?

#### Wai Yin

To be frank, a large part of it is intuition. Of course there is always the need to read the context, constantly reviewing based

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on outcomes, managing the unintended consequences of whatever styles, but after a while, everything seeps into the sub-conscious and intuition takes over. Somehow, one just knows, and uses the style we think best suits the context almost sub-consciously. In real life, we also do not have the time to dissect which style we are using, and whether style A or B is better. When one style does not work well, we try something else, which may neither be transactional nor transformational. Perhaps it is a hybrid of both.

#### Chee Siong

To empower or to coordinate and control is not a matter of choice but of necessity. With the fast pace of change and sheer volume of work, it is not possible to run a tight ship by being in control in all places all the time. A better qualified teaching force will also want to engage and school leaders must be willing to tap into them for the best idea to emerge. They want to be heard, seen and will not be professionally satisfied if they are engaged only at the do-as-I say level. On the other hand, progress will be very choppy if teachers are left on their own to do what they wish. Hence empowerment must happen in the context of a shared sense of purpose, direction and focus. Doing so will enable staff to play to their strengths in helping the school to achieve its vision.

#### **Tiong San**

At Unity Primary School, many structures and programmes that have now been established were my ideas, but it would be misleading to say that this reflects a transactional leadership. In a sense, it seems top-down, but in another way, it can also be bottomup. After I took stock of the school's needs and sensed its culture, my approach was to propose changes to the KPs and staff. What followed would be a series of conversations with ideas buzzing and bouncing about (usually along corridors and not in meeting rooms) before a plan was formulated for implementation. Seen through the lens of complexity theory, what was happening was a disturbance to the system that led to dissonance before a new order

emerged and prevailed. Through the lens of transactional-transformative models. the disturbance was top-down, but the allowance for dissonance (and messiness) and the final emergence (with consensual ownership and empowerment) would be bottom-up. What I did was to challenge my staff to take a different perspective instead of keeping to the status quo, but I gave them the freedom to debate with me and among themselves, so that the eventual conclusion was owned by all. In the process of this conversation, the staff, especially the KPs, developed the capacity to handle ambiguity and messiness, and work with others who had differing views and priorities, and became empowered in decision-making. Of course, it took a while. In the beginning, the staff took my proposals as directives because a culture of open conversation and debate hadn't been established. Today, they are so used to the sense of empowerment that I sometimes do not know what decisions have been made behind my back!

As for who's making the pedagogical decisions, I can think of the example when Unity PS embarked on our literacy programme for Primary 1 & 2. In the spirit of TLLM of enabling our students to become life-long self-directed learners, I wanted to focus on the learning of skills and strategies in EL. These skills and strategies included learning phonemes and phonics, skills of blending and decoding, and reading strategies. I saw these being explicitly taught in the literacy programme in my visit to U.S. schools with a team of teachers. When my team and I came back from U.S. and shared with the teachers, they too were excited and we decided to embark on a literacy programme. Teachers interested were invited on board, and so a team of committed teachers was formed and they then designed a schoolbased curriculum (but one aligned with the learning outcomes of the national EL syllabus). The literacy programme is one example where my role was essentially inspiring my teachers by planting an idea, and then organising and supporting the team as the seed took root and blossomed. Our literacy programme has been running for 4 years now, and when STELLAR came along, it was not something new compared to what my teachers had designed.

#### Chee Siong

I agree with Tiong San and many others who share the belief that a right type of organisational culture is critical to bring about lasting change. Schools with a culture of staff empowerment are apt to fill teachers with a stronger TLLM spirit. This is not surprising because TLLM in essence is about empowering pupils in their learning and to co-own the responsibility for learning. Teachers who are empowered in their work are comfortable with being held accountable for results while they loosen their grip on pupils' learning. In my school, we complement our usual assessment with alternative modes of assessment in most subject areas for pupils across all levels and streams. How did the school come to decide on this focus? This desire to teach and assess pupils differently in the spirit of TLLM was the heartbeat of many teachers. A few years ago, the school leadership made this heartbeat audible through a feedback platform and included alternative assessments in the school's direction. In addition to setting the direction, the school supported the teachers in their journey by allocating resources to support the initiative. The resources included developing a TLLM framework that articulates the type of teaching and assessment we want to see in our lessons, re-working the lesson observation checklist to emphasise TLLM teaching, funding training, using technology to make it easy for teachers to report pupils' learning, etc. While the TLLM principles set the standards for lessons, the school leaders and KPs exercised stronger curriculum leadership guided by its curriculum leadership frameworks. Although the journey was tough, the school's fervent belief in its mission of providing holistic education and its vision of producing pupils who are Knowledgeable, Resourceful and Warm-hearted helps us persevere through the ups and downs of any change.

A school's culture must keep evolving with time. A school with hard working staff must learn to embrace creativity in their work and to nurture creativity in their pupils. As "change" is here to stay, every school must have in its culture the ability to learn. This will increase the chance of schools reinventing themselves to stay relevant.