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Social & Emotional Learning

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ASSOCIATION FOR SUPERVISION AND
CURRICULUM DEVELOPMENT
(SINGAPORE)

Social &
Emotional
Learning

Association for Supervision and Curriculum Development (Singapore)

Editorial

This issue of the REVIEW shares the experiences of six schools that have embarked on their SEL journeys, making use of different approaches to work towards a common goal. These programmes range from getting at-risk pupils to learn to play percussion instruments, to making use of the Teaching for Understanding (TfU) framework to design character development programmes.

Many schools all over Singapore are on this same journey, an on-going journey that is often laborious, requiring a lot of determination and patience, as well as time before any result can be seen. We hope that with these articles, you will be able to get an idea of how schools are trying to impart the SE competencies, so necessary for a holistic education.

Among our many articles in this issue, one by Dr Noel Chia and Angie Ng discusses a theoretical model to explain the interdependent effects of learning inside and outside the classroom on the individual as a learner. Joy Tan and Dionne Teo share how the Green Club of North View Primary School has helped to nurture young Green Ambassadors in a community by making full use of a neighbourhood park. Jenny Wong, a Senior Teacher at Blangah Rise Primary School, writes about her two and a half month stint at the New Zealand Marine Studies Centre where she was attached for her Professional Development Leave (PDL). The Centre nurtures young talents in an enriched learning environment.

Looking forward, we would like to encourage teachers and schools that have embraced the curriculum framework Understanding by Design, to share their learning journeys, be it at the classroom or school level. We are also looking to feature articles on formative assessment or assessment for learning in our forthcoming issues. This journal is your platform for professional sharing. Do send us your contributions.

Happy writing!

Soo Kim Bee

Social & Emotional Learning

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The **SEL Journey** *in Schools*

The SEL Journey in Schools

Social and emotional learning, or SEL, is the process through which students learn to recognise and manage emotions, care about others, make responsible decisions, behave ethically and responsibly, develop positive relationships and avoid negative behaviours. The benefits of SEL extend from the socially acceptable behaviours into the academic spheres (CASEL, 2008).

This is the basic understanding of what SEL is from the proponents themselves. Since the introduction of the SEL framework to Singapore schools in 2005, various schools have embarked on their own unique journeys to impart social and emotional (SE) competencies to their students with the common purpose of giving all students under their charge, a holistic education that will equip them for life. The following stories would shed light on the different journeys and approaches that six schools, namely four primary schools and two secondary schools have taken. Each is aware that it is an on-going journey and albeit laborious in nature at times, they have a strong purpose and belief that it will all be worth it. All of them have seen that their efforts have borne some fruit.

A targeted approach at a group of at-risk and unmotivated students is what Eunos Primary School and South View Primary School have taken on in their journey using the SEL framework with commendable success. Both schools believe that this particular group of students need a caring school environment where they feel supported and cared for as they tend to have problems coping with their circumstances. They would also benefit from platforms where they are able to self-actualise and be educated on what they can achieve. The Mayor's Club was introduced by Eunos Primary. Students engage in customised activities that allow them to contribute to the school as a club as they are mentored by parent volunteers, the teacher coordinator and the school counsellor. With that, strong relationships and bonds are built which help the students to learn the SE competencies from the adults who show genuine concern through the powerful tool of role modelling. South View Primary has introduced a programme where at-risk students are engaged in drumming as a group, facilitated and taught by a professional drummer, who focused on making music as a team rather than through individual display of skills and talent. This is augmented by engaging students in goal-setting, reflection and learning of various SE competencies. Parents' support is also sought to further the cause. The positive results in their children, encourage the parents as they feel grateful that the school is willing to go the extra mile to help them.

Using the arts is what MacPherson Primary and Tampines Primary have tried in their journey with SEL. MacPherson Primary uses the approach of explicit and implicit teaching of SEL, where explicit teaching is carried out using the school's life skills package and implicit teaching is done through the infusion of SEL in their Arts programme. They do so by ensuring that all students go through compulsory modules where art, music, dance and drama are integrated with other subjects for the purpose of creating 'unified' unit plans. Interdisciplinary project work and the community involvement progamme are used as platforms for SE competencies to be exhibited. Students are also given opportunities to shine in the areas of Co-Curricular Activities (CCA) and interest-based electives. Tampines Primary uses an 8-week character development programme called ACTituDE, which stands for A Character Turnaround and Transformation Inspired through Drama in Education, for their SEL journey. The programme taps various drama strategies to teach relevant SE competencies; and students are then assessed using a set of customised rubrics consisting of components of SEL and Habits of Mind (HOM).

A systematic system of assessment of SEL outcomes was introduced at River Valley High School. River Valley works towards a holistic approach to student development in the form of a programme called CHAMPS, which stands for Character Education, Health Education with Home Economics, Active Citizenry, Moral Philosophy, Physical Education and Student Leadership Development. SEL has been incorporated in the CHAMPS programme in 2007 with the formulation of SEL lessons and a set of rubrics for assessment of their students' SEL.

Outdoor education is an area that Zhenghua Secondary School has tried in their SEL journey based on the premise that outdoor education develops social emotional competencies that in turn support students' engagement in the classroom. Based on research carried out, they have found the positive effects on the students.

SEL sets a framework for schools to take on their individual and unique journeys towards the goal of providing for holistic education that our young can benefit from. As seen from the above, one thing remains clear – none of the schools regretted embarking on this journey. Going the extra mile for students is worth it all when they blossom into individuals well-prepared for their life ahead.
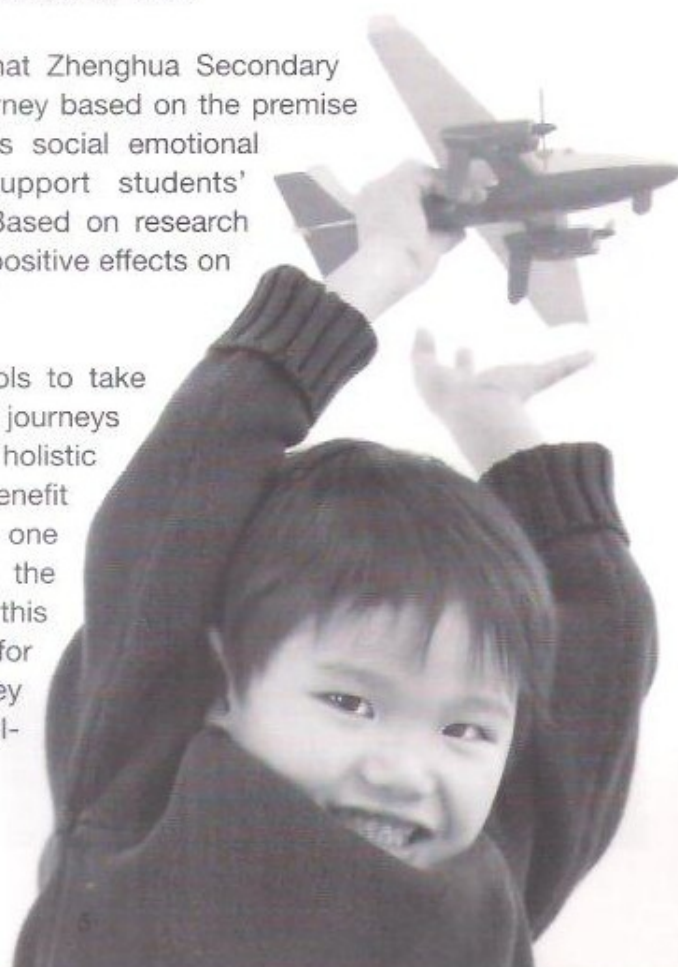
Developing CHAMPS through Social Emotional Learning
Holistic Development of Self and Guiding Others to become Citizens and Leaders with Strong Moral Character

Tan Chuan Long & So Kah Lay

The RV Graduate

River Valley High School's (RVHS) vision of the RV Graduate is "an independent and passionate learner with a sense of tradition and integrity." He is effectively bilingual, possesses strong moral character and uses his talents to serve the community". As a Special Assistance Plan (SAP) school steeped in Chinese heritage, our school motto <立德立功 、化愚化顽> describes what we would like every student to imbibe, how each will uphold virtues and contribute to society, and through personal growth, guides others in the quest for knowledge and wisdom.

Background

In November 2006, members of several departments came together to review our current effort at holistic education through our pupil development programme and proposed a more integrated approach through a revised programme known as CHAMPS[1].

This 2006 systemic review was built upon our earlier effort in 2003 which saw the roll-out for our integrated character education programme through the various eclectic components (such as Civics and Moral Education (CME), nNational Education,
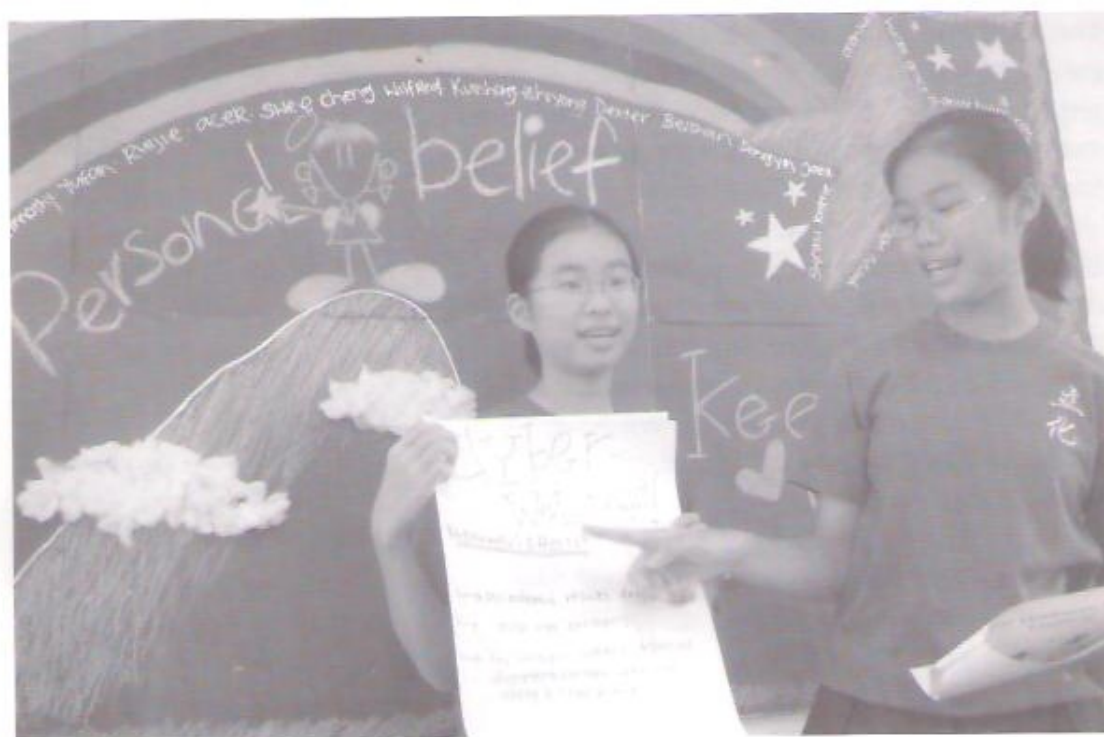
Human Sexuality Education, Economic and Financial Literacy, Life Skills, Career Guidance, Arts Assembly and Reading) into a meaningful whole. The attempt at integration stemmed from our belief that we needed a school-wide approach towards character education.

In 2007, we adopted the 'Teaching for Understanding' (TfU) framework for our student development programme. The TfU framework permeates the teaching and learning of the RVHS Integrated Programme (RVIP). The same year also saw us incorporating the use of Social-Emotional Learning (SEL) competencies on a school-wide basis.

CHAMPS – Student Development Programme

'CHAMPS' is an acronym for **C**haracter Education, **H**ealth Education with Home Economics, **A**ctive Citizenry, **M**oral

Table 1: CHAMPS Curriculum Delivery

TEACHING OF SOUND VALUES

Values are explicitly taught and infused during CHAMPS lessons. The students learn the R^3ICH values and moral values. They understand the meaning of self-discipline and good character. This is guided by a variety of approaches such as discussion of current affairs, case studies, and storytelling.

TEACHING OF SKILLS

The students learn life skills as well as gain awareness through learning SEL competencies and skills. They also learn how to implement Community Involvement Programme (CIP) using service learning, organising camps or leading their peers.

LIVING IT OUT

Through life application of values (moral feeling and moral action) as well as SEL and other skills, the students will have ample opportunities to live out life values and skills. These include CIP, CCA, local and overseas learning journeys and leadership.

Philosophy, Physical Education and Student Leadership Development. It is a student development programme that focuses on nurturing values and character for holistic development. It seeks to develop life skills, and the social, national, cultural and moral consciousness of the students. By nurturing a conscious awareness of their roles in the family, school, society, nation and the world, we aim to equip them with the attitudes, skills and knowledge to negotiate in a complex, fast-paced knowledge economy. Through CHAMPS, we seek to inculcate in our students the two key goals of character education:

a) a strong moral character and

b) active citizenship

Social Emotional Learning (SEL) was incorporated in the CHAMPS programme on a school-wide basis in 2007, following our pilot in 2006. Our work was based on the Ministry of Education's Social Emotional Learning framework. In 2006, a team of teachers developed the assessment rubrics based on the MOE SEL Goals, Standards and Benchmarks[2] document. With these rubrics, we then went on to develop our curriculum and assessment of SEL for CHAMPS.

Our Approach to CHAMPS Curriculum

Our approach to CHAMPS curriculum design and delivery is articulated as follows in Table 1.

Within the CHAMPS lessons, further ideas are incorporated so that the students can gain a good understanding of values, skills and living it out. These include the MOE CME values of R[3]ICH, Kohlberg's moral knowing, feeling and action as well as the SEL competencies.

Binding our lessons within the process-centred curriculum of our IP, we further sought to develop our CHAMPS using the TfU using the four key components:

c) Overarching goals or Throughlines

d) Generative topics

e) Understanding goals and

f) Performances of understanding

The overarching goals or throughlines that the CHAMPS team came up with provide the overall directions to CHAMPS. These overarching goals or throughlines of CHAMPS help students to understand that education is more than doing well academically. They seek to develop students holistically and encompass cognitive, aesthetic, physical, social-emotional and moral development in the realms of active citizenship, leadership development and adding value to others in the community. They prepare them for successful living in a changing world and appreciate the qualities of being human and understanding that life is more than existing.

The generative topics for each term that revolve round the objectives of CHAMPS help both the teachers and the students to generate discussions and enable opportunities for multiple connections around the topic. Unit-sized understanding goals support the understanding of the overarching goals and generative topics as well as guide the development of the knowledge and skills for that component.

To support the development of CHAMPS lessons, we further articulated the generative topics from which lesson plans are developed, supporting the understanding goals for each unit. These generative topics also followed the flow of the school events, as we sought to further integrate the rhythm of the school within CHAMPS lessons. The topics that guided us in our lesson design are:

a) What shapes an identity?

b) Our quest for exploration – what do we seek for in life?

c) Celebrating and commemorating –

Honouring the defining moments and people in our journey.

d) Have I made an impact on others, to make my life meaningful and my learning worthwhile?

For each CHAMPS unit, understanding performances guide the teachers and students in understanding the goals of each unit so that they know what is required of them. A variety of on-going assessments are used for assessment of learning. Two key assessment rubrics are used throughout the year. They are the 'Moral Knowing, Moral Feeling, Moral Action' checklist and the SEL Assessment Rubric.

Table 2 provides a summary of the assessment types for CHAMPS

Incorporating SEL into Champs

The incorporation of SEL into our student development programme further enhances the holistic assessment of students in the affective domain. In 2006, a team of teachers developed a set of rubrics (that is unique to the profile of our RV students) to be used for tracking our students' SEL. They designed lessons,

worked with a small group of students on the use of the assessment rubrics. From the collated feedback the team worked on improvements before implementing it school-wide in 2007. In the second semester 2008, we refined the SEL rubrics for our pre-university cohort.

In 2007, we planned to mount a 360° assessment that involved self, peers, teachers and parents. In 2007 and 2008, we did the self, peer and teacher assessment. We mounted a phased approach to training the teachers and students so that we could complete the entire exercise for the year. We also designed and developed an online scoring system to facilitate the self, peer and teacher scoring of SEL. The trends and patterns derived from the scores were used for reviewing our current programmes and charting new programmes for new rising needs of our students. We also used the SEL scores as part of our school's self assessment (SEM) to measure the affective needs and trends of our students.

The school took advantage of the opportunities that presented to the teachers and students to do the SEL scoring. These

Table 2: Assessment Types

Approach	Programmes	Assessment
Values Education	• CHAMPS lesson (social, moral, physical, cultural and national consciousness)	• CHAMPS lesson rubrics • Conduct Grade
Skills Development	• Class discussions • Journal Reflections • SEL and Life Skills • Sharing during assemblies	• CHAMPS performances of understanding rubrics
Living it out	• CIP • Explorers and Connectors Week • Racial Harmony Day Activities • International Understanding Day Activities • Healthy Lifestyle Activities	• Big Hearts Award • Service Learning Reflections • SEL rubrics and reflection • Rubrics for activities

included the Outward Bound School, Year 2 cohort learning journey to West Malaysia, CIP and CCA amongst others. Through the 'living out' component, students and teachers were able to capture the SEL of our students. In addition, the students also captured their reflections in e-portfolio which were accessible to the teachers.

Table 3 summarises our efforts in incorporating SEL into our student development programmes.

SEL Assessment and Reporting

The objectives of SEL scoring are:

a) to provide an indicative score and level of attainment for each RV student, under the 5 competencies and 14 benchmarks in the MOE SEL Goals, Standards and Benchmarks document,

b) to provide an assessment on each student's social and emotional development through self, peer and teacher evaluation, and

c) to provide a basis for reflection on one's social and emotional development and the planning of strategies for achieving a higher level of attainment

This SEL scoring, which is implemented school-wide, is one of the 3 components under the CHAMPS assessment as shown in Table 4.

To align with the outcomes of our values education, the various benchmarks in the MOE SEL Goals, Standards and Benchmarks[3] document are further used to surface the Personal Qualities of Respect, Responsibility, Resilience, Integrity, Care and Harmony (R[3]ICH values) in the Holistic Report Card for every student. The corresponding SEL competencies matched to the Personal Qualities with at least a 'meeting' rating are reported in the 'Personal Qualities' in

Table 3: Implementation Schedule of SEL

Phase	Activities
Phase 1 (2006)	• Core group training • SEL rubrics design • Prototype • Revised rubrics • Staff Seminar (Cascading & Training)
Phase 2 (2007)	• Set up the online SEL system • Self, peer and teacher scoring • Training for new teachers • Reporting (SEL Scores) • Intervention & Development Strategies
Phase 3 (2008)	• Review the SEL rubrics including the Year 5 rubrics • Enhance the online reporting systems
Phase 4 (2009)	• Communication with parents • Pilot - parents to volunteer for SEL scoring

Table 4: CHAMPS Assessment

Areas of Assessment	Max Score	Remarks	Scoring Table	
Conduct Grade Values-education • Moral Knowing, Feeling & Action • R^{3}ICH • Commendation	18	By Form Teacher Students with a demerit point for that semester will get a FAIR grade.	**Grade**	**Converted Score**
			Excellent	18
			Very Good	12
			Good	6
			Fair	0
Skills acquisition Social-Emotional Learning	42	Term 1: Self & Peers Term 3: Self, Peers & Teachers Only teachers' assessment will be counted towards the CHAMPS grade	**Attainment**	**Scores**
			Developing	1
			Meeting	2
			Exceeding	3
Living out CIP	40	Form Teacher CIP Teachers 6 CIP hours – mandatory (takes up 25% of Civics and Moral Education grade)	**No of hours**	**Scores**
			< 6 hours	0
			6 hours	25
			7 – 20 hours	30
			21 – 35 hours	35
			≥ 36 hours	40
TOTAL POSSIBLE SCORE	100	Holistic Report Card	**Grade**	**Range of Scores**
			A	70 - 100
			B	55 - 69
			C	45 - 54
			D	Less than 45

Table 5: Social Emotional Competencies and Personal Qualities

Values	Matching with the 5 Social and Emotional Competencies Domains	Matching with SEL Benchmarks[4]
Respect	Social Awareness and Relationship Management	2.1, 2.2a
Responsibility	Self Awareness and Self Managemen Relationship Management Responsible Decision Making	1.1b, 1.1c, 1.2b, 1.3 2.2d 3b
Resilience	Self Management Responsible Decision Making	1.2a 3b
Integrity	Self Awareness and Self Management Responsible Decision Making	1.1a 3a
Care	Relationship Management	2.2
Harmony	Social Awareness and Relationship Management	2.2c, 2.3

Term	Groups
1	Self
2	Peers
3	Teachers
4	CHAMPS team to compile score and print CHAMPS report

the Holistic Report Card. Table 5 shows how the personal qualities correspond to the SEL competencies.

To space out the work of the teachers and students, we adopted the following in our implementation. This also provided us with time to train each level of new students as well as new teachers.

Individual Student's SEL Report and e-Portfolio Reflections

Since 2007, the School has used SEL for assessment. Each child is given a SEL report in a radial format as shown in Figure 1. Individual student's reflections are captured in e-portfolio reflections.

A Cohort's SEL Report

At the school-wide level, the SEL scores provide us with information about the cohort's development in the affective domain, measured across time. With a 6-year IP, this becomes useful information for us to better plan programmes for our adolescents and young adults. We

Teacher – Term 3
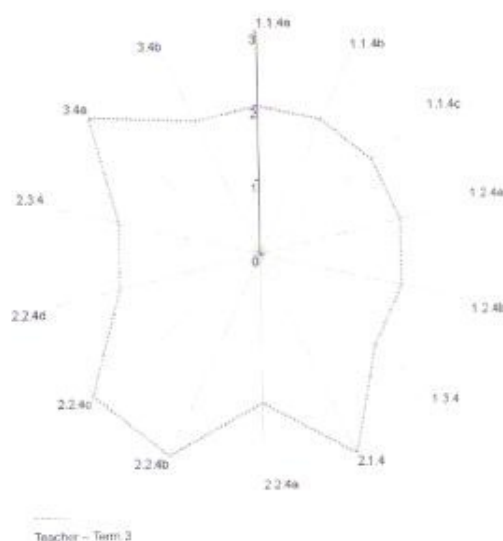
Figure 1 - Individual Student's SEL Report

Social Emotional Learning Competencies	Benchmarks
Self Awareness and Self Management	1.1.4a, 1.1.4b, 1.1.4c, 1.3.4
Self Management	1.2.4a, 1.2.4b
Social Awareness and Relationship Management	2.1.4, 2.3.4
Relationship Management	2.2.4a, 2.2.4b, 2.2.4c, 2.2.4d
Responsible Decision Making	3a, 3b
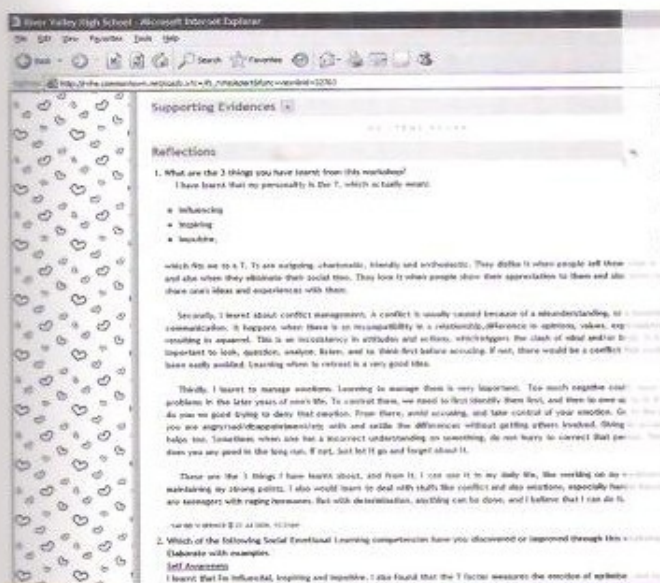
I learnt about conflict management. Conflict happens when there is an incompatibility in a relationship, difference in opinions, values, expectations, etc, resulting in a quarrel... It is super important to look, question, analyse, listen, and to think first before accusing. If not, there would be a conflict that could have been easily avoided. Learning when to retreat is a very good idea.

– Yip Bei Yi

also used the information for our school's annual self-assessment.

Interpretation and Use of SEL Scores

Form teachers and Level Committees use data from the Holistic Report Card and the online SEL scoring and profile system to identify the gaps in students' social-emotional development. SEL scores of Year 2 to Year 4 students in 2007 were used as part of their goal-setting focus in Term 1. Students also worked out strategies for SEL using case studies during their CHAMPS lessons.

Indicative scores of the respective levels provided the considerations and directions for planning CHAMPS lesson and enrichment programmes. They not only acquired knowledge and skills to overcome their weakness in the identified competencies, but also learnt to understand themselves, to interact effectively with others and to cope with future challenges. For example, in 2008, a Conflict Management Workshop was planned and implemented for the Year 2 to address the gap under Relationship Management based on the trends and patterns identified through their SEL competencies attainment scores in 2007.

Feedback on SEL Implementation

Our SEL journey from 2006 till 2008 has given us valuable feedback to its review and implementation. Most found the SEL scoring useful. The students generally liked the idea of such an assessment as it was a fun and it was a good way to know

how people viewed them and how they viewed themselves in certain aspects.

The feedback we obtained from the teachers and students included the following broad categories:

a. Collecting evidence for assessment requires first hand interaction. It is important that sufficient time and opportunities be given to both the assessor and the student being assessed.

b. Assessment may interfere with the relationships they have cultivated. For peer assessment, students reflected that for this assessment to work, the peers must be very familiar with the students that they are being assigned to assess. Others also

remarked that they were not able to give a non-biased assessment without considering the implications of a negative assessment. Some also felt that it was difficult to observe tacit thinking and decision making process.

c. Difficulty in achieving common understanding of the language used in the benchmark. Students may understand the phrases but to score under the same context was a challenge. Bridging inter-assessor reliability became an issue that we had to grapple with.

The feedback collected proved valuable for the review and improvement of the SEL implementation in the school.

Reviews and Improvemens

The feedback given at the review conducted immediately after the pilot in 2006 was that the language used for the lower secondary was beyond the reach of the students. We then simplified the rubrics so that it was easier to score. We also revised the reporting of CHAMPS grade incorporating development in the moral domain, SEL competencies and participation in CIP.

In 2007, we adopted TfU as a school-wide pedagogy for our CHAMPS. This was aligned with our entire RVIP. Having familiarity with the academic programme, the teachers found the adoption for the non-academic domains manageable. Like our other school programmes, we adopted the school-wide practice of doing our mid-year and end-year review to ensure that the deliverables are met and adjustments made for improvements.

In 2008, the planning and implementation of development and intervention programmes took into account the data collected on CHAMPS grade and SEL. We also spent time to refine our SEL rubrics for the pre-university students,

in time for the start of our Year 5 (Grade 11) programme in 2009. This extension and regular review of the CHAMPS programme ensured that the programme remain relevant and effective for the older students.

With an established system in place, our next plan is to include parents in SEL reporting. This will definitely provide a more encompassing assessment of each child's social and emotional development and also provide a reference to our parents in guiding their child in the affective domain.

Conclusion

In conclusion, RVHS is committed to developing each child holistically, with a strong moral character and a disposition to serve the community. Through the use of the 'Teaching for Understanding' framework and a clearer articulation of our CHAMPS curriculum delivery which leverages on the school-based SEL benchmarks and rubrics, we believe that this improved curriculum will meet the

outcomes that we want to see in our graduates.

Reference

1. CHAMPS is an acronym for Character Education, Health Education, Active Citizenry, Moral Philosophy, Physical Education and Student Leadership Development
2. The SEL goals, standards and benchmarks have been developed by MOE to guide schools in their teaching of SE skills. It also serves as a means for assessment and monitoring of learning. The goals, standards and benchmarks document can be found in the MOE intranet (http://intranet.moe.gov.sg/guidancebranch/sel_website/standards.htm).
3. The SEL goals, standards and benchmarks have been developed by MOE to guide schools in their teaching of SE skills. It also serves as a means for assessment and monitoring of learning. The goals, standards and benchmarks document can be found in the MOE intranet (http://intranet.moe.gov.sg/guidancebranch/sel_website/standards.htm).
4. Benchmarks in the SEL goals, standards and benchmarks document are represented by numbers and letters (e.g. 2.2a) that reflect the goals, standards and developmental level depicted by the various benchmarks.

Tan Chuan Long & So Kah Lay, River Valley High School.

The Effect of Outdoor Education on Students' Social Emotional Competencies Development and Engagement in the Classroom

Hanif Abdul Rahman

Abstract

It has been commonly accepted that Outdoor Education (OE) produces positive effects in participants due to exposure to adventure programmes and activities intended to build character through enhancing self-discovery. While most OE programmes in Singapore schools occur in the form of camping and trekking, not much has been done to study the effectiveness of a school-based regular programme on secondary school students. This study investigated the effects of an eight-week OE programme, on the development of Social Emotional (SE) competencies – Self Awareness, Self Management, Social Awareness, Relationship Management and Responsible Decision Making. Each lesson lasted an hour and was held during the school's secondary three Physical Education (PE) curriculum. Forty students (22 from Express and 18 from Normal courses; 23 male and 17 female) underwent this programme, with an SE competencies questionnaire being administered before and after the programme. Quantitative results indicated medium to large effect on the Express course but negligible effect on Normal course students. Comparing genders, slightly more statistical significant effects were seen in males than in females. Addressing the secondary hypothesis of this study that SE competencies support classroom engagement, significant correlations were also obtained. Supported by interviews on students and teachers, as well as students' weekly reflections, qualitative results indicated that the programme yielded the said desired outcome, as well as supported students' engagement in classroom.

Introduction

The aim of a Physical Education (PE) programme is "to develop in each student the ability to perform and enjoy a variety of physical activities with understanding [and] ... maintain physical health and fitness through regular participation in physical activities" (Singapore Ministry of Education – MOE, 2006). Hence, PE teachers should seek to equip each of their students the necessary attributes to adopt a physically active and healthy lifestyle, especially long after students leave school. While lifelong adoption of physical activity appears to be an obvious objective, teachers should not forget that desirable interpersonal skills are as important a focus.

Issues such as the extent of the effectiveness of OE towards students' holistic development and the actual measurable outcomes of OE, have often been merely accepted. Schools are jumping on the bandwagon by introducing OE programmes to students, driven in part by MOE's emphasis on character development and mental toughness in students (Wang, Liu & Kahlid, 2006), without fully understanding the true

benefits, if any, to their students. Sizeable financial resource are needed either to run OE programmes in school, or to engage external organisations to deliver such programmes in or out of school. As such, how justifiable is the claim that the values of OE extend beyond the activities itself? Will the students effectively internalise the learning, such that the lifeskills learnt can be transferred to the other domains of their life, such as in the classroom setting?

This study thus attempted to investigate the effect of Outdoor Education (OE) on the development of students' Social Emotional (SE) competencies (MOE, 2008a). While it has been commonly accepted that OE produces positive effects in participants due to exposure to adventure programmes and activities intended to build character through enhancing self-discovery, most OE programmes in Singapore schools occur in the form of trekking and camping. Very little has been done to study the effectiveness of a school-based regular OE programme on secondary school students, especially in terms of SE Learning (SEL). Previous studies in Singapore were done on specific short-term programmes (Ho, 2003; Tan, 2005; Wang, Liu & Kahlid, 2006). In this study, efforts were also made to draw a link between the development of SE competencies (as an outcome of the long-term OE programme), to the student's classroom engagement.

Thus, the following research question was asked: "Does Outdoor Education develop Social Emotional competencies that in turn support students' engagement in classroom?", with the following hypotheses:

1. Outdoor Education leads to Social Emotional competencies development

2. Social Emotional competencies support students' engagement in classroom.

Literature Review

Experiential Learning is education that occurs as a direct participation in the events of life. The most established model proposed by Kolb (1984), states that the learning process begins with an experience ('concrete experience'), followed by reflection ('reflective observation'). The reflection is then assimilated into a theory ('abstract conceptualization') and finally these new (or reformulated) hypotheses are tested in new situations ('active experimentation'). The model is a recurring cycle within which the learner tests new concepts and modifies them as a result of the reflection and conceptualization.

Bruner (1966) advocates, through his Constructivist Theory, that the emphasis of learning is placed on the student rather than the teacher. It is the learner who interacts with objects and events and thereby gains an understanding of the features held by such occurrence. The learner, therefore, constructs his own conceptualizations and solutions to problems. Learner autonomy and initiative is accepted and very much encouraged. Constructivists view learning as the result of mental construction. Students learn by fitting new information together with what they already know and understand. Referring back to the experiential learning cycle, by undergoing the relevant and appropriate experience, participants will be able to construct authentic personal meaning, and hence conceptualise a personal assertion. What is needed now is the motivation to actualise this personal assertion into active experimentation.

Self Determination Theory (SDT) (Deci & Ryan, 1985) may possibly be able to explain this volitional push. As a theory of motivation that accounts for psychological needs that offer an expansive view of motivated behaviours, SDT states that the three psychological needs for motivated behaviours are: autonomy, competence and relatedness. The need for autonomy is the need to feel ownership over one's behaviour (Ryan, 1993), while the need for competence is defined as the need for producing desired outcomes and to experience effectiveness (Deci, Vallerand,

Pelletier & Ryan, 1991), and the need for relatedness refers to the social need to feel that one can relate to others around him or her (Ryan, 1993). These needs are critical for the development of self (Ryan & Deci, 2000). With the absence of external pressure, people feel autonomous as they experience choice over their actions (Deci & Ryan, 1987). On the other hand, when people are controlled into doing certain things, they may perceive themselves as incompetent. Therefore, "if the need for autonomy, competence and relatedness are satisfied, intrinsic motivation will increase" (Wang, Ang, Teo-Koh & Kahlid, 2004, p. 58), thus contributing toward the attainment of learning outcomes.

Lave and Wenger (1991) mooted their Theory of Situated Learning (TSL) that "expand[s] our attention from the learner as an 'isolated' individual to include a focus on the social settings that construct and constitute the individual as a learner" (Kirk & Macdonald, 1998, pp. 379-380). Rather than looking at learning as the acquisition of certain forms of knowledge through isolated cognitive processes and conceptual structures, the emphasis is placed on social engagements which will provide the genuine environment for learning to take place.

The student has been "correspondingly transformed into a practitioner, a newcomer becoming an old-timer, whose changing knowledge, skill and discourse are part of a developing identity – in short, member of a community of practice. [The student] is both member of a community and agent of activity" (Lave & Wenger, 1991, p. 122). The activities of a community of practice provide students with a framework for making sense of the specific sphere of life. The social and cultural contexts in which a community of practice exists and to which its activities contribute, have a significant influence on what is learned and how learning takes place. This theory provides a valuable mindset for enhancing the design and implementation of learning experiences (McLellan, 1996).

SEL, as the term suggests, is the process through which students learn to recognise and manage emotions, care about others, make responsible decisions, behave ethically and responsibly, develop positive relationships and avoid negative behaviours. Beyond just these skills outcomes, the benefits of SEL extend from the socially acceptable behaviours into the academic spheres. Key findings linking SEL to academics include: improving academic performance and educational outcomes, promoting deeper understanding of subject matter, helping students learn well with others, increasing student engagement in school, as well as decreasing behaviours that interfere with learning (CASEL, 2008)

The major premise in the development of SE competencies through OE's theoretical framework is that learning is an active process in which students constructs new ideas or concepts based upon their current and past knowledge. In constructivist thinking, learning is affected by the context and the beliefs and attitudes of the learner. Students are encouraged to invent their own solutions and to try out possible propositions, as in the strategizing of alternative approaches towards better self and team interpersonal skills. They are given the opportunity to build on prior knowledge. Therefore, with the right amount of facilitation on the part of the teacher, students will be lead to reflect and 'rediscover' themselves, with regards to their personal experience in relation to the social environment they are in.

Davidson (2001) found OE to be potentially valuable as a holistic and lifelong activity that enhances the capacity to enjoy and engage in life. It is a holistic form of education that can assist in educating students as a whole; academically, physically, emotionally, socially and psychologically (Davidson, 2001; Gray & Perusco, 1993; Hattie, Marsh, Neill & Richards, 1997; Marsh & Richards, 1998). Meta-analysis conducted by Cason and

Gillis (1994) on 43 outdoor programmes, based solely on adolescents, found that participants became more internal in their locus of control, and had more positive self-concept and better academic achievement after the completion of adventure programmes. Another meta-analysis conducted by Hattie, Marsh, Neill and Richards (1997) with a total sample size of 12 057 participants, also established the positive impact of the experience gained from outdoor adventure programmes on leadership, self-concept, academic achievement, personality and interpersonal relationship.

Ho (2003), in her study on primary five students in Singapore who underwent an OE programme, reported that, due to the short duration, there was no significant difference between the experimental and control groups in terms of their overall Life Effectiveness Questionnaire scores (LEQ; Neill, Marsh & Richards, 2003). McLeod and Allen-Craig (2007) also reported that significant difference in life effectiveness was found between boys who participated in two OE programmes compared to only one. These are consistent with that reported by Hattie, Marsh, Neill and Richards (1997). Hence, in order to have sustained deep learning, the current common school practice in Singapore of having camps (and in most cases, just one cohort camp per year, lasting just mere three to four days) may not be sufficient at all. There is a strong need for students to undergo a long-term programme in order to have enhanced learning.

Method

Participants

Two classes of secondary three students, Secondary 3E3 (Express course) and 3N2 (Normal course) were selected to participate in this study. While this was a convenient captive sampling, the decision to specifically choose these two classes was also an attempt to form a representative sampling of the school's secondary three cohort, as these two classes were generally of middle ability within the Express and Normal courses. In Secondary 3E3, half the class (n=22; 11 male and 11 female) served as the experimental group that underwent the new eight-week OE.SEL@ZSS programme specially designed to enhance the development of SE competencies, while the other half (n=21; 10 male and 11 female), served as control group by undergoing the regular OE programme (consisting of four lessons of rockclimbing and four lessons of orienteering, focussing on just achievements). Similarly, there were 18 students (12 male and 6 female) from Secondary 3N2 who were in the experimental group and 21 students (13 male and 8 female) were in the control group. The effort to have all groups concerned to have almost equal number of male and female was also to ascertain stratified sampling of gender.

Programme

The two OE programmes were conducted concurrently. Both groups were taught by PE teachers with similar teaching experience. The experimental group students who underwent the OE.SEL@ZSS programme first had the opportunity to experience rockclimbing for four weeks. Besides scaling the rockwall which was of varying difficulties, students were also equipped with belaying and safety skills. They learnt to work as part of team, to be responsible for their peers' safety and to trust each other. Whether climbing or belaying, students would be guided to build not only their self awareness and self management competencies, they were also lead to think more about the people around them – thus, developing their social awareness and relationship management competencies. In addition to rockclimbing, students also have to build on team synergy while doing the high ropes elements, Vertical Playpen and Paired Leap of Faith, specially selected to bring out the development of teamwork. On top of this, the experience gained through exposure to the diverse orienteering challenges (from the simple

treasure hunt-like activity, to the complex use of grid reference and pacing) would also develop relationship management between peers.

Throughout the programme, students would constantly have to learn to apply appropriate decision-making skill, thus leading them to make informed and responsible decisions that would not only affect their personal well being, but also their relationship with peers and teachers. Efforts were made to deliver the lessons utilising the five pedagogical principles for SEL (MOE, 2008b). Facilitation of learning was extremely key in this programme. Teachers would get students to share their experiences with each other. Assumptions were questioned, in order to elicit deeper learning and understanding. In addition, a reflection journal was also maintained by each student, detailing their SE growth throughout the programme. In order to make deliberate attempts to get the students to acquire the desired benchmarks (MOE, 2008b) for upper secondary students, during lessons, the teacher would also make specific references to the SEL benchmarks for the various goals (see Table 1).

Procedure
An SE competencies questionnaire was administered to both the experimental as well as control groups, before the commencement of the respective OE programmes. An MOE PETALS™ (MOE, 2007) questionnaire, that measures the five dimensions of learning and teaching that contribute to engaged learning (P – Pedagogy that considers students' readiness to learn and their learning styles; E – Experience of learning that stretches thinking, promotes inter-connectedness and develops independent learning; T – Tone of environment that is safe, stimulating and which engenders trust; A – Assessment practices that provide information on how well students have performed and provide timely feedback to improve learning; L – Learning content that are relevant and meaningful) as well the three types of students' engagement in classroom – Affective engagement (GA), Behavioural engagement (GB) and Cognitive engagement (GC) (MOE, 2007), was also conducted as part of a larger TLLM *Ignite!* study that examined students' engagement in school-based curriculum innovation. These administrations as well as the conduct of the programmes were done concurrently. Throughout the programme, short interviews were conducted with the experimental group students, either individually or in pairs at most. Their academic classroom teachers were also invited to give any feedback on any noticeable change in behaviours seen in these students in class. At the end of the eight-week period, the same SE and PETALS™ questionnaires were administered again to both groups. Some classroom teachers were also interviewed.

Table 1: SEL goals and competencies

Goal	Description	Competencies
1 (SS)	Develop self-awareness and self management skills to achieve personal well-being	(i) Self awareness (ii) Self management
2 (SR)	Develop social awareness and manage relationships for one's social well-being	(iii) Social awareness (iv) Relationship management
3 (SDM)	Make responsible decisions and act on them	(v) Responsible decision making

Measures

The independent variable in this study was the *OE.SEL@ZSS* programme, with the two dependent variables being (1) SE competencies, and (2) students' engagement in classroom. Within possible means, reliability and validity issues were sufficiently addressed. The designing of the programme was in consultation with the MOE Co-Curricular Activities Branch (OE Unit), which consists of specialist education officers for matters pertaining to OE. Expert advice was also sought from the MOE Guidance Branch (GB), which consists of specialist education officers for matters pertaining to SEL. Careful attention was given to the manner in which there was meaningful flow to the crafted curriculum, starting from self awareness, moving towards relationship management, while maintaining responsible decision making throughout. Site visit to the school was also done by officers from these branches, in order to ensure that lessons were conducted as meaningfully as possible.

Construct validity was also attempted in the crafting of the 28-item SE competencies questionnaire. Again, several consultation sessions were held with the two branches concerned, as well as curriculum officers from the MOE Curriculum Policy and Pedagogy Unit (CPPU). Before the final version of questionnaire was confirmed, a small-scale pilot run was done on five random secondary three non-participants, to ascertain that the words could be clearly understood.

As seen in Table 2, Cronbach alpha obtained from the pre-test, showed that there were satisfactory internal consistencies in all factors tested. In addition, the PETALS™ questionnaire that measured students' engagement in classroom had also been tested for reliability and validity by MOE CPPU.

Data Analysis

Mean scores and standard deviations were calculated from questionnaire items that address each of the three factors (SEL goal) as well as the overall SE competency, for each of these eight groups:

1. Express and Normal (Experimental versus Control)

2. Male and Female (Experimental versus Control)

These mean scores were calculated for both the pre as well as post-tests. Thereafter, the effect sizes between the respective groups were calculated using the standardised mean difference method. For the post-test, Pearson correlation values were also calculated between the three SEL goals (including overall SE competency) and PETALS™, as well as their correlations with the three types of students' engagement in classroom.

Results

Descriptive Statistics

Table 3 and 4 showed the mean scores and standard deviations of the various factors

Table 2: Internal consistency of the three identified factors (n=82)

Factor (SEL goal)	No. of items	Cronbach alpha	Sample item
SS	12	.85	When I look back at past incidences, I am able to strategize on how to do it better in the future.
SR	12	.87	I have learnt to value everyone's contributions no matter who they are or how small their contributions may seem.
SDM	4	.63	I think about the consequences, before taking actions.

Table 3: Mean score (and standard deviation) of the 3 SEL goals – by course

SEL Goal	Course							
	Express				Normal			
	Experimental		Control		Experimental		Control	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
SS	4.0 (0.48)	4.2 (0.55)	3.9 (0.51)	3.9 (0.87)	3.9 (0.60)	4.0 (0.58)	3.9 (0.87)	4.0 (0.75)
SR	4.5 (0.54)	4.9 (0.22)	4.3 (0.57)	4.4 (0.43)	4.2 (0.63)	4.4 (0.63)	4.2 (0.85)	4.4 (0.94)
SDM	4.5 (0.75)	4.7 (0.55)	4.4 (0.52)	4.2 (0.63)	4.0 (0.63)	4.6 (0.74)	4.0 (0.56)	4.5 (1.07)
Sall (overall)	4.3 (0.49)	4.6 (0.36)	4.3 (0.51)	4.2 (0.44)	4.0 (0.53)	4.3 (0.59)	4.0 (0.70)	4.3 (0.86)

Table 4: Mean score (and standard deviation) of the 3 SEL goals – by gender

SEL Goal	Gender							
	Male				Female			
	Experimental		Control		Experimental		Control	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
SS	4.0 (0.53)	4.0 (0.63)	3.9 (0.79)	3.9 (0.72)	3.9 (0.55)	4.3 (0.43)	4.0 (0.61)	4.0 (0.49)
SR	4.2 (0.54)	4.6 (0.55)	4.1 (0.82)	4.2 (0.73)	4.6 (0.56)	4.9 (0.46)	4.5 (0.52)	4.6 (0.64)
SDM	4.0 (0.66)	4.6 (0.65)	4.1 (0.63)	4.2 (0.90)	4.6 (0.71)	4.7 (0.63)	4.3 (0.47)	4.5 (0.85)
Sall (overall)	4.0 (0.49)	4.4 (0.53)	4.0 (0.67)	4.1 (0.70)	4.4 (0.53)	4.6 (0.43)	4.2 (0.44)	4.4 (0.63)

for all the groups previously mentioned. Effect sizes between comparable groups were subsequently calculated. As seen in Table 5, during pre-test, there was already in existence a small statistical significant difference between the experimental and control groups of the Express course students, in terms of all the SE goals. This was evident through the scores of .23 (SS), .30 (SR), .23 (SDM) and .31 (Sall). However, it should also be noted that these scores were very close to the negligible value of less than .20. After the programme, the post-test scores were .50 (SS), 1.23 (SR), .82 (SDM) and .97 (Sall). With the exception of Goal 1 (SS) which had medium statistical significant difference, all the other three recorded large statistical significance. This result clearly indicated that the OE.SEL@ZSS programme had caused positive impacts on the SE competencies of these students.

On the other hand, the same cannot be said for the Normal course students. Although all pre-test scores indicated that the experimental and control groups were statistically the same, they remained the same even after the programme. However, qualitative data obtained from interviews with teachers suggested that there were forms of SE competencies development.

For example, academic Teacher A said this of her 3N2 class,

"Sometimes, when I get angry with the class, some of them will tell me nicely, *"Cher (Teacher), don't be angry lah. Relax! OK, OK, we do [our work] now. We do your work."* They are able to understand why I am displeased."

This observation exemplified a sense of social awareness, translated to self awareness and management, through responsible decision making.

Student W, from 3N2 also mentioned this regarding one of the paired activities in the OE.SEL@ZSS programme, "I do not

Table 5: Standardised Mean Difference (Effect size) of Express and Normal course

SEL Goal	Course			
	Express		Normal	
	Pre	Post	Pre	Post
SS	.23	.50	-.02	.07
SR	.30	1.23	-.02	.07
SDM	.23	.82	-.04	.07
Sall (overall)	.31	.97	-.03	.08

Table 6: Standardised Mean Difference (Effect size) of male and female

SEL Goal	Gender			
	Male		Female	
	Pre	Post	Pre	Post
SS	.15	.09	-.03	.56
SR	.06	.59	.35	.33
SDM	-.14	.47	.64	.19
Sall (overall)	.04	.44	.35	.34

want to disappoint [*Student X*]. We [had] already plan[ned] the strategy. He trust[s] me, so I must work together". *Student X* said this in response, "This is what you call pair activity!" Here, the *Vertical Playpen* activity that *Students W* and *X* underwent were able to bring out elements of social awareness and relationship management, while exercising responsible decision making throughout.

In Table 6, the male pre-test scores indicated that the experimental and control groups were statistically similar. After the programme, the effect size was still negligible for Goal 1 (SS). But, Goal 2 (SR) recorded medium statistically significant effect size, while Goal 3 (SDM) and overall SE competency (Sall) both had small statistical significance. Again, it should be noted here, that both of these scores were close to the medium score of .50. Therefore, it can be said that the programme was able to have limited

impact on the male students as there were small to medium effect size during post-test.

However, the same cannot be said for the female students. Only Goal 1 (SS) had a negligible pre-test effect size (-.03) that became medium (.56) at post-test. Nevertheless, some of the female students interviewed exhibited SE competencies development. For example, *Student Y* said, "After I leap [*at the Paired Leap of Faith*], I didn't leave my partner behind. We got strategy. I was supposed to help her across. Although I was very scared on the plank, I must still keep my promise." Hence indicating that there were again anecdotal evidences of SE competencies development, especially in Goal 2 and 3, as seen in the example above.

As seen in Table 7, the correlational studies done between SE competencies and the five dimensions of engaged learning showed that there were significant correlations between all the PETAL dimensions and SE Goal 1 (SS), Goal 2 (SR) and overall SE competency (Sall). Goal 3 (SDM) recorded negligible significant correlation with all five dimensions. The highest correlation of .67 was between Learning Content (L) and Goal 1 (SS).

Student Z remarked that,
> "Before [rock]climbing, *Miss S* (PE teacher) made me set my own goal... where to climb. She said that we must be realistic, but at the same time try to stretch our potential. After climbing, she asked me how I feel about climbing higher than my target. I said happy *lor*."

Upon probing this student further, she mentioned that,
> "Actually, she (*Miss S*) made me see that setting goals is important in life. At the same time, I must know my

Table 7: Post-test Pearson Correlation between dimensions of engaged learning and SEL goals

Dimensions of engaged learning	SS	SR	SDM	Sall
P	.55**	.39**	.20	.38**
E	.52**	.35*	.15	.33*
T	.60**	.39**	.22	.39**
A	.58**	.48**	.16	.43**
L	.67**	.52**	.22	.49**

*Correlation is significant at the .01 level (2-tailed)
*Correlation is significant at the .05 level (2-tailed)

Table 8: Post-test Pearson Correlation between types of students' engagement and SEL goals

Types of students' engagement	SS	SR	SDM	Sall
GA	.58**	.51**	.23	.48**
GB	.53**	.43**	.17	.39**
GC	.65**	.53**	.16	.47**
GG (overall)	.63**	.53**	.20	.48**

*Correlation is significant at the .01 level (2-tailed)
*Correlation is significant at the .05 level (2-tailed)

own ability too. My target just now was [just] to follow my friend. Actually, I think I'm better (more capable) than her. This target is for me, not other people. ...From today's lesson, I realise [that] setting target is important so that I can try to be better... Can also apply in class, CCA and everything."

This episode demonstrated how the authentic learning content of the lesson was able to make students more aware of their abilities, and manage strategies towards self-improvement.

Similar outcomes were obtained for correlational studies between SE competencies and the types of students' engagement in classroom, as seen in Table 8. Again, Goal 3 (SDM) showed no significant correlations with any types of students' engagement.

Nevertheless, *Teacher B* made this observation regarding affective engagement seen in her 3N2 class,

"The class is generally able to relate to what I am teaching in class. They are more involved in general discussions (now). Some gave personal comments voluntarily. Also, when I go into [the] class, they are not as slow in getting ready as they were in the beginning of term 3."

In terms of behavioural engagement seen in 3E3, *Teacher C* mentioned,

"Recently, I noticed that they are more well-behaved and very attentive in class. So much so that I enjoy teaching them, and I can finish the syllabus smoothly with them. Every lesson, all the students have their materials, books and notes with them. Of course, there are some weak students amongst them academically, but their pleasant nature makes up for just about anything."

Another *Teacher D* made this observation regarding cognitive engagement seen in 3N2,

"Generally, the class is better behaved and their attention span is longer especially towards the end of term 3 and in term 4. A majority, even the seemingly lazy ones are more actively involved in attempting the practice papers given to them in class."

These statements certainly supported classroom engagements taking place.

Discussion

Does Outdoor Education develop Social Emotional competencies that in turn support students' engagement in classroom? As highlighted earlier, there were statistical medium to large effects on the Express course but negligible effect on Normal course students. Comparing genders, slightly more statistical significant effects seen in males than in females. Addressing the secondary hypothesis of this study that SE competencies support classroom engagement, significant correlations were also obtained. However, interview out-comes were able to provide qualitative support for favourable findings.

A possible explanation to the findings that less significant effects were observed in girls, could be related to the level of maturity attributed to female adolescents whose emotional development may be ahead of male adolescents, to begin with. From Table 5, during pre-test, the mean Sall score for female experimental group was 4.4, compared to 4.0 for male. Female control group's score was 4.2, compared to 4.0 for male. This finding is consistent with that of Tan (2005), where girls had higher LEQ scores than boys pre and post an Outward Bound Singapore course.

This study had shed some light on how SE competencies development can be done through PE, and specifically OE. It also showed the possibility of transmitting SEL through outdoor education, an authentic education beyond just mere

outdoor activities or pursuits. The enhanced competencies development was also shown to have correlation with the quality of classroom learning environment, specifically in terms of students' engagement in learning.

However, more extensive research is needed to further add value to this field. A pilot study involving more participants can be done on the questionnaire. Further amendments can be made to finetune the items so as to accurately measure what were intended. This will certainly add more consistency and reliability to questionnaire. Not only will having a reliable questionnaire add validity to the research result, this questionnaire may also be used in assessing other non-OE SEL programmes.

Having more participants involved will also add more external validity. In addition, having more participants will also allow further levels of analysis. For example, gender differences within each course can possibly be investigated. This knowledge will enable teachers and curriculum designers to produce differentiated curriculum specific to the intended groups of students.

This study investigated comparisons between two long term programmes, vis-à-vis one which was crafted with a deliberate attempt to have SEL. To further substantiate this positive effect, comparison should also be done with a short term programme. Only then, will we be able to see if the amount of SE competencies development was truly due to the long term programme.

Time series study can also be conducted, to see if there are indeed any evidences of lasting effects of the programme. While other literature had shown that long term programmes had better effects, little has been done to see if these effects last. If proven otherwise, strategies can then be mapped on how to make the learning a more lasting one.

A more extensive qualitative study can also be carried out to examine deeper into the cause (or, the lack) of actions. This will be highly useful in unravelling the possible reasons behind the statistically negligible effect of the programme on Normal course students in this study. Further explorations can then be made to see how motivational factors had interacted with the outcomes.

Conclusion

More than just addressing the physical or psychomotor aspect of the subject, PE lessons also stress upon the cognitive and affective development of students. In addition to developing the skills to maintain a lifelong involvement in physical activity, students will also be given the opportunity to develop cognitively as well as affectively. The affective domain contains many facets of development such as moral and character development (Gibbons & Bressan, 1991). This OE setting in PE brings out numerous situations where students must make decisions about their individual needs, rights, and responsibilities, and also with relations to those of other students. As these occurrences arise, teachers must determine the most fitting strategy for addressing some of these moral issues, and hence, the character development of students (Solomon, 1997).

In experiential learning, one learns from experience when he assesses the experience, assigns his own meaning in terms of his own goals and expectations. The experience takes on added meaning in relation to other experiences. All these are then conceptualized, synthesized and integrated into the individual learner's system of constructs which he imposes on the environment, through which he views, perceives, categorizes, evaluates and seeks experience. By energizing the heart and mind through stimulating the environment, OE emphasizes the active role of the student in building or constructing their own SE understanding

and competency, especially towards character development.

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Drama in Education for Social and Emotional Learning

Nazreen bte Osman

Preparing Our Young for the 21st Century

To prepare our young for the 21st Century is to provide them with a holistic education, equipping them with skills such as problem solving, critical thinking, creativity, communication and collaboration, and self confidence. Developing such 21st Century skills in pupils invariably necessitates their acquisition of social and emotional competencies, that is, skills, knowledge and dispositions that will help them face future challenges.

The Ministry of Education's Social and Emotional Learning (SEL) framework[1] is aimed at supporting the holistic development of pupils. The focus of the framework is the development of social and emotional competencies in pupils. The teaching and learning of these competencies, which are anchored in sound moral values, take place in a caring and supportive school environment.

In this article, I would like to present how drama is used as a vehicle to promote the social and emotional competencies and also how it is adopted as an approach in a character development programme within a primary school.

First Phase

Drama as a Vehicle to Promote Learning

I would like to first take a look at the changing educational landscape. With

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[1] Social and emotional learning (SEL) refers to "the acquisition of skills, habits and dispositions that will help them establish positive relationships, and face up to challenges" (CASEL cited in MOE, 2008). The Ministry of Education SEL framework has specifically five domains of social and emotional competencies: self awareness, self management, social awareness, relationship management and responsible decision-making.

Teach Less, Learn More (TLLM), the Ministry paved the way for catalytic changes in the educational system. Tampines Primary School was selected as one of the TLLM Prototype Schools in 2006.

TLLM is about teaching better, to engage our learners and prepare them for life, rather than teaching more, for tests and examinations. At Tampines Primary, the five domains of school's teaching and learning framework[2], namely, 'learning outcomes', 'content', 'process', 'intellectual climate' and 'social-emotional climate', are consciously planned for in every lesson to ensure quality teaching and learning. In adopting a TLLM approach in teaching and learning, teachers consciously plan lessons to accommodate the varied methods of teaching: group work strategies, experiential and inquiry-based learning, to provide holistic development for the child. They use varied methods of teaching for effective and engaging learning, mindful that a child understands a concept not just through completing worksheets but through experiential learning and inquiry-based learning.

The school adopted a TLLM activist structure. The TLLM activist will role model quality teaching through pedagogical tools. In the area of Drama, the role of the Drama Activist is to use drama as pedagogy in the delivery of core subjects like the English Language and Science. The Drama Activist plans and delivers the lessons for Primary 3 to 5 levels, using drama as a tool in the delivery of subject matter and skills in Social Studies (SS), Science and English (EL). Each drama lesson goes on weekly for an hour during the SS or EL curriculum time. Using the school's teaching and learning framework, drama lessons were planned according to the domains of the school's framework for quality teaching and learning.

At Tampines Primary, the EL teachers who observed the drama lessons have given positive feedback about how drama is useful in developing the pupils' wellbeing and character. They agreed that drama

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[2] The school's framework for teaching and learning is known as "Principles of Effective Teaching and Engaged Learning" (PoETEL).

looked into the emotional being and self-confidence of the pupils as they become more willing to speak up and share their views in a comfortable and safe environment. By interacting with each other, pupils get to share their learning experiences and exchange ideas, thus building on each other's knowledge and making sense of their work.

Using Drama to Promote Social and Emotional Learning

Drama provides a powerful mode of expression. Strategies used like interactive games, role play and reflective dramatisations arouse pupils' imagination and support experiential learning.

Specifically, drama in education is used as pedagogy to promote social and emotional learning for two main reasons. Firstly, drama learning provides a **context** where pupils can imagine and feel safe to take creative risks. Pupils explore solutions to a problem and they learn to put themselves in others' shoes. The creative process of exploration and reflection in drama allows pupils to be active learners. The drama learning process nurtures and develops both individual and group skills and enhances the pupils' abilities to communicate their ideas, images, and feelings towards others through dramatic action.

Secondly, drama helps pupils to build imagination in a social context and to develop the ability of pupils to **connect imagination to action**, not just in a drama, but every day. The pupils involved in a drama lesson can discover themselves and develop shared meaning of the story. With the teacher as a facilitator, the drama strategies employed build knowledge, skills, dispositions, and feelings through interaction and collaboration with others. Gradually, these qualities become integrated into private thought, covert behaviours, and a shared consciousness. Having a shared consciousness, pupils will develop self

awareness and social awareness, to think and to act responsibly. They learn to interpret human interactions and hence, raise their sense of self as well as their relationships with others.

In drama, pupils are immersed in the context provided and they involve themselves in critical and reflective talk. Pupils may state their intention in role and say their opinion and what they feel and understand through the drama activities. Usually in drama talk, pupils are involved in a problem in a story that requires them to work together to problem solve. Vygotsky (1976) (as cited in Hertzberg, 2004:43) terms drama talk as 'outer speech'. The 'outer speech' helps to develop a child's 'inner speech'. The 'inner speech' consists of abstract thoughts and mental sense units between self and self that promotes and/or are the functions of thinking and problem solving. Drama involves interaction, collaboration and reflection. Hence, when pupils reflect and think for themselves, they are being more self-aware.

Drama as a pedagogy can therefore serve as a vehicle to enhance pupils' development of self awareness by allowing room for pupils to create. Gladding (cited in Grimsley, 1961) mentioned that creative expression provides avenues for bringing thoughts and emotions into awareness in ways that differ from more traditional rational, linear approaches. As Gladding pointed out, expressive arts can help "draw people out of self-consciousness and into self-awareness by having them express themselves in a symbolic manner" (p. 10). Creative modalities enable people to express themselves in multiple ways, leading to increased understanding of themselves and their world.

According to Way (1967), drama overcomes self-consciousness, an uncomfortable consciousness of one's self, in favour of a healthy consciousness of self. The process leads to an acceptance of self, an awareness of personal resources,

and an awareness of the internal and external influences on living. Way viewed a positive self-concept as a prerequisite to an individual's development of healthy peer relations and to the development of other personal attributes.

Children use the resources (tools) that are offered to them to change themselves internally (Wood & Attfield, 1996). Their imaginative use of tools and artefacts is well recognized, for example when a wooden stick becomes a toothbrush or an empty mug becomes 'orange juice'. Wood and Attfield show how positively and easily interacting peers respond to the changing role of objects as a natural feature of their play. These resources become a crucial link between the child's internal developmental processes and the society or community around them, in this case, their peers and the adult educators. When pupils find meaning in the use of objects when they are in role, they will be more aware of what they say and what they are doing. Pupils will interact with each other especially when they have a purpose to find out or to

collectively imagine in that certain time period of drama.

SECOND PHASE

Drama and Character Education

The school conducted a research in 2006 and looked at a series of drama lessons using the school's teaching and learning framework and its impact on pupils' engagement in learning. The study showed that the good rapport build through drama has created a positive social-emotional climate and allowed pupils the freedom to speak up and share their ideas with teacher and one another. The statistics showed that drama in education serves as an effective pedagogy to enhance the social-emotional climate in the classroom.

A Character Turnaround and Transformation inspired through Drama in Education (ACTtituDE) is an eight-week character development programme which was implemented in 2007. The customised school programme looked into how

and respond". Through imaginative play, pupils act out the scenarios posed to them, interact and communicate with each other on the situation and reflect on the consequences. This reflection provides pupils the knowledge for self-development. The table below shows the examples of drama strategies and the type of SEL competency domains that they promote. It is drawn based on a practitioner's insight and observation during the delivery of drama lessons in the classroom.

Drama Strategies	Social and Emotional Competency Domains[3]
Gossip Mill	Self Management Relationship Management Responsible Decision Making
Teacher In Role	Self Awareness Social Awareness Responsible Decision Making
Still Image	Self Awareness Relationship Management Responsible Decision Making
Tap and Speak	Self Awareness Relationship Management Social Awareness
Role Play	Self Awareness Social Awareness Relationship Management Responsible Decision Making

pupils' thinking is nurtured, competencies are acquired and values instilled, thus shaping character. The programme is introduced to all levels from Primary 1 to 6 and conducted in modules. At the end of the programme, the pupils are assessed using a set of customised rubrics, consisting of components of SEL and Habits of Mind (HOM). ACTtituDE is aimed at instilling social and emotional learning competencies in our pupils. Moving forward, it is essential to embark on the development of rubrics to assess character development.

Overview of Drama in Education at Tampines Primary

Drama Protocol

In the drama classroom, pupils adopt the essential behaviours of "focus, listen

An Example

In the last section, I present an example of how a drama strategy, *Gossip Mill*, is used to deliver social and emotional competencies.

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3   Each social and emotional competency domains covers several competencies. For example, self-awareness includes the ability to identify and recognise one's emotions; having an accurate self-perception; ability to recognise strengths, needs and values; self-efficacy; and spirituality. Social awareness includes perspective taking; empathy; appreciating diversity; and respect for others. Refer to Ministry of Education, Singapore (2008). *The SEL Resource Pack for Singapore Schools.*

Drama strategy: Gossip Mill

What it is	As a class, pupils role play as residents in the neighbourhood who are unhappy with their new neighbour who likes to interrupt their conversations. They will interact with each other and pass rumours about their neighbour which result in making their neighbour upset.
SEL Competency Domains	Social Awareness, Relationship Management, Responsible Decision Making
Pupils' Learning	Pupils learn that although they listen to other peoples' opinions and comments, they have to be sensitive to what they hear and be wary of rumours spreading because rumours will cause disharmony. In this lesson, they will learn about relating to others and how to take care of each others' feelings. Although the 'Gossip Mill' strategy generates negativity towards the neighbour, the pupils realise the harmful impact to the neighbourhood. The rumours create animosity towards the new neighbour. In order to rectify the problem about the disharmony caused, pupils have to make a 'responsible decision' i.e. to solve the problem. They have to make the new neighbour feel comfortable and to be honest about their feelings towards her.
Assessment	The pupils are then assessed using the customised rubrics which look into content knowledge and social and emotional competencies. The marks allocated will then be used in their overall assessment of Social Studies. The pupils also undergo a focus group dialogue by their level to assess whether they found the drama lessons meaningful.

Through pupils' feedback and teachers' survey conducted, it is evident that drama is an effective teaching method to promote engaged learning. There is also evidence from my practitioner's journal that the pupils demonstrated self awareness and group cooperation during the drama activities. Pupils' reflection journals have also indicated how they exhibited empathy for others while they were in role as a different character.

These experiences and findings demonstrate ways in which drama enhances the social-emotional climate and promotes the learning of social and emotional competencies in the classroom.

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Nazreen bte Osman, Tampines Primary School

ACTtituDE Programme 2009
Subject Integration: Social Studies
A Character Turnaround/Transformation to be inspired through Drama in Education (ACTtituDE)

Level	Theme	Story	SEL Competency Domain	Habits of Mind	National Education Messages	Time-frame
1	Myth & Legend of S'pore: Sang Nila Utama • Qualities we admire • Power Relationship Building • Peer Pressure • Trust and Loyalty • Managing Anger	Sang Nila Utama	• Self Awareness • Social Awareness • Relationship Management	• Managing impulsivity • Listening with understanding and empathy • Persisting • Questioning and Posing Problems	• We must preserve racial and religious harmony	Term 2
2	Respecting Differences • Similarities and differences between people • Respect and concern for others • Empathy for those in different circumstances • Discrimination and Prejudice	Our New Neighbour	• Self Awareness • Social Awareness • Relationship Management	• Managing impulsivity • Listening with understanding and empathy • Thinking interdependently • Persisting • Questioning and Posing Problems	• S'pore is our Homeland • We must preserve racial and religious harmony	Term 1
3	Strengthening Bonds • The meaning of "Power" • Respecting others • Qualities we admire • Peer Pressure • Trust and Loyalty	The Attack of the Swordfish	• Self Awareness • Social Awareness • Self Management • Relationship Management	• Managing impulsivity • Listening with understanding and empathy • Thinking interdependently • Persisting	• We must uphold meritocracy and incorruptibility • We must ourselves defend S'pore	Term 2
4	Contributions to the Community • Working together • Responsibility for the environment • Belonging and not belonging • Group responsibilities • Individual responsibilities	Life of the Early Settlers	• Social Awareness • Self Management • Relationship Management • Responsible Decision Making	• Responding with Wonderment and Awe • Listening with understanding and empathy • Thinking interdependently • Persisting • Questioning and Posing Problems	• S'pore is our Homeland • We must preserve racial and religious harmony • No one owes S'pore a living	Term 1
5	Sense of Belonging • Working together • Rights and responsibilities • Justice and fairness • Motives for behaviour • Empathy for those in different circumstances	The Japanese Occupation	• Self Awareness • Social Awareness • Self Management • Relationship Management • Responsible Decision Making	• Responding with Wonderment and Awe • Listening with understanding and empathy • Thinking interdependently • Persisting • Questioning and Posing Problems	• We must preserve racial and religious harmony • S'pore is our Homeland	Term 3
6	Discrimination & Prejudice • Rights and responsibilities • Justice and fairness • Motives for behaviour • Respect and concern for others • Empathy for those in different circumstances	Maria Hertogh Racial Riots	• Self Awareness • Social Awareness • Self Management • Relationship Management • Responsible Decision Making	• Listening with understanding and empathy • Thinking interdependently • Persisting • Questioning and Posing Problems	• S'pore is our Homeland • We must preserve racial and religious harmony • We must uphold meritocracy and incorruptibility • We must ourselves defend S'pore	Term 4

Global Percussion and Social Emotional Learning for Pupils at–Risk

Ng Mei Mei

Social and Emotional Learning (SEL) has been promoted at South View Primary School for a number of years through a 'whole-school' approach in a positive and supportive school environment. Specific social and emotional competencies are explicitly taught to each cohort of students so that by the time pupils reach primary five, they would have acquired competencies such as the capacity to perceive the perspective of others and respect others, the ability to work cooperatively, impulse control, goal-setting, problem solving skills, and responsible decision making; and are able to apply these competencies to enhance their social and study behaviours. The teaching of the core curriculum is also infused with the teaching of social and emotional competencies together with our school values, namely, integrity, care and concern, respect, resilience, spirit of excellence, enterprise and innovation. The overall goal is to help pupils learn better and achieve better academic performance and success in school and life.

Supporting Pupils at-Risk

Despite efforts to facilitate school-wide SEL in a supportive learning environment, there still exists a group of pupils who face the risk of dropping out of school and display anti-social behaviours such as rudeness to teachers, aggression towards peers and adults, vandalism, smoking and stealing, and are beyond parental control. Some may be cases of school refusal or high absenteeism, while others have lost interest in their studies. They may also come from dysfunctional families and/or low socio-economic backgrounds.

The needs of this group of pupils at-risk prompted us to design progressive intervention programmes targeted at such pupils. These programmes are not standalone programmes but are meant to complement our school-wide efforts to build up the emotional and social resilience, the confidence and character of these pupils, so that they will be able to cope with the challenges of growing up in our school system and in society.

At the end of each academic year, our school identifies the pupils at-risk using assessment tools. These tools are provided

Percussion members interacting with audience during their performance. Music breaks down barriers and helps students build up confidence.

When students contribute they have ownership, and when more students have ownership, there is more success. Students are also committed and will strive for excellence.

by a service provider registered with the Ministry of Community Development, Youth and Sports (MCYS), Singapore, and engaged by our school. A holistic and systemic approach is targeted; this will include working with the pupils' parents and teachers, and other school stakeholders; programmes that focus on the prevention and intervention to pupils at-risk. Counselling is provided where applicable.

One of such programmes is the "Rhythm Cures Insights to Percussions (Global Community Drum Circle)" designed for Primary 4 and Primary 5 pupils at-risk and conducted over two school terms. The pre-requisites for pupils in this programme are decision making and problem solving skills. The programme applies the model of experiential learning (David A Kolb and Roger Fry, 1975) with empowerment learning method. The five pedagogical principles of SEL[1], namely providing for the social dimension, providing for the emotional dimension, reflection, relevance and action, also guide the delivery of the programme.

The planning and implementation of the programme are monitored closely by key personnel. The specific need(s) of each of the pupils are first identified before specific intervention goals that may focus on particular areas such as building self-esteem, encouraging teamwork, cooperation, flexibility, group responsibility and accepting differences are set. Programme evaluation is also built-in during the planning process.

Teaching of Social and Emotional Competencies

As the name "Rhythm Cures Insights to Percussions (Global Community Drum Circle)" suggests, the programme is about making connections beyond making music.

Drumming is a wonderful way to connecting people and transcending differences. While it encourages self-expression in the pupil, it also promotes cohesiveness as a group as there is teamwork involved in performance. The abilities to work cooperatively with as well as provide and receive help from others

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[1] Pedagogical principles for SEL are rules of thumb which guide the practice of teaching to achieve effective learning in pupils. The 5 pedagogical principles of SEL correspond to 5 aspects of the individual; namely, the emotional (providing for the emotional dimension), social (providing for the social dimension), cognitive (reflection), spiritual (relevance) and physical (action). These principles are not restricted to SEL alone; they apply to the teaching of any other subject matters. However, application of these principles is necessary for SEL to be effective.

are essential competencies in social maturity. Having pupils work in teams will help to teach them these competencies.

The pupils pick up drumming skills and knowledge through concrete experiences. By providing a psychologically safe and open yet exciting setting with lots of fun, action and music, an effective experiential learning environment is established.

In this experiential learning environment, pupils first go through the process of goal setting, as they begin each session with an outcome in mind. Next, while they are engaged in music making, they also experiment and observe their own behaviour, review their own action, and finally go through one-word reflection at the end of the session. Hence, the pupils go from the known to the unknown, and in such an open and experimenting environment, pupils are observed to be more reflective and receptive to new learning and even feedback.

The reflection time is critical in helping pupils trace their own thoughts, identify their own character qualities and assess their own performance. They are given opportunities to share and talk about their feelings and give feedback. Through the entire process, pupils learn new skills, new attitudes and behaviours from their own experiences as well from their peers' experiences.

Sometimes, pupils display negative feelings and behaviours. These will be addressed and their implications and consequences discussed openly, to ensure that there is always positive learning arising from negative situations. Children who seem distant from the others are encouraged to interact. They are given more attention, counselling or individual coaching to facilitate their behavioural change.

Throughout the programme there are also many teachable moments that can be tapped on where pupils can be prompted to recognise and manage their own emotions and weaknesses, appreciate the perspectives of others, handle interpersonal interactions effectively, and make responsible decisions.

The pupils also work towards developing a sense of cultural identity and inter-cultural understanding as they play together as a community and work with others from various races. They also learn to understand that people from different cultural backgrounds may react differently to situations and learn to accommodate to these differences. Hence, there is consistent reinforcement of values throughout the programme. Pupils develop respectful behaviours, the ability to accept differences, sensitivity to others, self-discipline and good working attitudes, for example, punctuality and precision, as they ensemble skills to play as a group rather than as individuals.

The facilitator is a professional drummer who not only teaches music but also demonstrates a lot of passion for music and self-discipline as she instructs. She provides the role model for positive attitudes and good behaviours, engaging the pupils' imagination and creativity while helping them to connect learning with their own experiences. She also teaches them to focus on playing as a group rather than showing off individual musical skills and instill skills flexibility. The teacher-in-charge, who was trained in SEL, consistently assesses the competency of the facilitator in engaging participants totally in the learning situation, and allowing them to gain positive knowledge from their peers and the learning environment.

Addressing Affective and Social Dimensions of Learning

At the end of the programme, we would like all participants to be **self-aware.** They are able to recognize their emotions, describe their interests and values, and accurately assess their strengths and weaknesses. They are to build-up self-esteem and hope for the future.

Debriefing helps our pupils see how they met their goals, overcome social barriers and envision the broader social change implications.

The pupils are also able to **self-regulate their emotions (self-manage)**. They are able to manage stress, control impulses, and persevere in trying times. They can set goals for themselves and monitor their progress toward the achievement of these goals, as well as express their emotions appropriately in a wide range of situations.

The pupils are **socially aware**. They are able to think for others and empathize with others, as well as recognize and appreciate racial and cultural differences.

The pupils cultivate **good relationship management skills**. They are able to establish and maintain healthy and rewarding relationships based on cooperation. They are also able to resist inappropriate social temptations, manage, and resolve interpersonal conflict; and seek and provide help when needed.

They also demonstrate **responsible decision-making** in school, at home, and in the community. In making decisions, the pupils consider ethical standards, safety concerns, appropriate social norms, respect for others, and the likely consequences of various courses of action. They are able to apply these decision-making skills in

all circumstances and contexts. They are motivated to contribute to the well-being of the school, the community and the nation.

In reality, however, even in a very safe and caring learning environment as such, and with all the social and emotional skills imparted to this group of pupils at-risk, there are still a few pupils who continue to demonstrate anti-social behaviours. These are usually pupils who are from highly dysfunctional families. For them, there is a more intensive intervention programme conducted by professional external agencies.

Involving Family and Teachers Partnership

In promoting SEL, our school encourages and coordinates the efforts and involvement of pupils and parents.

Before the commencement of the percussion programme, our school writes a short letter to all parents involved, explaining how the programme works for their children and describes the social and emotional competencies which will be imparted to them, and the advantages of doing so. We seek their support to

help their children practice the same level of expectation and skills at home for reinforcement and consistency. We also invite them to our 'graduation' and performance session. At the end of the programme, a testimonial will be issued to all participants of the programme. The teachers of these pupils will also comment on the behaviourial changes that they have observed in them.

To promote SEL at home, parents were advised to do the following (Casel, 2009):

1. Focus on the strengths of their child.

2. Follow up with consequences for misbehaviours.

3. Ask children how they feel.

4. Find ways to stay calm when angry.

5. Avoid humiliating or mocking their child.

6. Be willing to apologize.

7. Give children choices and respect their wishes.

8. Ask questions that help children to solve problems on their own.

9. Read books and stories together.

10. Encourage sharing and helping.

This is the fourth year in which we are conducting the percussion programme for our pupils at-risk. We have received much positive feedback and support from pupils, parents and teachers on this programme. Pupils who participated gave verbal feedback that they have built good friendships and rapport with their teammates and instructors. Most of them are able to bring these experiences back to their classrooms and are able to relate better to their peers and teachers after picking up listening and social skills from the programme. The programme has helped to enhance their teacher-student relationships and bonding with peers, leading to good social health, which helps them to build strong self image and the confidence necessary for school success. In addition, as the pupils mastered the skills of drumming, their levels of self-confidence will also be further enhanced; this will give them a more positive outlook in life. Many parents are happy to note that our school did not 'give up' on our pupils at-risk and instead was willing to go the extra mile to help develop positive social behaviours and emotional health.

What Our Pupils Have to Say

Music helps me relax my mind.
~ Joel Koh, Primary 5.4

I learnt much about teamwork and would like to create my own music.
~ Ritchie, Primary 5.4

I learnt to respect other's opinions and work together for a common goal.
~ Zou Yiting, Primary 5.9

I am fascinated and would like to come up with my own instruments, yeah!
~ Ng Song Heng, Primary 5.1

Concentration is the key to playing good music and to be successful.
~ Ahmad Isa, Primary 4.3

We strive to continue to re-invent and improvise our SEL programme to help our pupils develop to their fullest potential.

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Ng Mei Mei, South View Primary School

Mayor's Club
Providing a Safe and Caring Learning Environment for the Development of Social and Emotional Competencies in Children Who Require After School Supervision

Lim-Chua Siow Ling

Our Child's Story

"Did you see how Helen just lost her cool this morning when she was teased about her mother? Poor girl, I haven't seen her smile since the day she joined our school," confided the class teacher to another in the staff room.

Daily anger outbursts, frequent quarrels and occasional fist fights between Helen (not her real name) and her peers were common occurrences that Helen's class teachers had to deal with for a few years. Helen joined the school when she was in Primary 3 and this child has a sad personal story to tell.

Helen was born in Malaysia. At the tender age of five, she lost her mother, maternal grandmother, elder sister and an unborn sibling to a cruel car accident. On that fateful day 7 years ago, Helen, together with her family members, took the family car out on a shopping trip. They never made it to the shopping mall that day. A huge machine at the site of some road works malfunctioned and collided into the family car, sending it spinning 360° and crashing into a lamp-post. The impact of the accident killed 3 of them instantly and injured the remaining 3 passengers. Thankfully, Helen survived but sustained some facial injuries.

That accident marked a turning point in Helen's life. Her care-giving arrangements were turned topsy-turvy. Her father, a Singaporean, took both Helen and her younger sister to Singapore where they would be cared for by their aunts. Helen could still vividly recall that for a few months after the loss of her mother; she would cry herself to sleep every night.

When Helen joined Eunos Primary when she was 9 years old, teachers noticed that the child never looked happy. Not only that, she was very aggressive. When her classmates teased her and called her "pig nose" (due to the scars left on her face after the car accident) or "motherless child", she would retaliate by shouting or fighting with them. Helen described herself as "lonely, hot-tempered, grouchy and angry".

Her class teachers, school counsellor and even the school leaders cared for her, counselled her and helped her to resolve her conflicts with her classmates, but often wondered what else they could do to help her develop a positive self-esteem, manage her emotions and have better social skills. When Mayor's Club was started in 2007, Helen was invited to participate in the club's activities. Every day after school, Helen would be supervised in her studies by parent volunteers, taught basic home skills such as cooking, sewing and ironing as well as social and emotional skills to enhance her self-management and relationship management skills.

That was Helen two years ago. She has since blossomed into a mature young lady. She has found bosom friends for herself, is able to manage her temper

better and definitely is more cheerful than before. Today, she is a Sports Leader and a Green Agent (ambassador for the green movement). Last year, in her report book, her form teacher commented "Helen is an exceptional individual who has demonstrated strength of character that is commendable for someone her age. She has managed to overcome personal struggles to focus on what she needs to do to better herself as a student and a person".

When asked what might have caused the transformation in her life, Helen said, "I would like to thank the teachers and my friends who have changed my life. Without them, I will still be a grouchy person and dislike the people around me."

The changes that we witness in the lives of our pupils like Helen often affirm the work that we do in Eunos Primary and we are firm believers that any sound and robust programme will impact our pupils if it is built upon the culture of care, with a premium placed on building quality relationships with our pupils.

Our School's Profile

The vision of Eunos Primary School is "Hearts that Glow, Minds that Grow". We envision the Eunosian to be one who is able to lead a healthy lifestyle, shows consideration for others and the environment and believes in his or her own abilities. In our quest to provide a holistic education for our pupils, we are guided by the philosophy that "Every Child Can Learn and Achieve".

The school serves a significant percentage of multi-racial and multi-religious pupils from disadvantaged homes. Many of our pupils do not have much home support and about 20% of our pupils are currently receiving financial assistance.

In a survey conducted by the Pupil Development department this year (based on our enrolment of 1123 pupils), 13 of our pupils are staying in welfare homes, 102 come from single-parent homes while another 57 are latch-key pupils.

Based on the profile of our charges, the school leaders recognised that in order to help our pupils to learn and achieve, it was essential to create a caring school environment where they feel supported and cared for. The school's approach to teaching and learning was conceptualised using a 'House Model' (refer to Annex A). It symbolises the importance of building quality relationships amongst all members of the Eunos family in order to achieve our common goal of reaching out to our pupils. To seal our commitment in doing so and ensure that time and energy will be channeled to this cause, the school specified 'A Caring Culture' as one of our school's strategic thrusts.

Our Journey

Our mission of providing a safe and caring learning environment so as to develop social and emotional (SE) competencies in pupils who require after school supervision through the form of Mayor's Club took on 3 phases.

Phase 1: The Prototyping Experience

A team of 5 teachers across various departments, led by the then Vice Principal, Mrs Maria Abdullah, participated in Phase 3 of SEL Prototyping which was organised by the Education Programmes Division, Ministry of Education, Singapore. Given the profile of our pupils, the team members hoped to take away some knowledge and skills to help our pupils manage themselves and their relationships better. From July to November 2006, the team learnt the innovation protocol and acquired knowledge and skills to conceptualise and implement a prototype to meet the identified needs of a target group of pupils.

In order to get started, it was important for the team to understand where the

school stood in terms of its understanding of SEL and the SEL provisions that had already been put in place in the school. The members conducted an SEL School-wide Needs and Resource Analysis[1] and realised that the facilitation of SEL in our school had been carried out on an ad hoc basis and there was a need for a more systematic and formal approach to integrating SEL into the school-wide curriculum. This exercise allowed us to be aware of the need to equip ourselves as well as the rest of the teachers in the school with knowledge on SEL so as to be able to guide our pupils to develop the SE competencies. It also highlighted to us that in designing the prototype, we had to be more conscious about not turning it into just another programme.

The team undertook a process of drawing out persona mind-maps[2] and conducted ethnography[3] to identify the target group for whom the prototype was to be designed for. This tedious but necessary process allowed us to finally arrive at the target persona and clarified the desired outcomes we hoped to see in these pupils (see Table 1 below).

With the end in mind, the next task was to design a prototype to address these identified needs. Our aim was to create a programme for a small yet significant number of 'unmotivated and disruptive pupils' to develop their self-awareness (strengths & weaknesses, self-worth), equip them with self management skills and help them discover their sense of purpose in Eunos Primary. Table 2 summarises the plan we had by the end of the 5-month long SEL prototyping workshop.

Phase 2: The Birth of Mayor's Club

Many have asked why we coined the term 'Mayor's Club'. A mayor is the head of government of a town, city or village. A mayor is a leader who serves the members of the community. It is our desire

Table 1: Target Persona and Desired Outcomes

Current State	Desired Outcomes	SE Competencies Required	SEL Standards and Benchmarks

• Lack home supervision; latch-key
• Often get into trouble because they are hot-tempered;
• Tend to resort to using physical violence or verbal abuse to resolve issues
• Disrespectful and defiant
• Disinterested in learning and schoolwork
• Attend school regularly
	• Able to manage anger; display self-control
	• Demonstrate values of respect and self-discipline
	• Engaged in learning
		• Ability to:
		  - manage anger
		  - admit mistakes
		  - manage time and organise things
		  - show care and respect for others
		• Sense of purpose in learning
			1.1.1a - Recognise & label one's emotions and identify contributing factors to one's emotions
			1.2.1a - Recognise appropriate responses to emotions in a varaxiety of contexts
			1.2.1b - Recognise impulsive behaviours and their consequences

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[1] This resource is designed to help schools focus on key factors the school has in place in terms of school processes, support structures and resources, and staff readiness. It also highlights the importance of building on existing SEL efforts and looking at what needs to be enhanced, combined or eliminated for more effective SEL implementation.

[2] The Persona Mind-map is a tool that the team used to identify our target group of pupils and highlight the behaviour changes expected of this group.

[3] Ethnography is the study of a people group or a community which involves observations, interviews and analyses of practices, artifacts and documentation. In SEL prototyping, it is a tool used to gain insights into pupils' needs, interests, perspectives and opportunities for SE development.

Table 2: Mayor's Club: The Prototype

Target Group	Upper primary pupils who fit the description of the target persona
Key Features	Personalised tuition Interaction time e.g. playing board games Activities that allow pupils to contribute back to school e.g. • Helping out in the school garden; hydroponics • Decorating hall for school functions
Frequency	Twice a week; 1.5 hours per session
Manpower Deployment	Teachers involved in SEL prototyping
Teacher-Pupil Ratio	1:8

to see these unengaged, disinterested pupils being transformed into motivated individuals who find meaning in contributing back to the school.

Anchoring the prototype on our school's third strategic thrust 'A Caring Culture', we realised that it was necessary to create a sense of identity and belonging for this group of pupils as a first step to keeping them engaged in the club's activities. Keeping in mind that these students also lacked parental supervision and guidance, we worked towards providing a home environment within the school for them. Funds were solicited from a charitable organisation to turn the Pastoral Care Room into a Cosy Cove equipped with furniture, electrical appliances and other resources to allow it to function like a home.

With the programmes designed and physical resources made available, the next task at hand was to ensure that there would be sufficient human resources to run the Mayor's Club and care for these pupils. The school is blessed to have a strong Parent Support Group. We decided to engage the help of our parent volunteers, whom we called "Care Mums", because they could serve as positive parental role models for our pupils who lacked the home support. Currently, the activities in Mayor's Club are facilitated by a group of parent volunteers, our school counsellor and teacher coordinator.

With all the resources put in place, we were ready to recruit the members for Mayor's Club. Each year, the Pupil Development department of the school carries out a 'Latch-key/Single Parent' survey to identify pupils who lack after school supervision. This list would be forwarded to the teacher coordinator of Mayor's Club, who will then shortlist the upper primary pupils. The final list of pupils will be confirmed after discussions with the class teachers of the shortlisted pupils.

Phase 3: The Evolution of Mayor's Club

We have learnt from the SEL Prototyping Workshop that iterations and reiterations cannot be avoided if we want to fine tune and improve our processes and programmes. Many times we had gone back to the drawing board to relook at the programmes and deployment of resources and made changes to them.

Today, the activities carried out in Mayor's Club are very different from the original ones that were conceptualised. However, we are mindful of the need to keep to

Table 3: Evolution of Mayor's Club: Key Milestones

Year	Key Features	Personnel Involved	Review
2006 – SEL Prototype Run Time	• Twice a week; 1.5 hrs each • Personalised Tuition • Interaction Time • Activities that allow pupils to contribute back to school community	Teachers who attended SEL Prototyping workshop	• Too time consuming for teachers involved • Activities carried out required teachers to possess certain expertise • Need to redefine skills taught to pupils as most of them are latch-key
Beginning 2007	• Daily; 1.5 hrs each • Supervised homework time • Home skills teaching e.g. cooking, sewing, ironing	School Counsellor SEL Coordinator (one of the teachers who attended SEL prototyping workshop)	• More manpower resources required • Need to set up a structured timetable
Mid 2007	• Daily; 1.5 hrs each • Supervised homework time • Home skills teaching e.g. cooking, sewing, ironing • Values Education through Computer Interaction	Parent Volunteers SEL Coordinator School Counsellor	• SE competencies need to be taught explicitly • Need to reintroduce the component of contribution back to school community • Reduce the frequency of activities as pupils do no turn up on class remedial days
2009	• Thrice weekly; 1.5 hrs each • Supervised homework time • Home skills teaching e.g. cooking, sewing, ironing • Computer Interaction Time • Values Education and Explicit Teaching of SE Competencies • Community Involvement Project	Parent Volunteers SEL Coordinator School Counsellor	• To be reviewed again at the end of the year

the original intent of the club and that is to immerse these pupils in a caring and learning environment in which they would feel empowered and appreciated for the contributions that they make to the school community. We also equip them with skills to lead responsible and purposeful lives. Key milestones of the evolution of Mayor's Club are summarized in Table 3 above.

Our People

What is the essence of Mayor's Club? Is it the physical environment or the curriculum or the structures put in place over the years?

We believe that at the core of Mayor's Club is the quality relationships built, the friendships formed and the trust established between the adults and pupils and amongst the pupils.

Besides the teacher coordinator and school counsellor, the parent volunteers, who have been serving the club since 2007, have built such strong bonds with the pupils that many of them regard the pupils as their own children. A parent shared that

when she first volunteered at the club, she was shocked by the rudeness and poor attitude of these pupils. However, these pupils have now been won over by our parents' sincerity and love for them.

We asked the parents if they did anything special for these children and their reply was, "We talk to them like we would talk to our own children. We advise them like we would advise our own children. Children know when you genuinely care for them."

When Mayor's Club lacked the funds to run its day-to-day activities, these parents did not hesitate to fund the activities using their own money. "It's all worth it because we know we are touching the lives of these pupils," commented one parent. Such is the dedication of our parent volunteers.

Conclusion

The hardware of any programme or curriculum should always be balanced with its 'heartware'. In order to provide our pupils with the best learning opportunities, a sound and rigorous approach in programme design is important and essential. Eunos Primary is committed to improving our standards of curriculum design to provide quality holistic education for our pupils.

The experience of working with our pupils has also taught us that over and above the delivery of quality education programmes, it is equally crucial to reach out to the hearts of our young charges. Where SEL is concerned, a teacher teaches who he or she is. We cannot give what we do not have. We are the role models for our pupils; we facilitate SEL for them through our interactions with them and others. This conviction, coupled with our commitment towards curriculum development, is our approach towards engaging our pupils.

Lim-Chua Siow Ling, Eunos Primary School
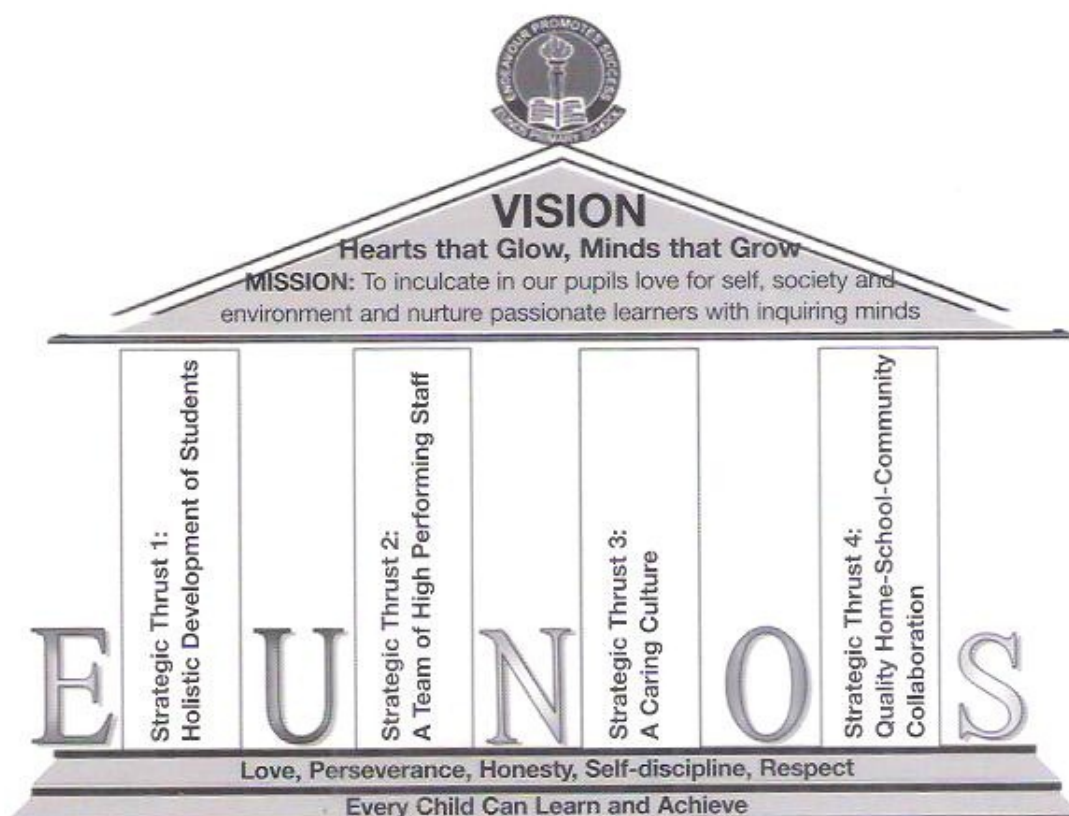
Annex A – The Eunos 'House Model'

Infusing Social and Emotional Learning into the Arts

Fong Yan Kit

Xue Qi, a Primary 6 pupil, who had never handed in her work for art, regularly reminded her teacher that she had no ideas and could not draw or do craftwork. Sometimes she would sketch a little and when her teacher or peers asked about her work, she would hide it away or simply crush it and throw it into the bin.

Another pupil, Krissada who was from the best class for his academic level would wait till the last minute before doodling nonchalantly. When questioned about his indifference, he would reply that he did not see the need to spend time and effort as art was not a subject tested in the national examinations.
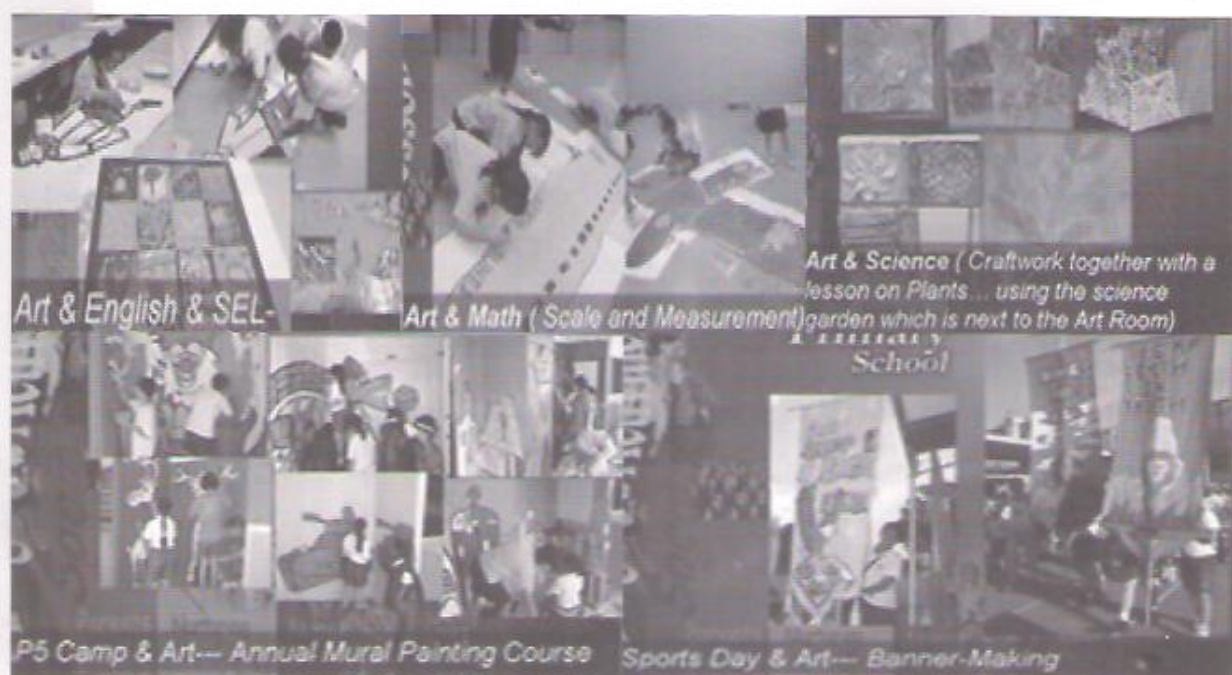
However, in a matter of a few months, Xue Qi graduated from the school enjoying art lessons, and Krissada won a design competition.

What brought about such transformation? What made the difference? Would provision of an arts curriculum to build the relevant set of skills and content knowledge in the arts alone, be able to bring about the change in the pupils?

Perhaps before we try to answer the questions, we may think of Vincent Van Gogh and Pablo Picasso. Both are great artists. However, Van Gogh was considered a failure when he was alive and the success of his works only followed after his death. Picasso, on the other hand, achieved great success when he was alive. He was rich and famous. Although Van Gogh was known as a genius ahead of his time, unlike Picasso, he was unable to communicate his ideas to others. Could the reason possibly be the lack of social and emotional competencies?

As a teacher and Head of Department for the Arts and Core-Curriculum Activities in MacPherson Primary School, I have seen how pupils are transformed when the school embarks on the journey to

Art & English & SEL-

Art & Math (Scale and Measurement)

Art & Science (Craftwork together with a lesson on Plants... using the science garden which is next to the Art Room)

School

P5 Camp & Art-- Annual Mural Painting Course   Sports Day & Art-- Banner-Making

The Arts programme is well-integrated in various subjects and school events

develop a school-wide coordinated Social and Emotional Learning (SEL). I have seen many pupils in the school benefiting from such reforms, in both the formal and informal curriculum of the Arts.

The success of the school's current efforts can also be inferred from the results of the Quality School Experience (QSE) Survey. QSE is an annual survey conducted for all schools in Singapore to gauge the graduating pupils' perception and satisfaction of their school. For the past 3 years, the school has been scoring above 90% for all the indicators in the QSE, which is approximately 10% above the national average in all the indicators. Examples of indicators related to SEL are 'Teacher-Pupil Relationship', 'Peer-relationship', 'Recognition', 'School Pride' and 'School Affect' and 'Engagement in Learning'. This is a great achievement for the school especially when the majority of the pupils come from families with low socio-economic status. These pupils generally do not receive much learning support elsewhere other than what is provided by the school and the community.

In addition, the school has also achieved Band 1 in all the indicators in the latest staff climate survey conducted by Forbes and MOE. This indicates that the school has over the years created a school community conducive for teaching and learning as well as building positive relationships.

SEL – The Prototyping Process

In 2006, the school joined Phase 2 of the SEL prototyping schools. Each of the Phase 2 schools was partnered with a Phase 1 school which served as discussion partners and observers in the prototyping process.

In MacPherson Primary, the Arts programme was chosen for the SEL prototype as the school has a very extensive Arts programme that is well integrated into the other subjects and school events.

Prototyping 'The Design Process'

An example of an SEL-infused art lesson is the 'Letter Box' project. The students designed letter boxes out of paper plates to display in the classroom and used them as a means of communication with one other and the teachers. Social and emotional competencies and cooperative learning strategies were incorporated in the lessons.

The students were taught to apply random connection strategies to help them generate ideas from picture books into possible ideas for the letter boxes.

In their groups, the students discussed their ideas using 'Think, Pair, Share' or 'Round Robin' to help structure the sharing and discussion of ideas, and consolidate their ideas on presentation boards.

The presentation boards were displayed on the 'wall of ideas'. As part of the 'gallery walk', the students walked around the art room to view the exhibits and gave constructive comments and words of encouragement while learning from the others.

In the subsequent lessons, the students created letter boxes by refining the ideas inspired by their favourite display. The final products were displayed at the National Library.

Exhibition outside the National Library.

A similar process was adopted for the decoration of the dust bins around the school.

The Design Process

Ideation – brainstorming, group discussion & making mock-ups

Ideation – generating possibilities through random connection

Concept development

Research

Final product – a chair with a lamp

Sample of how social and emotional competencies are mapped to the processes of Art in the domain of Relationship Making

Relationship Management
Concept Statement:
Ability to demonstrate empathy and appropriate interpersonal skills to build positive relationships

	Seeing	Making	Appreciating
Exploration	• Able to discuss opinions fairly, sensitively and objectively, in order to strive for a win-win situation • Able to disagree without hurting the feelings of others	• Able to generate ideas as a group with every member contributing, leveraging on diversity • Able to give support to the group members despite the differences in opinion	• Able to appreciate diversity by acknowledging the efforts put in by others
Expression	• Able to criticise ideas with sensitivity without putting others down • Able to clarify doubts in a courteous manner • Able to listen attentively before forming an opinion	• Able to play the role of a leader/member well • Able to make sensible and responsible decisions as a group	• Able to celebrate strength publicly by affirming others
Evaluation	• Able to accept constructive feedback and use the feedback for improvement • Able to be thankful for constructive feedback		

Sample Art activities

	Seeing	Making	Appreciating

Exploration	• Any pre-activity e.g.
	  - Walk in the garden
	  - Graphic stimulus for brainstorming
	  - Observing the plants, animals or things around
		• Making prototype or mock-up
		• Drafts or sketches
		• Taking notes
			• Discussing about the array of ideas

Expression	• Giving comments on what is observed
	• Writing down comments and ideas on what is observed
		• Art production	• Affirming good work during
			  - Art critic
			  - Art appreciation programme
			  - Group presentation on an artwork
			  - Class discussion on the work of others

Evaluation	• Choosing appropriate information, images or ideas	• Journal writing • Reflection log • Self-evaluation checklist • Personal art blog	• Art exhibition • Portfolio

The school leverages on the curriculum structures that are already put in place. Moreover, the Arts by nature is non-judgemental and therapeutic. It is also a non-examinable subject and the risk of a negative impact on the school's academic mission is low. Hence, the existing Arts programme is expanded to facilitate SEL.

SEL Through the Arts

There are two parts to the school's plan in the teaching of SEL, explicit teaching and implicit teaching. SEL is explicitly taught using the school's life skills package. This is made possible when the school extended an extra half an hour of the curriculum time every day for the SEL lessons in the package to be successfully carried out. Besides SEL lessons, the extended time is also used for class and group discussions as well as for pupils to journal their reflections based on what is taught during the Assembly programmes, related to the teaching of SEL and school values. Implicit teaching is done by infusing SEL in the relevant lessons in the subject areas, including the Arts.

The Arts curriculum in MacPherson Primary comprises Visual Arts, Music, Dance and Drama. There are two main components to the Arts curriculum: Arts Instructional Programme (AIP) and Co-curricular and Core-curricular Enrichment Programme which is also known as the STARS programme in the school.

Arts Instructional Programme (AIP)

The AIP is only limited to art and music at primary level as there is no an official syllabus from MOE for drama and dance. It is enhanced with a library of resources to help teachers create 'Unified' unit plans that link most of the activities of the various subjects under one theme. The lessons are thematically aligned with the English topics for all levels. This is to create a structure to allow for better integration of art, music, dance

and drama with other subjects for the purpose of creating 'Unified' unit plans. It is the school's belief that by leveraging on the common schema generated by the activities, teachers can utilize the prior experience gained through the arts activity to teach English and vice versa. In the area for art, this is done by aligning the social and emotional competencies with the three processes of Art making – Exploration, Expression and Evaluation.

Similarly, the social and emotional competencies are also aligned with the four processes of Music making – Listening, Performing, Creating and Reflecting. In addition, pupils are encouraged to create portfolios, keep scrapbooks and write journals. There are also guidelines on how to share ideas constructively, how to be an encouraging audience and how to learn from criticisms.

Core-Curricular, Co-Curricular and Enrichment Programme (also known as the STARS programme)

The school's STAR programme complements the AIP by providing all pupils with a comprehensive programme. It consists of level-based compulsory modules for all pupils, elective modules and also full-fledged Co-Curricular Activities (CCA). The STARS programme

3 LEVELS OF PARTICIPATION

5-10 weeks
Interest-based Electives
e.g. Street Bandy

Level-based Enrichment
Programme and
School-wide Events
e.g. Sports day, Badminton

Full-fledged CCA
e.g. Choir, Angklung,
Athletics

The STARS programme

is instrumental in bringing the Arts beyond the classroom and linking the pupils to the school and community.

Level-based Compulsory Modules

All pupils have to participate in a 6-year course of compulsory modules. One of the ways in which the school promotes SEL through Arts-related level-based compulsory modules is to leverage on the diversity of the modules to extend the pupils' awareness of the cultural diversity in the Arts and promote social awareness. For instance, the pupils learn about the cultures from different ethnic groups through Ethnic Dance, Angklung and Instrumental Ensemble, and Choral and Voice Training modules. Knowledge on the cultures is integrated into the delivery of the lessons of these modules. Upon completion of the modules, the class is expected to put up a performance. The experience enables the social and emotional competencies pertaining to group dynamics to be played out.

Another way that the school promotes SEL is through linking Arts-related level-based compulsory modules with Integrated Project Work (IPW) and service learning for the Community Involvement Programme (CIP). Social and emotional competencies are vital in IPW as pupils will need skills on decision making, self-management and relationship management for the projects to be truly successful. These projects not only bring relevance and authenticity to

what has been taught in the classrooms, but also learning soft skills through but they also enable the pupils to learn soft skills through relating and interacting with their peers and with adults.

In 2008, three IPW were conducted simultaneously as part of post-PSLE activities. In one of the projects, the Primary 6 pupils reflected and interpreted what it meant to be a hero, wrote a script and performed a skit to their groups about their interpretation. To help the pupils with the projects, discussion sessions and drama class which is a level-based enrichment programme, together with learning journeys to sites like Changi Prison Chapel, Battle Box were planned and scheduled for the classes.

Concurrently, the pupils had to manage their service learning project. The project involved the pupils finding out about the needs of an animal shelter, Animal Lovers' League (ALL) which resulted in pupils making leashes and hammocks for the abandoned animals under the care of ALL. The art workshops on fused glass techniques were conducted as a level-based enrichment programme. Thereafter, the pupils designed hand phone trinkets and jewellery for sale to raise funds for the animal shelter.

The third project focused on the conservation of the rainforest after a field trip to the rainforest at the Singapore Botanical Gardens. The pupils were

64 murals at 36 locations around the school – 80% painted by the students between 2004 and 2009

required as part of the Adobe Photoshop enrichment programme to work in pairs to either design a poster to convince members of the public the importance of conservation or create a graphic journal featuring the photographs taken during the field trip and personal reflections.

In addition, an exhibition showcasing the pupils' photographs, art works and reflections was set up. After a learning journey to one of the Biennale exhibition sites and a visit to the old folks at a physiotherapy centre for the aged, the pupils came up with song and dance presentations. These activities were captured on photographs and displayed.

There are many similar examples. One such example is an enrichment programme in ceramics conducted for all Primary 3 pupils. The pupils not only made animal models to form part of a wall mural, but also bird 'boxes' for migrant birds to nest. This was linked to their science project work on wild-life conservation and a learning journey to the zoo.

Most art work (e.g. murals, sculptures, painting) completed by the pupils through the level-based compulsory programme are visible around the school or exhibited in acrylic pockets at the adjacent corridors and doorways of the pupils' classrooms. Every pupil owns a pocket to display his/her best art work.

Similarly, level-based enrichment programmes related to music, drama and dance resulted in performances at the four mini-stages around the school. The best performers will also get to perform at the school's National Day Celebration.

Electives

The pupils are free to select the elective modules which are interest-based and short term. In this way, the activities catered to the pupils' diverse interests. The provision of electives provided more opportunities for pupils to discover their talents and interests, thereby helping to promote the social and emotional well-being of the pupils.

In 2008, the school considered taking part in a local television programme to break Singapore records as one of the elective modules. The pupils successfully broke two Singapore records by having the most number of pupils in a pick-up truck and by creating the largest painting made up of toasted bread. This helped to build a stronger school spirit and higher self-esteem among the pupils.

Full-fledged CCA

While most pupils may be under the charge of the same classroom teacher for at most two years, pupils may remain in the same CCA for an average of three years. Pupils with talents are spotted at the level-based compulsory modules and invited to join the related-CCA at the competitive level before Primary 3 while the rest of the cohort choose their CCA at Primary 3.

If the pupil is talent-spotted in Primary 1, the pupil may even remain in the CCA for six years. Hence, CCA provides a good platform for pupils to build connections with their peers and teachers or coaches, and a sense of belonging to their school.

Public performances and art exhibitions are common for the Arts-related CCA. This not only brings about an increased self-esteem among the pupils but also creates an opportunity for the pupils to learn from one another. The school has also encouraged all Aesthetics CCA to contribute to the community through at least two public performances per year, and complete at least one CIP activity through fund-raising activities for charitable organisations.

Conclusion

In conclusion, let me bring you back to the two case studies mentioned at the beginning of the article.

Installation of students' work as part of the school's decoration

Xue Qi, through encouragement from teachers and peers, and a classroom environment with positive and supportive learning culture, she began to realise that she has been acting on an assumption that she could not draw and her classmates would laugh at her art work. She began to realise that when she played a more active role during the art lessons, she found the lessons more meaningful and enjoyable. She has also learnt that there is beauty in imperfections, and imperfections can be unique.

Krissada, through a design project that he has done as an elective, discovered that art can communicate ideas, and the value of learning does not have to be tied in with an outcome such as a grade for an examination.

At MacPherson Primary, we believe that the uniqueness of every individual pupil is the source of their originality and creativity. The pupils' creations and expressions in the arts, no matter how immature technically, have the potential for something great as they stem from the pupil's unique world-views and experiences that might be vastly different from the adults. This potential for creativity is greatly enhanced when we consider the synergy in the diversity each individual pupil contributes to the whole.

We do not just impart skills and knowledge but aim to draw out the creativity that is in every pupil through an Arts education based on the authentic experiences of the child. We acknowledge each pupil's uniqueness and celebrate the diversity

he/she brings, and the ways the pupil can contribute to 'a whole' as a group, class, level, school, community or nation.

The school has also proposed a structure with the teaching of social and emotional competencies integrated into the other instructional programmes to equip the pupils with both the hard and soft skills to prepare them for the future.

SEL also gels well with the school's efforts in developing the pupils in the social domain. Prior to this, the school faced difficulties to specifically link Holistic Health, Character, Citizenship and Leadership education under the social domain so that it could systemically unify the fragmented curricula as a coherent one and communicate it to the stakeholders.

SEL proved to be the missing unifying link that the school was looking for as the outcomes of the SEL are character and citizenship in the SEL framework. SEL is also one of key strategies in promoting the social and mental health aspects of the Holistic Health. Furthermore, when promoting SEL, leadership skills are taught as the pupils acquire the knowledge, attitudes and skills to recognize and manage their own emotions, and to demonstrate care and concern. For others, establish positive relationships, make responsible decisions, and handle challenging situations constructively.

Fong Yan Kin, Head of Department, Aesthetics in MacPherson Primary School

Infusing Thinking and Social-Emotional Learning through Fables

Jessie Ee

Teachers can empower and infuse students' thinking and social emotional learning (SEL) through interesting lessons from fables. Why fables? Fables normally have moral lessons attached to them and teachers can address these moral issues in a fun, relevant and meaningful way when they relate the fables to the children's real-life experiences. As the story enfolds and takes the child to the land of make-believe, the child is in a happy and positive disposition and is able to absorb and learn better as the teacher slowly relates the story to their personal lives through effective questions that relate to the five SEL core competencies like *self-awareness, social awareness, self-management, relationship management and responsible decision-making.*

According to CASEL (Collaborative for Academic, Social and Emotional Learning, 2005), the five core competencies can be identified as follows:

Self-awareness:
- recognising strengths, needs and values
- identifying and recognising emotions
- self-efficacy
- accurate self-perception

Social Awareness:
- perspective taking
- empathy
- appreciating diversity
- respect for others

Self-Management:
- impulse control and self-management
- self-motivation and discipline
- goal-setting and organisation skills

Relationship Management:
- communication, social engagement and building relationships
- working cooperatively
- negotiation, refusal and conflict
- seeking and providing help

Responsible Decision-making:
- problem identification and situation analysis
- problem-solving
- evaluation and reflection
- personal, moral and ethical responsibility

In the process of enhancing students' thinking and SEL core competencies, effective questioning is necessary. Questions may initially address the story line. However, it should subsequently proceed to address real life situations. Ideally, all the questions should be open-ended to enhance thinking in children as well as to assess what children learnt from the stories given.

Generating Questions

In generating challenging questions, DeBono's Six Hats can be used to address information, advantages, disadvantages, feelings, creativity and thinking about their thinking (Table 1).

In attempting to address the five core SEL competencies, help children to relate the characters' strengths and weaknesses in the story to themselves. This will help them to develop their self-awareness of their own strengths and weaknesses e.g. How is the character's strengths and weaknesses related to yours?

As they address their self-perceptions, encourage them also to empathize with others e.g. How will your strengths and weaknesses affect others? At this stage, it would also be wise to help them address their emotions if they are unable to self-manage certain behaviours that are related in the storyline as this would also subsequently have repercussions with

Table 1: DeBono's Six Hats for Generating Questions

	Types	Questions
	Information	What was ... ? Who was ....? Where ....? When..........? How many... ?
	Emotions	How did you feel....? How do you think she/he felt?
	Advantages	What are all the good points about ..? What would be fun about being ....?
	Disadvantages	What was wrong with ...? What might have gone wrong if ....?
	Creativity	What else could have been done? What if ......?
	Thinking about Thinking	What part of the story do we need to think about? What did you learn? What are the implications?

their relationships with others. It is hoped that through such questions on SEL, children will gradually tend to consider others' perspectives or the consequences of their actions in making responsible decision-making.

In encouraging children to provide reasons for their explanations, it is necessary to get them to elaborate on their answers by asking questions such as:
- "Why do you say so?"
- "Can you elaborate further?"
- "How did you derive at your answer?"

Do ensure that children are given an "appropriate amount of time" to think through the questions asked. Teacher facilitation and probing encourages children to clarify and expand ideas and to build bridges between knowledge and the children themselves as knowledge seekers. Quality interaction includes teacher and children giving reasons and evidence to support comments and opinions, self-critiques of discussions and syntheses, and summaries of points made. Children are actively engaged in the learning process as opposed to sleeping or daydreaming or other forms of non-engagement activities and there is self-regulation or reflection about what is

happening, what is learned, and how well the class is moving towards its learning goals. A conducive environment that sees mistakes as part of the learning process, will encourage risk-taking and generating more creative ideas during brainstorming and learning. Teacher's questions may further help to scaffold children's ideas during discussions. This will help children to construct meaning and higher-order thinking that allows for better application of knowledge through critical thinking, problem solving and decision making.

Using fables can truly be an interesting approach in infusing "teachable moments" that warrant thoughtful exploration and investigation of knowledge. This approach can later be extended to include various real-life scenerios e.g. Sarah Boyle in Britain's Got Talent Video Clip http://www. youtube.com/watch?v=9lp0IWv8QZY&fe ature=related showing the importance of not judging a book by its cover. The video clip showed the audience's perception of a lady who auditioned for Britian's Got Talent and were pleasantly surprised when she started singing. Some of the SEL questions that can be included are listed in Table 4. The teacher can cultivate children's thinking dispositions in a healthy way through this process.

In using the story of Goldilocks and the Three Bears from the youtube http://www.youtube.com/watch?v=mS3nN6PH96Y and the scene where the dwarfs gave up their bed for Snow White Part 7 in the youtube http://www.youtube.com/watch?v=rllx1i1zEfg, the following questions in Table 2 may be generated:

Table 2: Questions on Goldilocks and The Three Bears and Snow White (Part 7)

Focus	Goldilocks and the Three Bears	Snow White (Part 7)
Information	What was Goldilocks doing? What did her mum warn her not to do? How should we sit on a chair?	Whose house did Snow White stay in? Where did Snow White sleep? Where did the Seven Dwarfs sleep?
Emotion	How do you think Goldilocks feel when she came across the empty house? How did Goldilocks felt when she saw the three bears? How do you think baby bear felt when he found his bowl was empty, his chair was broken and his bed has been slept on? How do you think Father and Mother bear felt when their home was invaded?	How did Snow White feel when the dwarfs offered her their bed? How did the dwarfs feel when they offered their bed to Snow White? How did the Queen feel when she found out that Snow White is still alive and happy?
Advantages	What are the advantages of finding an empty home?	What are the advantages of staying with the dwarfs? What are the advantages for the Queen when she realised that Snow White is still alive?
Disadvantages	What are the disadvantages of not locking your home? Is it alright to enter someone's home without their permission? Why?	What are the disadvantages of staying with the dwarfs? What are the disadvantages for the Queen when she realised that Snow White is still alive?
Creativity	What if the three bears were found invading Goldilocks' home?	What if Snow White has never met the dwarfs? What if the dwarfs rejected Snow White? What if Snow White is a snobbish and rude princess?
Thinking about Thinking	What can you learn from this story? What would you do if your home was invaded?	What did you learn from the story? What would you do if you are asked to share your notes with your friend who has been absent from class?

This constant exercise of such an approach will empower children to consider a range of perspectives whenever they are discussing concepts or ideas whether in class or outside the classroom. This effective learning will slowly encourage the learner to take active charge of his/her learning processes by drawing on their own interests, experiences and prior knowledge and extend their learning beyond the given information. Thus, the learning slowly becomes self-regulated in the learning process and moves on to take an active control of the child's own learning as the child critically and creatively think about the topics that they are learning.

Overtime, according to Zimmerman (1994), self-regulated learners develop certain critical and creative thinking skills and characteristics that enable them to identify and investigate all sorts of topics in meaningful and fulfilling ways. In the process, children will also be mindful of always taking into consideration others' perspectives and understand how each action has a consequence. As such, they are likely to self-manage themselves

Table 3: Questions on Social-Emotional Learning based on Goldilocks and the Three Bears and Snow White (Part 7)

SEL	Goldilocks and the Three Bears	Snow White (Part 7)
Self-Awareness	Which animal in the story best describes you? (Goldilocks, Father bear, Mother bear or Baby bear) How are the strengths or weaknesses of the character like you?	Which character in the story best describe you? (Snow White, Dopey, Bashful, Sleepy, Grumpy, Doc, Sneezy and Happy, Wicked Queen) How is the character's strengths and weaknesses related to yours?
Social Awareness	How will your strengths and weaknesses affect others?	What was the consequence of not sharing something with your sibling or friend?
Self-Management	How would you respond if your friend or your parent entered your bedroom and read your diary? How would you respond if someone hacked your computer to retrieve your personal files?	What is your respond should someone wish to share something precious of yours?
Relationship Management	How would you help your friend or parent to understand that it was wrong of him/her to invade on someone's property without offending the person?	How would you explain to your friend that you can't share your comb or toothbrush without offending them? How would you respond should your friend request to stay with you even though your home has limited space?
Responsible Decision-Making	Your friends urged you to hack your teachers' computer to retrieve the exam paper. What would you do?	Your new classmate approaches you for help but your classmates urge you not to, what would you do?

Table 4: Social-Emotional Learning Questions on Susan Boyle

SEL	Questions
Self-Awareness	How is the singer's strengths and weaknesses related to yours?
Social Awareness	Reflect on an occasion where you were misjudged by your friends, explain the circumstances. What were your friends' reactions and how did you feel? Have you experienced a scenario where you tend to judge someone wrongly? Describe the scenario. How do you think the person felt?
Self-Management	What would you do to ensure that you do not misjudge someone on first impressions?
Relationship Management	What would you do to influence your fellow friends such that they would look beyond the superficial and be more receptive to someone else?
Responsible Decision-Making	If your friends tell you not to befriend this nerdy classmate, how would you handle the situation without offending both parties?

better but also their relationships as they become more metacognitively aware of the importance of making responsible decision-making. More lessons on SEL can also be found in Ee (2009).

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Learning Inside and Outside Classroom: A Bio-ecological Model

Angie Ng Gek Tee & Dr Noel Chia Kok Hwee

Learning does not occur in vacuum or exist in isolation in our brain. For almost every piece of information in our mind, it is associated with something else. When we learn or acquire a new concept, fact, or skill, we habitually connect it to or lock it onto things we have known already or experienced previously. This is learning by association. Sometimes we may do this deliberately to aid our memory. However, such a process takes place all the time with or without conscious effort.

In this article, we attempt to provide a theoretical model based on the bio-ecological systems theory of Bronfenbrenner and Evans (2000) to explain the interdependent effects of learning inside and outside classroom on an individual as a learner.

What is learning?

Learning is thought of generally as a relatively permanent change in behavior that results from the interaction (experiences) of an individual with his/her environment. This could be a result of reinforcement (Skinner, 1974), which is some form of feedback so that the learner becomes aware of the correctness of his/her response (Thornburg, 1973). It could also be inferred by the learner's ability to demonstrate knowledge and skills when given the opportunity to do so. It may also result directly from the learner's response to the teacher's instructional behavior within the classroom context.

Psychologists have made numerous detailed studies of the various stimuli that cause learning to happen and the responses they evoke. From classical conditioning of the Russian physiologist,

Ivan Pavlov (1849-1936), who proposed four general principles of acquisition, generalization, discrimination, and extinction, to instrumental conditioning of the American psychologist, Edward Lee Thorndike (1874-1949), and operant conditioning of another American psychologist, B.F. Skinner (1904-1990), learning has been examined as a tangible behavioral trait in the past decades at the beginning of post-World War II period.

Briefly, the Pavlovian classical conditioning explains learning as a range of behaviors based on innate responses such as emotional reactions (especially fears and phobias) and food aversions. The unconditioned response has to be automatic and involuntary. However, Thorndike (1905) described learning procedure as instrumental conditioning in which there does not need to be an inborn response to begin with, and the individual's behavior is voluntary, i.e., it operates on its environment. Skinner (1953) developed a procedure similar to Thorndike's (1905), which he called operant conditioning where the term "operant" means that the behavior of the individual "operates" on the environment, i.e., it involves positive reinforcement of behavior through rewards rather than punishment (or negative reinforcement).

Is learning just an experiential behavioral trait that brings about a change in a learner? Is there more than just what behavioral psychologists have been telling us about learning?

Operating definitions of learning

English and English (1958) have defined learning more formally as "a highly general

term for the relatively enduring change, in response to a task demand, that is induced directly by experience; or the process or processes whereby such change is brought out" (p.289).

However, Sticht et al (1974) see learning more than just an experienced-induced change in an individual's behavior. Learning is seen as the ability to adapt to the world around the learner through which he/she acquires language, which is essential to allow the process of learning to take place. Sticht et al (1974) include all the basic adaptive processes (i.e., sensory, perceptual, and motor) and cognitive capacities operating at birth and attempted to provide some impression of their interrelations within a developmental sequence (see Figure 1) as follows:

Developmental Stage 1:
Operation of sensory, perceptual, motor, and cognitive capacities at birth by means of which the infant adapts to the environment (e.g., hearing for reception of sound; seeing for reception of light; motor movement for orienting to and manipulating the environment; cognition for storing, retrieving, and using information).

Developmental Stage 2:
Development of languaging, i.e., "representation of conceptualizations by properly ordered sequences of signs, or the inverse process of understanding the conceptualizations underlying the sequences of signs produced by others" (Sticht et al, 1974, p.8).

Developmental Stage 3:
Development of oracy processes involving

auding (listening to speech in order to language) and speaking (uttering in order to language)

Developmental Stage 4:
Development of literacy processes involving reading (looking at script in order to language) and writing (marking in order to language).

Bio-ecological model of learning

Unlike the model proposed by Sticht et al (1974), we see learning as a life-long developmental process that occurs at different times (*chronosystem*) within different contexts (*ecosystems*). There are four essential parts to our proposed model: (1) developmental phases; (2) lifespan timeline; (3) contexts; and (4) the interaction among the developmental phases, the lifespan timeline, and the various contexts.

Developmental Phases
There are three phases in the development of learning: (1) "caught" learning; (2) "others taught" learning; and (3) "self-taught" learning (see Figure 2). The first phase sees learning as "caught," i.e., learning as a process is spontaneous during which the individual as a learner picks up new things quite quickly and easily like a sponge or what Montessori (1967) has described as the absorbent mind. This is the critical or sensitive period when a pre-school child learns best through observation, imitation, repetitive manipulation and exploration through his/her basic adaptive processes. The second phase views learning as "others taught." Learning becomes a deliberate

Figure 1: Developmental model of languaging

| Stage 1 | → | Stage 2 | → | Stage 3 | → | Stage 4 |

	ENVIRONMENT		
↕	↕	↕	↕
	DEVELOPMENT OF LEARNING		
↕	↕	↕	↕
	COGNITIVE DEVELOPMENT		
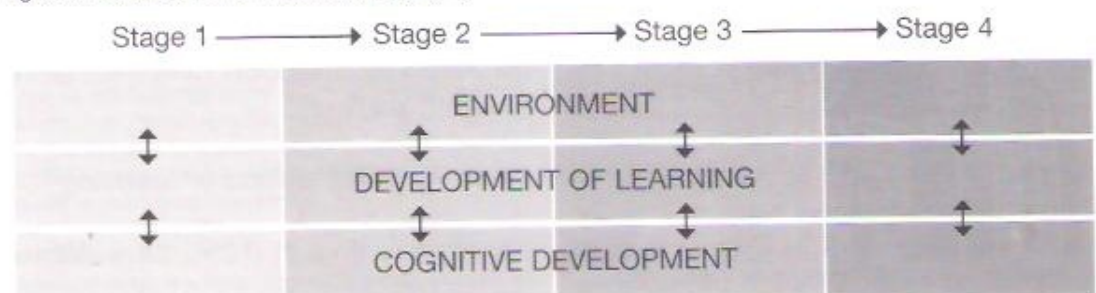
effort on the part of the learner to need to learn or acquire new concepts, facts, and/or skills in order to satisfy, say, the school curricular demands. Such learning normally takes place in a highly structured classroom where academic subjects (e.g., English, Mother Tongue, Science and Mathematics) are taught and learnt. This learning process can take place only if the learner's cognitive capacity is functioning normally. The third phase of "self-taught" learning takes place when the learner is more matured and independent and knows what he/she wants to learn. Such learning involves some form of volition or free will to choose what to do. For instance, a young working adult signs up a distance-learning course on a specific area of study that leads to the award of a bachelor's degree or professional qualification because he/she believes it will enhance his/her job prospect and career advancement.

Lifespan Timeline

Learning is not static but dynamic in nature as it keeps changing over time in terms of style, content, taste, interest and motivation. Bronfenbrenner (1995) refers to this temporal dimension in his ecological systems theory as the *chronosystem*. Changes in life events (e.g., transferring to another school, birth of a sibling, or parents' divorce) can be imposed on the individual as a learner. Alternatively, such changes can also arise from within the learner since as the learner gets older, he/she selects, modifies, and creates many of his/her own contexts and experiences. How the learner goes about doing it depends on his/her physical, intellectual, and personality traits and his/her environmental opportunities.

Berk (2005) has pointed out that in the ecological systems theory that "development is neither controlled by environmental circumstances nor driven by inner dispositions" (p.29). Instead, learners are products and producers of their environments, so both they and their environments form a network of interdependent effects. For instance, learners tend to perform better if they have teachers who are seen as being approachable and patient. Teachers, on the other hand, perform better if they perceive learners as willing and motivated partners in the learning process.
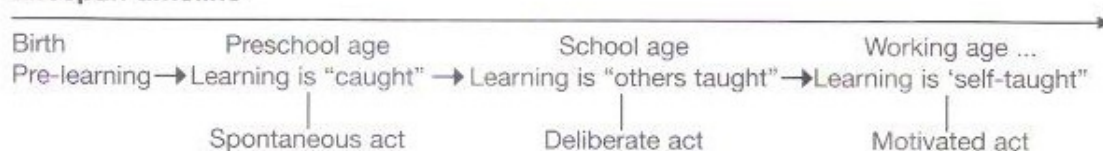
Contexts

As mentioned earlier at the beginning of this article, learning does not occur in vacuum or exist in isolation in our brain. It must have a context in order to take place. Without any context, no meaningful learning can take place. What do we mean by the term *context*? To us, context can be either intrinsic environment (i.e., our mind as well as our genetic dispositions) or extrinsic environment (i.e., classroom and the community at large). The extrinsic environment also refers to any situation (e.g., the colonial Singapore), event (e.g., a school sports day) or information (e.g., the female part of a flower is called a pistil) that is related to what we are talking about and that helps us to understand it.

Bronfenbrenner (1995) has used the term *ecological systems* (or *ecosystems* for short) to refer to what we called here as contexts. His ecological systems theory is based on the premise that development is greatly influenced by forces outside the individual as a learner. Development, according to Bronfenbrenner (2000), is a joint function of an individual and his/her

Figure 2: Developmental phases of learning

Lifespan timeline

Birth	Preschool age	School age	Working age ...
Pre-learning →	Learning is "caught" →	Learning is "others taught" →	Learning is 'self-taught'
	Spontaneous act	Deliberate act	Motivated act

environment, and the human ecosystems include both physical factors (i.e., climate, space, home, and school) and the social environment (i.e., family, culture, and the larger community) (see Figure 3). In addition, since the learner's biologically influenced dispositions (i.e., genetic traits) join with environmental forces to mould development, Bronfenbrenner and Evans (2000) characterized this perspective as a *bio-ecological*.

Briefly, Bronfenbrenner's model describes five systems, i.e., *microsystem, mesosystem, exosystem, macrosystem,* and *chronosystem*, which influence human development, nested within each other like a circle of rings. The learner as an individual is at the centre of these circles which are the contexts where the learner spends a significant amount of time, the relationships of those contexts, the societal structures, and then the

larger contexts in which these systems operate (see Figure 3).

• Microsystem: This concerns relations between the individual learner and his/her immediate environment. To us, this ecosystem can be further divided into: *intra-microsystem and inter-microsystem*. The former has to do with the learner's innate or genetically determined abilities. "It is these innate abilities that a child is assessed (e.g., an IQ test) to determine if he/she is highly-able, able, less-able or disabled in his/her performance as a learner" (Chia, 2008, p.29). The latter concerns with the learner's adaptive-behavioral skills to function normally in his/her daily life. "Significant limitations in adaptive behavior may impact his/her daily life and affect the ability to respond to a particular situation or environment" (Chia, 2008, p.28).
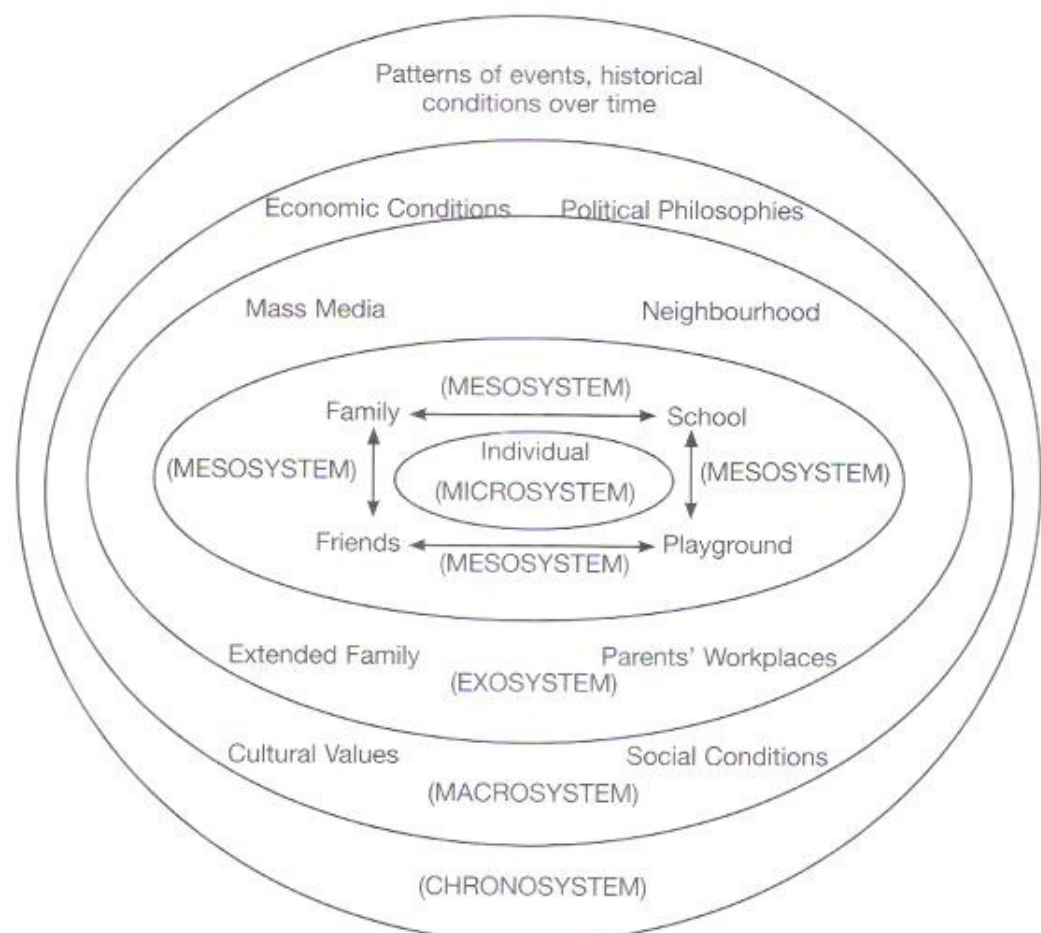

Figure 3: An example of a complex multi-level ecosystem of relationships

- Mesosystem: This refers to the connection between and among immediate contexts such as friends, family, school and playground. For instance, the learner's academic progress depends not just on activities that take place inside the classroom; it is also promoted by parental involvement in the school/class life and the extent to which academic learning is carried over into the home (Epstein & Sanders, 2002).

- Exosystem: This is made up of social contexts that do not contain the individual learner but that affect the learner's experiences in immediate contexts. For example, socially isolated families have few personal or community-based ties or are affected by unemployment tend to be dysfunctional and show increased rates of conflict and child abuse. In turn, it gives a negative impact of a breakdown in exosystem activities affecting the learner's performance in class (Emery & Laumann-Billings, 1998).

- Macrosystem: This consists of the values, laws, customs, and resources of the culture that affect the activities and interactions at all inner circles. The priority that the macrosystem gives to the learner's needs affects the support he/she receives at inner levels of the environment. For instance, in countries where generous workplace benefits for parents in employment and high-quality standards for childcare services are mandated, children are more likely to have favorable learning experiences in their immediate contexts (Berk, 2005).

- Chronosystem: This refers to the dynamic, every-changing nature of the individual learner's environment. (See *Lifespan Timeline* above)

Implications for teachers

There are five implications for teachers when they look at learning inside and/or outside classroom as opportunities for learners to advance themselves:

1. Learning is a developmental or life-long changing process that both teachers and learners must acknowledge and accept as part and parcel of life as they grow and mature. In other words, it is dynamic. Hence, teachers must continue to upgrade themselves while the learners, on their part, must continue to read and explore widely.

2. Learning is more than just an experiential behavioral trait that brings about a change in a learner. With learning comes intangible knowledge and tangible skills that are not always easily measured in terms of observable behaviors. Hence, teachers must possess a wide repertoire of measuring tools to assess and/or evaluate varied learning outcomes.

3. Learning involves *languaging* which forms the basis for concept formation and understanding of conceptualization. Learners with very poor language foundation will face an uphill task to perform well in their learning to meet the academic requirements. As such, it is of an important priority for teachers to focus on raising the level of oracy and literacy of their academically weak students before providing remedial lessons for any other weak subjects.

4. Learning is the result of active participation on the part of the learner as a product and producer of his/her environment so that both the learner and his/her environment form a network of interdependent effects to promote further learning. This means that the onus to learn is on the learner. The teacher's role is to facilitate learning and motivate the learner to want to learn.

5. Learning is context-based or being very much influenced by the various ecosystems. Teachers should always examine all the different ecosystems

that are affecting the learner before jumping too quickly to label him/her as a learner with special needs.

Conclusion

What is learning inside and/or outside classroom all about? To sum it up all, at the centre of this concept stands the learner, whose acquisition of knowledge and skills from both inside and outside classroom decides his/her level of performance, limited by his/her innate abilities that determine his/her level of competence as well as the extent to which and how effectively the learner interacts with the significant others within a complex system of relationships affected by surrounding multiple-level contexts.

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Nurturing Green Ambassadors

Joy Tan & Dionne Teo

North View Primary School's Green Club adopted a two-pronged approach to greening the minds of the young – indoor and outdoor learning – with a heavy skew towards the latter. *Nature Exploration @ Yishun Park*, a two-year programme, began in 2007 when Green Club pupils visited and explored Yishun Park with teachers and a nature consultant. We focused on these key topics: biodiversity, ecosystems, habitats, adaptation, dispersal and conservation. The outcome was the creation of the brochure featuring the flora and fauna of Yishun Park. In 2008, selected pupils underwent training to become Green Marshalls – amateur nature guides – for Yishun Park. The training culminated in them guiding groups on a trail on 26 April 2008 in celebration of Earth Day.

The Rationale

When we were thinking about how we could best influence the young charges we had under the Green Club ambit, we were all in favour of a heavy dosage of outdoor learning. Why? We believe that stepping-out-of-the-classroom or outdoor learning has a great potential in creating an impact on the pupils' learning. As educators, we have experienced the vast and tangible differences between teaching pupils in a classroom context and outdoors. The outdoors is a powerful tool in itself. It allows learning from first hand experience. Experience is one key stage in *Kolb's Experiential Learning Cycle* where pupils attain direct practical experience. Imagine the impact on a child when he or she takes a walk through a forest, as opposed to gaining knowledge of the same habitat through websites or static pictures projected in a classroom.

A valuable point of concern is that outdoor experiential learning exposes pupils to the 'real world'. From a small scale matter of keeping a healthy diet to a big scale issue of global warming, there are real issues and challenges to be faced everyday. Compared to chalk-and-talk teachings in the classroom, learning beyond it helps pupils see the value of education. In the process, they develop useful and valuable life long process skills that are relevant and applicable in real life.

'Service and compassion' is one of the ten *Expeditionary Learning Outward Bound Designed Principles*. 'Service learning' is an approach undertaken by the Ministry of Education (Singapore) to train pupils to become socially responsible and develop their sense of belonging and commitment to the country.

Outdoor learning develops and instils values in pupils who undergo the process of it. Values such as respect for others, respect for life and the environment, putting others before self, sense of awareness, concern and responsibility to the community cannot be instilled simply through reading textbooks. Most of the time, values and attitudes have to be cultivated over time through experiential processes.

Planning & Implementation

The following are the objectives and framework of *Nature Exploration @ Yishun Park*, subdivided into two years:

Exploring Nature at Yishun Park

This brochure introduces you to the plants and animals that live in Yishun Park. It also provides a self-guiding trail map to lead you to the points of interest. As several schools are within walking distance to this park, it is an ideal place for learning about our natural environment outdoors. Students and teachers can utilise the park to study ecology, flora and fauna. They can easily observe how plants and animals have adapted to live in different niches in various habitats.

Above all, exploring Nature will allow us to understand how our natural environment works. Every living thing and ecosystem has an important role to play to ensure that our Planet Earth remains a healthy and fruitful place for all of us.

How to get there

Yishun Park is encircled by Yishun Avenue 4, Yishun Central Road, Yishun Avenue 11 and Yishun Ring Road. Several buses from the Yishun MRT/Bus Interchange go to this park.

Tips for the outdoors

- The paths in Yishun Park are mostly on level ground and are suitable for both young and old, as well as the physically challenged.
- The park is surrounded by roads, so please do watch out for traffic.
- During windy or rainy weather, do watch out for falling tree branches. Also, do not stay under durian or coconut trees during their fruiting season.
- Love nature! You can help to protect our environment. Please do not pluck any plant, harm or capture any animal.
- Do not feed wild animals such as monkeys. They become tame and may then attack when food is not given. Our food items may also make them sick.
- Releasing unwanted pets in parks and other nature areas is cruel and is against the law. Most pet animals are not used to the wild and will die. Those that survive will compete with the native wild animals for food and habitat.
- Please properly dispose of all litter into bins. Litter pollutes our environment and harms wildlife.

I feel so happy. I think it is exciting
It makes us happy. It is very meaningful
It makes us learn things
I learn about animals. I learn about plants

Poem by Carmen Chng, P3

Nature Exploration
@ Yishun Park
with North View Primary School
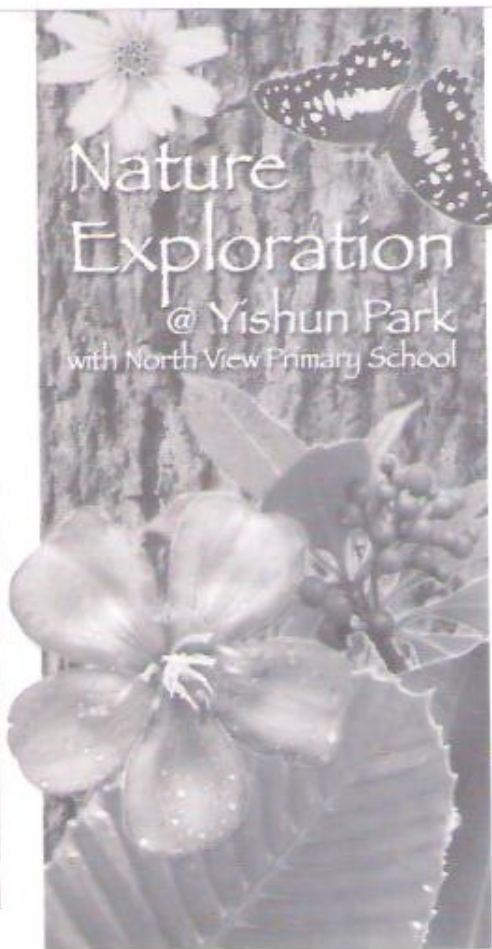
Exploring Nature at Yishun Park with North View Primary School

North View Primary School is situated just opposite the Khatib Bongsu Nature Area. In June 2007, P3 and P4 members of the school's Green Club embarked on a project about local Nature, and it was only 'natural' that Khatib Bongsu be the location of their exploration. Then the government announced that this area will become a military training ground and no longer accessible to the public.

Another nature area was needed for the project. The nearby Yishun Park was chosen as an alternative spot. Though a man-made park, the National Parks Board has left parts of it wild and natural, and allowed the secondary forest to mature. And due to its proximity to the Khatib Bongsu Nature Area, wildlife from that area also visit Yishun Park.

The Green Club members excitedly explored their neighbourhood park. Guided by a nature consultant, the students searched and encountered some of the inhabitants of the park through several exploratory visits. They were surprised to see many kinds of fruit trees, wildflowers and wildlife. The teachers and consultant encouraged and guided them to do research on the flora and fauna that they have seen. It was decided that this information should be compiled into a brochure so that the students' work could be shared with their fellow students and the neighbourhood community. The students then designed and created mock-up brochures. They gave suggestions on what the brochure could look like, and the interesting information that should be included.

This printed brochure is the fruit of their combined efforts. This project was initiated by the school to encourage its students to learn about the living world around them. But it is also hoped that the students' work will reach out to the community to promote a love and respect for our natural heritage. Thanks go to the National Parks Board for their kind support of this project.

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Nobility & Valour

Rubber
Hevea brasiliensis
This useful tree originates from South America. It is cultivated for its white sap which is made into rubber. In the past, Singapore had many rubber plantations. Here in Yishun Park, many of these Rubber trees are still alive. On a very hot day, you may hear the explosions of the ripened seed pods up in the canopy. This is how the tree disperses its seeds. Look on the ground and you may find the brown seeds which has pretty batik-like markings.

Giant Macaranga
Macaranga gigantea
There are many kinds of Macaranga but this species has the largest leaves of all. Its leaf can be almost a metre wide. Look for dropped ones on the paths. In the Macaranga family, many species have a special relationship with ants. These trees have hollow stems to attract ants to make their homes within. They also produce small food particles to feed the ants. In return, the ants protect their living home from herbivores such as caterpillars and grasshoppers.

Rain Tree
Samanea saman
This bean tree originates from South America. Here it is commonly planted as a shade tree. In other countries, it is grown to shade Coffee and Cacao trees. Its black bean pods are also collected to feed cattle. Mature Rain trees are home to an incredible diversity of other plants and animals. Many kinds of ferns and orchids grow on its branches. You may even spot a kingfisher nesting in a tree hole. Observe this tree at around 5 o'clock or when the sky turns dark before it rains. All its leaves will start closing up.

Simpoh Ayer
Dillenia suffructicosa
The large leaves of this native shrub are used as an environment-friendly food wrapper. The Malays use the leaves to wrap 'Tempeh', a protein-rich soybean cake. In the past, the leaves were also used to wrap packet 'Nasi Lemak' and 'Rojak'. This bush can grow into a small tree. It has a large, yellow flower with five petals. It has a pink, star-shaped fruit with red berries within. Many birds feed on these berries and help disperse the seeds in their poo.

Bird's Nest Fern
Asplenium nidus
This lovely native fern grows perched on the trees. The 'nest' is formed by its radiating fronds which uncurl from a central growth point. The fern traps organic litter which decomposes to provide nutrients. It also grows spongey roots to absorb and conserve moisture on its airy perch. It does not collect water to breed mosquitoes as some people wrongly believe. Spores are produced on the undersides of mature leaves.

2007

Objectives for participating students

- Research and collate information on flora and fauna
- Visit and explore the site and its various ecosystems
- Map out a self-guided route and note points of interest
- Conduct flora and fauna surveys
- Do photographic/video documentation
- Learn about environmental conservation values
- Create an educational project or activities based on the selected location

Bearing these objectives in mind, four guided tours were made to Yishun Park for students to explore, familiarise and document the flora and fauna they found interest in. Students further researched and collated further information on these selected animals and plants. Next, with the guidance of the nature consultant, they identified a route to create a self-guiding trail at the park linking various points of interest. Two indoor sessions were conducted to discuss about collated information and the production of an informational brochure, its content and design. Teachers and nature consultant edited the collated material selected for use in brochure. For a professional touch, the consultant coordinated the production of brochure, including layout and picture selection.

2008

Objectives for participating students

- Learn to share knowledge of flora and fauna with others
- Learn to work as a team
- Sharpen observational skills and scientific inquiry

Nature Foundation Session 1:

- The history of the location
- Identifying its flora and fauna inhabitants
- Working in teams
- Using the existing brochure as a reference guide

Nature Exploration Session 2:

- Re-visit and explore the site
- Going onto the trails, noting the points of interest
- Do photographic documentation for reference purposes
- Discuss environmental conservation issues
- Discuss ways to create interest and awareness of nature around us

Nature Guiding Session 3:

- Learning to become a nature guide
- Selecting a trail and the points of interest
- Making a set of reference cards

Nature Guiding Session 4:

- Practice guiding on the selected trails
- Bringing groups out for guided field trips

Pupils' and Parents' Views

Following the completion of these sessions of outdoor learning, a parent expressed, "I encourage the school to organize more of such outdoor learning. Pupils spend far too much time situated in the classroom. Taking lessons to the outdoors has engaged the attention of my son. He has gained knowledge of interesting facts about animals and plants found in the park. My son has become more confident in articulating his ideas." Another alleged, "My child has gained actual experience through *Nature Exploration @ Yishun Park.*" A parent also observed that her child has learnt to pay more attention to the surroundings and begun to appreciate nature.

From a student's point of view: "I think learning outdoors is much better and more fun than indoors as I can experience and see things 'live' and it is something I can't gain from textbooks."

Another agreed, "In outdoor learning, I can touch and see whatever the teacher is talking about. This is something I can't do in the classroom."

Nature Consultant and Teachers' View

A nature consultant affirmed, "I believe nothing can replace an actual sensorial experience. Can one actually fully experience the ambience of a rainforest or being in the Himalayan mountains just by reading or watching a film about them? For fuller benefits, and especially when the outdoor learning space is easily available, it is crucial, and responsible, that an outdoor learning experience is provided for as well. Students SEE the variation and diversity of flora and fauna, and their co-independence. They learnt and FEEL hands-on in an outdoor setting, within the actual ecosystem. This fosters a familiarity for young student participants, something which they lack growing up in an urban setting. The students were also encouraged to discuss, think about, had to do research on what they saw and experienced, and then share all that with others. This leads to a gain of knowledge, an increased understanding of our environment, and hopefully, an appreciation of what Planet Earth our only Home is to us all."

However, one of the problems observed by the teachers and nature consultant is pupils cannot connect what they have learnt in the classrooms to what they see and feel outdoors. They may have learnt about habitats, ecosystems, adaptation and dispersal from their textbooks but do not comprehend exactly what these things are or these processes are all about when faced with it. Our young students also seem to relate better to virtual reality and fantasy while being ignorant of natural subject matter and processes. The problem, or rather, the challenge, is to connect what they have learnt about to the real thing. So taking pupils outdoor per se is not a solution to boring lessons. Educators need to develop skills and sound pedagogies to engage the pupils productively on outdoor trips.

Outdoor learning also involves a certain measure of risk. As in our case, one of the pupils was stung by a wasp and developed allergic reaction and had to be brought to the doctor immediately. It is noted by some academics who researched on outdoor learning that a disproportionate emphasis on risk causes educators to shun this mode of delivery of lessons.

Conclusion

Personally we felt there is scope for Singapore educators to explore the idea of incorporating a larger dosage of outdoor learning in the school's curriculum. At present, outdoor learning takes a back seat with most schools favouring classroom bound lessons. There is no structured approach to infusing outdoor learning into formal curriculum.

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Joy Tan & Dionne Teo, *Green Club Teachers, North View Primary School*

PDL@The New Zealand Marine Studies Centre

Jenny Wong

Introduction

The opportunity was given for me to spend time in a unique cultural and educational experience through my stay at the New Zealand Marine Studies Centre (the Centre) Dunedin, South Island, New Zealand.

With the support of the NZMSC, I was able to obtain the permission of the University of Otago (of which the NZMSC is an integral part of a research facility based at Portobello on the Otago Peninsula) to be attached to this Centre as a visiting Teacher for the period of my Professional Development Leave (PDL) from the 8th Sept to 14th Nov 2008.

The plan was to give myself the various opportunities to observe the implementation of the special programmes that have been developed for the Gifted and Talented students as well as interacting with teachers and students from visiting schools.

The foundational experience of the NZMSC

Through their long history in delivering Learning Experiences Outside The Classroom (LEOTC) that cater for mainstream curriculum and assessment needs of primary and secondary schools, they are able to develop the **Talent Development Initiatives** (TDI) programmes for gifted learners.

In my short stint with the Centre, I understand that the TDI programmes have, since its inception, benefited a significant number of schools through the continuous support of the local Ministry of Education.

The team of educators comprises highly qualified and competent individuals who have chalked up several years of experience as teachers themselves and in their careers at various levels. They also possess an extraordinary dose of passion in their chosen field of study.

With Steve Cutler, Educator (NZMSC), discussing Gifted and Talented programmes for schools.

Some of the senior students at work at the shoreline.

With Victoria Rosin, Educator (NZMSC), collecting shore specimens for research.

Steve at work explaining the findings to senior students.

Steve Cutler and Victoria, whom I had the privilege of working closely with for my attachment at the Centre, were among the key people behind the TDI programmes. Of course, the Centre has more than just two individuals in their setup which include several other competent staff and postgraduate students who serve as mentors in the projects teams.

Identifiying the Gifted and Talented

Participating schools are required to identify potential candidates for these short term hands-on field projects at the

Centre through the use of prescribed assessment tools. Some of these methods include:

- Observation and nomination from teacher, parents, peer, caregiver as well as extended family members

- Student portfolio, academic and non-academic performances and auditions

- Standardised testing

- Purdue Academic Rating scales (which are designed for teachers' assessment of students' performance in specific subject matter eg science, social studies, English, Mathematics and foreign languages.

Discussing identification criteria for the Gifted and Talented with teachers of participating schools.

Through my interaction with the educators, I learnt that they use the student profiles to group the students in order to enable the students to effectively support one another in their projects. Individuals with inherent strengths in certain areas (leaders and team players) were placed together to make up an effective team that will stimulate active participation through the

dynamics of its members. Much inquiry and discussion was observed amongst team members.

Mentors probe and guide the team to develop several hypothetical statements for challenge before a final decision is made by the team.

Such insights into team composition are therefore helpful for the development of key learning strategies where inquiry based learning experiences are pursued.

This brings to mind a point noted by our Minister for Education, Mr Ng Eng Hen on the importance of retaining

"...the inherent curiosity in the child, to make sure that it was not dampened throughout the course of their education... After all, all young children ask questions. In our classrooms, especially in primary schools, this should be encouraged.

Their innate desire to learn, explore and be inventive should be nurtured and celebrated. Stubborn curiosity is a fundamental trait that allows one to push limits and take calculated risks to learn new things ...

They must be secure in their own identity, be able to form their own opinions, and communicate well to convince others."

Junior research team member dissecting marine specimen under mentorship of Research Scientist in laboratory.

The Research Project Teams

The Juniors (Year 6 to 12)

Each of the nominated students is grouped into individual research teams comprising a mentor (who is a research PhD student in a particular marine science subject), with about five nominated students from the participating schools.

As each team actively engaged themselves and soiled their hands in laboratory dissections and measurements, there was much interaction between the mentor and students.

The following were questions asked by the 10 year olds!

"Why does the crab walk sideways?".

"How do you know the sex of the fish?"

"Why do we need to compare the size and weight of the squid with our bodies?"

Before these questions were answered by the mentor, members of the teams were challenged to provide their own opinions based on what they had observed as well as to make predictions on likely behaviourial patterns on the specimen of inquiry e.g.

Do camouflage crabs prefer green seaweeds over a given period of time?

or "Are there are no preference on camouflage materials in these crabs?".

With their intimate knowledge of the subject, the mentor was able to encourage such questions and to provide an accurate assessment of the issue at hand for all members to understand.

What did the students learn from this? Students were encouraged to ask questions and no question is absurd! If they made a mistake, it was not a crime but instead the response from the mentor was one of affirmation and a correct answer.

The end of project presentation

The much anticipated end of project presentation was attended by a full turnout of parents, mentors , teachers and students from the participating schools. Instead of the usual research reports that we normally expect from powerpoints, we were pleasantly surprised at the creativity of the presentations and the in-depth knowledge of the students.

Skits were used to bring across the hypotheses and lessons learned from the time spent at the laboratory dissecting, measuring and questioning the findings of their specimens.

It was an eye opener as students end their presentation with an invitation for questions from the floor! Indeed it was rewarding to all parents and the mentors when they were able to witness the confidence of these 10 to 12 year olds answering complex questions posed by parents (who were of course, beaming with pride). The students had shown that they were *"able to form their own opinions, and communicate well to convince others"*.

A good pat on the shoulder was also the order of the day as sterling reports by the mentors on their charges were given after the dramatic skit presentation. Special mention is made for each individual of the team and it served as a great way to affirm the strengths and often leadership qualities of the students in each of the project teams. Much is learnt here. It is important to always find the time to affirm and reinforce good work done. Needless to say, the impact on both the parents and the students from this experience will last a long time to come.

"What we found in the stomachs" became a hot topic during the end of project presentation.

The Seniors (Year 13)

The senior students have the additional privilege of conducting their team research on the research vessel 'Polaris II' where expeditions (nicknamed 'Deep Thought') to the continental shelf were carried out to collect specimens.

I had the privilege of joining one of these whole day expeditions over choppy seas and high winds of the Pacific Ocean to

the edge of the deep canyons (at 350 metres, we were merely at the edge!).

The specimens collected were analysed in detail both on board and in the laboratory back at the Centre. Just like the juniors, the seniors had their hypothesis either proven right or dismissed with evidence from fresh specimens collected from the bed of the ocean floors. What these students take away were learning experiences gained from practical and hands-on research on a working research vessel. Sometimes, new species of marine life were found from such expeditions.

On board the ocean going research vessel 'Polaris II' with a Crew member and students.

This experience gave the senior students valuable insights into the world of marine scientists and perhaps paved the way for budding scientists in the future. Since New Zealand is surrounded by a rich heritage of natural habitat for the preservation of wildlife on both the land and sea, such efforts to provide their young with this exposure will indeed reap immeasurable benefits for future generations in their

Senior students examining specimens brought up from the ocean floor 350 metres below !

homeland. Does this hold valuable lessons for us in other lands?

The Captain getting ready the equipment to collect specimens from the ocean floor.

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Authentic Learning Experience:
A Multi-disciplinary Approach Towards the Teaching of News Report Writing

Tan Yan Ho & Ng Yuet Ling

Introduction

Traditional learning situations in which students are passive recipients of knowledge are inconsistent with the learning situations of real-life (Lave, 1988). In order to make student learning relevant to real life experiences, learning environments must be authentic.

Serangoon Secondary School embarked on a collaboration with Punggol-Pasir Ris GRC to participate in a Friendship and Harmony Carnival to allow students to explore, discover, discuss, and meaningfully construct concepts and relationships in contexts that involve real-world problems and situations that are relevant and interesting to the learner. (Donovan, Bransford & Pellegrino) We strongly believe that the learner must be active to be engaged in real learning (Piaget, 1954, 1974). Learning becomes active when students are able to connect new knowledge with their prior understanding.

Constructivists take this notion a bit further by stating that a meaningful context that brings the real world into the classroom learning environment is key to promoting learning (Brown, Collins, & Duguid, 1989). As such, Secondary Three students from Serangoon Secondary School were tasked to plan and organize traditional games stalls as part of the collaboration with Punggol-Pasir Ris GRC. Their learning culminated in writing a news report based on the event. In their direct involvement, the students were totally immersed in the environment and thus, able to report firsthand the excitement, carnival atmosphere and glamour of the occasion. Their learning was a process of interacting with the outside world, and continually reanalyzing and reinterpreting new information in the relation between their mindset and the real world (Brown et al., 1989; Lave & Wenger, 1991).

Phase 1: Creating the Authentic Experience

Authentic instruction takes on a much different form than traditional methods of teaching.

In creating an authentic experience, we sourced for an avenue where our students could undertake service learning as well as classroom learning to the world outside their classrooms. When we heard of the Punggol-Pasir Ris GRC Friendship and Harmony Carnival, we realised we had found the perfect activity to make their News Report segment of Situational Writing both meaningful and practical.

Prior to the event, the students were briefed about the scope of their involvement. They had to host the traditional games and teach the public how these games were played. They would also help their fellow schoolmates in the Fusion Orchestra set up their seats for a competition. Timing was crucial as this was a street performance. Audience interaction with the students in the games and the performance of the orchestra would serve as the source of the News Report.

Students had diverse roles to play in order to be directly involved in the learning process. They took on the roles of News Journalists, Information Technologists, Traditional Games Coordinators and Demonstrators, Participants as well as back-stage crew in the Fusion Orchestra Street Competition which ran concurrently.

(Annex 1). Each of these roles ensured that the students were engaged in genuine learning that fostered the opportunity for them to make direct connections between the new material that was being learned and their prior knowledge. This was achieved through conducting interviews, the designing of a customized souvenir through the Design and Technology Workshop and writing a news report of the event as the end product. Thus, the students were provided with an authentic learning environment to learn the features of a news report and were provided with a platform for oral communication as well. This genuine learning environment excited and motivated the learners and more importantly, helped them to connect with the real world.

In class, time was spent in role-playing and teaching the students to gain competence for their tasks:

1. Teaching and playing the games

2. Explaining the rules of the games

3. Inviting and facilitating audience participation

4. Framing leading questions and anticipating the answers

5. Conducting interviews

6. Assisting in props for the Orchestra

7. Filming

8. Using Newsmaker software to make their own News Broadcasts which combined features found on Television News Reports.

These experiences also increased student motivation. In fact, an "absence of meaning breeds low engagement in schoolwork and inhibits [learning] transfer" (Newmann, Secada, & Wehlage, 1995). Students were able to realise that their achievements stretched beyond the walls of the classroom. They bring to the classroom their experiences, knowledge, beliefs, and curiosities. Authentic learning provides a means of bridging those elements with classroom learning.

Students no longer simply learn facts by rote in abstract or artificial situations, but they experience and use information in ways that are grounded in reality. The true power of authentic learning is the ability to actively involve students and touch their intrinsic motivation (Mehlinger, 1995). Therefore, the students are active learners who constantly construct knowledge and apply their knowledge in the authentic learning environment.

Phase 2: Implementing the Authentic Experience

In authentic learning, the teacher must identify a problem or situation the students would want to address and develop creative activities through which students can influence the task. Also, the teacher must consider the students' abilities, as well as the students' learning objectives and educational standards when developing authentic learning experiences. Authentic learning has several key characteristics. In the case of our students:

- Students were engaged in exploration and inquiry. Students were given the theme of the Carnival and had to brainstorm for possible traditional games to attract and engage the residents. They constantly explored the different platforms to design and create their news report as part of the English Project.

- Learning is often interdisciplinary. As part of their Design and Technology Project, the students were tasked to design and create a suitable souvenir for the carnival. Thus, they were actively engaged in problem solving with the teachers as facilitators to ensure the success of the project. The project weaved National Education and Service Learning attributes into the programme to instil the school values of Loyalty and Diligence to the students.

- Learning is closely connected to the world beyond the walls of the classroom.

The whole learning process is fluid and dynamic and the students gained personal experience in organizing and interacting with the residents. They were responsible for solving any problems which arose and embarked on live video recordings of the event. Eight videos were shot which showed various segments of the Carnival. They also invited residents to be interviewees and the interview process provided an authentic platform for students to practice their oral communication skills. More importantly, they had to be articulate and more confident of themselves.

- Students were engaged in complex tasks and higher-order thinking skills, such as analyzing, synthesizing, designing, manipulating and evaluating information.

- Students produced a product that was shared with an audience outside the classroom. Video footages of the whole Carnival and the street parade were taken to be shared at the school during one of the assembly talks. In addition, the video was used as a teaching resource for lower secondary students to work on a structured reflection of the event and an English letter writing task.

- Learning was student-driven with teachers, parents, and the *Newsmaker* external trainers all assisting/coaching in the learning process. Students took ownership of the project and were the main drivers for the success of the carnival, with the teachers and the grassroots leaders as facilitators. Thus, learning with an authentic environment provided a useful real-life context for the students rather than decontextualised or classroom-based tasks.

Details Of The Project

- Our students participated in the Friendship and Harmony Carnival at Punggol Field by setting up traditional

games stalls. They taught the residents how to play these games and interacted and mingled with the residents who attended the event. Students were assigned different roles for the event.

- Students conducted interviews and took video footage of the Friendship and Harmony Carnival. They conducted interviews on the following groups of people:

  o Student Performers
  o Security Personnel
  o Residents
  o Student helpers at the traditional games stalls
  o Members of the Executive Committee of Punggol GRC

- They used the materials, video footage and interviews to write a news report of the event. These were some guiding questions for the students to consider in writing the news report.

  o Why did the teachers organise and participate in the event?
  o What event did the performers participate in and how did they feel about the event?
  o What are the learning points or values in the event?
  o What were the responses of the residents who attended the function?

- They displayed their news articles in class. A gallery walk was carried out for the students to comment on the articles using Post-it note pads. The teacher was the facilitator for the activity.

- The project also required students to apply their Design and Technology knowledge in designing and creating a customized souvenir for the VIPs.

- Values Programme – The project incorporated National Education and School Values. The theme of Friendship

and Harmony reminded us that the multi-racial nature of Singapore is unique and racial harmony is something that requires effort and sacrifice and we need to work together to achieve and not take things for granted.

Phase 3: Evaluating The Authentic Experience

The project was evaluated based on the following:

- Observations

- Formal Surveys

- Quality of the news report

Observations

- Students were highly motivated and excited about the lesson and many of them went the extra mile to design their own games booth and practice diligently after school to ensure they mastered the traditional games that they were in charge of. Students began to grasp the subtle, interpersonal, and unwritten knowledge that members in a community of practice use (often unconsciously) on a daily basis. "Learning becomes as much social as cognitive, as much concrete as abstract, and becomes intertwined with judgment and exploration," just as it is in an actual workplace.

- Students took ownership of the traditional games stalls and interacted, communicated and related to the residents who patronized their stalls. All of them felt a sense of achievement and strong camaraderie.

- The students were able to relate to the carnival and wrote a news report based on the authentic experience.

- The students were able to appreciate the importance of being active in the community. Instead of a school initiated CIP project which students are

disinterested in, this student initiated project helped to reinforce the need for all our youths to serve the community and the nation. Intrinsic values such as altruism, loyalty, diligence, sacrifice and others were effectively imparted to the students.

Surveys

The following are some comments from the survey conducted:

The event helped to instill greater self esteem and I am now more independent and confident of myself.

It is an interesting way to learn how to write a news report. All my classmates are excited and motivated at the innovative approach adopted by our teachers.

I find that it is a meaningful activity as we get to be actively involved in community work and are given the opportunity to plan and organize the traditional games.

I am able to apply the teaching of the features of a news report in class to a real situation. I hope more of such activity will be organized.

Conclusion

Authentic learning implies several things: that learning is centered around authentic tasks; that learning be guided with teacher scaffolding; that students be engaged in exploration and inquiry; that students have opportunities for social discourse; and that ample resources be available to students as they pursue meaningful tasks.

The experience of the News Report Writing has shown that authentic learning can be implemented in our curriculum. It has also shown that with the introduction of authentic activities and tasks, the students can make connections between what is being learned and what they already know. These experiences increase student motivation as "absence of meaning

breeds low engagement in schoolwork and inhibits [learning] transfer" (Newman, Secada, & Wehlage, 1995). The value of authentic activity is not only constrained to learning in real-life locations and practice, but the benefits of authentic activity can also be realized through careful design of simulated learning environments. "Learning becomes as much social as cognitive as much concrete as abstract, and becomes intertwined with judgment and exploration,"(Brown J.S., 1999) just as it is in an actual workplace.

In our effort to better prepare our students for a competitive global market, the students must become comfortable with the complexities of ill-defined real-world problems. The greater their exposure to authentic disciplinary communities, the better prepared they will be "to deal with ambiguity" and put into practice the kind of "higher order analysis and complex communication" required of them as professionals (Dede, C., Korte S., Nelson, R., Valdez, G., & Ward, D. J., 2005).

Tan Yan Ho & Ng Yuet Ling, Serangoon Secondary School

ANNEX 1

TEACHING REPORT WRITING AND ORAL COMMUNICATION SKILLS
THEME : FRIENDSHIP AND HARMONY

Objectives

- To develop students into confident, competent and creative users of the English Language.
- To provide an authentic experience for students to embark on newspaper report writing.
- To provide a platform for students to practice effective oral communication skills.

Introduction

You and your group members are members of the Harmony News Team. Your team has been invited to participate in the Friendship and Harmony Carnival organized by Punggol GRC. You are to plan, design and write a news report on the carnival.

Details of the Role

Interviewer	You are to conduct interviews at the Friendship and Harmony Carnival. You are to conduct interviews with the following groups of people: • Student Performers • Teachers • Residents • Student helpers at the traditional games stalls • Members of the Executive Committee of Punggol GRC

	These are some guiding questions for you to consider in writing the news report.
	- What event did the performers perform and how did they feel about the event? - What are the learning points or values in the event? - What was the response of the residents who attended the function? - Why did the teachers organise and participate in the event?
Games Coordinator	You will be in charge of setting up the traditional games with other games coordinators. You will be trained in the rules and regulation of the traditional games, play the games and interact with the residents. You will need to post a weekly reflection in the Serangoon Secondary English Language Blog.
Photographer	You are to participate in the Harmony and Friendship Carnival and take pictures of the carnival to document the event. You are to share your experiences, the activities in which you took part in and your reflection with your group members.
IT Expert	You are to attend all the training sessions on how to use the *Newsmaker* software. You are to create the news article or to report the news. You are in charge of videotaping the whole event during the carnival.
Participant	You are to participate in the Harmony and Friendship Carnival and to write a journal entry or to post it online in the English Language Blog. The following are some guiding questions for your journal entry - What are your feelings? - What are some of the activity which you participate in the carnival? - Do you think the carnival was a success? Why? - What are some of the learning points?

CCA and Personal Leadership

Nicholas Tang Ning

Not too long ago Singaporeans from various sections of our society were involved in an intense, at times passionate, public debate about whether Singapore should have a casino or not. This debate highlighted an interesting difference between two paradigms in values formation. The first paradigm believes that it is necessary to shelter people who are weak and may give in to temptations, such as gambling. The second paradigm believes that it is difficult, if not impossible, to shelter such people in a globalized society. This group, represented by the Prime Minister Lee Hsien Loong, believes that it is more important to help youth develop the right values so that "they can form their own judgements and they can deal with many risks in the world ... more dangerous than an integrated resort on Sentosa or on Marina South" (Lee H L, reported in Straits Times, 22 April, 2005).

The debate highlighted the need to understand why it is increasingly difficult for the State to control the avalanche of influences on the individual. Nor is it desirable because the new economy needs independently minded individuals and diversity instead of conformity. PM Lee's statement also highlighted the importance of recognizing that there will be other more dangerous 'risks' or challenges that youth will face. This is inevitable because rapid change, and with it greater uncertainty, is a key feature of globalization. It is not possible to protect youth from 'risks' or prepare them for opportunities that are yet unknown.

One of the roles of education in Singapore, therefore, is to nurture individuals who are "able to think, reason and deal confidently with the future, (and) have courage and conviction in facing adversity." (Ministry of Education, 1998). This article proposes that **personal leadership** is the key in the attainment of this goal and this attribute is best learned through participation in Co-Curricular Activities (CCA). It will use Scouting to illustrate some fundamental principles these CCAs will need to have in order to play this role.

What is Globalization?

In 2005, Singapore was ranked as the most globalised nation by the *Foreign Policy* magazine (Straits Times, 28 April 2005). But what is *globalization* and what implications does it have for education? Globalisation is a process and pheno-menon that is affecting almost all countries in the world. It goes beyond the interaction and influence of one country or culture on another, which in itself is not new and has been going on for centuries. For example, the Chinese influenced the cultural and economic development of much of Indo-China and Asia as early as 200 B.C.; the British influence on the education system and the civil service is still present in varying degrees in India, Malaya and Singapore; and the Japanese economic miracle of the 1980's brought with it the Total Quality Management culture and a love affair with anything Japanese. But this interaction and influence increased exponentially in the 90's and the term *globalization* refers to this heightened pace and intensity of interaction and integration between people, companies, and governments of different nations. One main contributory factor of globalization is the rapid growth and development of information and communications technology (ICT). The second is the new global trade structures

and practices (dictated to a large extent by international organizations such as the WTO and IMF), that have resulted in the growing influence of Trans-National Companies (TNCs) in national economies and concomitantly, greater mobility of people and funds across territorial boundaries. Some TNCs for example have annual budgets that exceed that of many nation states. An interesting example is the pressure the chewing gum lobby in the US Congress exerted on Singapore when we were negotiating the Free Trade Agreement with the US. If the Singapore government had not stood firm and, as a compromise, only allowed chewing gum for medical reasons, then it would surely have an impact on the social behaviour of youth in Singapore.

Of particular relevance to educators is the pervasive spread of values and ideas through not only the print and non-print media, but also through the internet, physical movement of people either as tourists or for employment, and even non-government organizations with their own ideologies and agenda (see Appadurai, 2000). Popular (or Pop) culture, for example, is not just about fashion or music but an entire culture that influences the attitude of youths towards sex, sexuality, notion of beauty and feelings of relative deprivation.

A recent study by the Pew Research Centre showed that globalization has widened the generation gap in all countries. Shao Guoyang from the China Youth and Children Research Centre also expressed the concern that globalization has caused many youth to move away from the traditional values that have held families, communities and nations together for a long time. These, and other similar studies, suggest that youth are more open to the new global, often American, values and behaviours. It is not suggested that all these values and behaviours are negative. In fact, some of these values and behaviours are necessary for survival and success in a global city. However,

it is necessary to recognize that these developments have reduced the stability, social structure and emotional support youths need during the crucial 'storm and stress' period when they are searching for their identity and purpose in life. Education can and should provide this support.

The second impact of globalization is on employability. To remain employable the worker of the future will need two important characteristics. The first is the ability to be engaged in lifelong learning. Lifelong learning has become more important because knowledge now has a shorter 'shelf-life'. The worker will need to continue to upgrade his knowledge in order to remain employable. Furthermore, adults will find that lifelong employment with, or loyalty to, a company will no longer be the norm. In fact, jobs or even entire industries may disappear overnight either because of new technology or the availability of cheaper or better workforce elsewhere. Keeping oneself relevant or employable will be a constant challenge.

A globalised economy will also value individualism and an acceptance of diversity more than conformity. It is instructive to note that Yotaro Kobayashi, Chairman of the Fuji Xerox Board, a Japanese company, said that

"...in fierce competition on a global scale, the pressure to conform... may well become a fatal disadvantage because it tends to block the creative mind of individuals, which is a source of competitiveness. In our borderless activities, those who have different values and backgrounds need to work together and there are bound to be various frictions among them. Therefore, the kind of individualism desired in this context requires permissiveness and tolerance for differences as well as ability for self-expression... Globalization does not mean uniformity. Rather, individuality and personal independence will become more important than ever."

The future worker, our present student, needs personal leadership because both employability and individualism needs an individual to have a personal goal, be self-motivated, have an 'internal locus of control'[1] (Rotter, 1966) and the self-confidence to accept diversity at the workplace.

Personal Leadership

As discussed earlier, the shift towards greater personal responsibility is unavoidable and, in a sense, is forced upon society and government. Take pornography as an example. In the past, it was possible to restrict or ban the sale of pornographic books and magazines. However, it is now freely and easily available on the internet. Whether a person chooses to indulge in such activities will depend almost entirely on his personal values and choice. Similarly, it is an individual's responsibility to ensure that he remains employable. But what is personal leadership?

John Maxwell (1998) states that "leadership is influence – nothing more, nothing less". The term *personal leadership*, therefore, refers to the continual and deliberate process of influencing one's own spiritual, intellectual, moral and emotional growth. Most people recognize and value leadership as the ability to influence others, but it is becoming increasingly obvious that the ability to influence oneself is far more important in a globalised world. Ironically the importance of knowing, mastering or leading oneself is as old as Lao Tzu[2], a Chinese philosopher in 500 BC. This is re-emphasized by writers in the field of organizational leadership such as Peter Senge (1990), Stephen Covey (1992) and Parker Palmer (2000).

The Cape Higher Education Consortium, a consortium of four universities in South Africa, uses the model below in their module on personal leadership. This model describes personal leadership as comprising three inter-related capabilities – personal insight, personal positioning and personal planning.
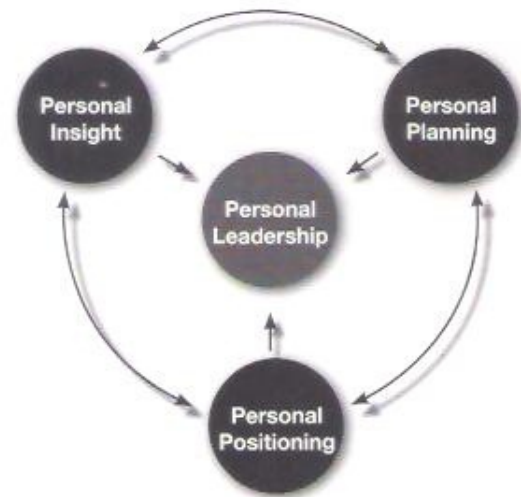
Personal Insight

- Accepting responsibility for own life, what has to be achieved and how to live it
- Willing to acknowledge personal strengths and weaknesses
- Being mindful of choices made
- Willing to confront oneself with care
- Recognizing and acknowledging own emotions
- Recognizing that 'true' power is internally referenced

Personal Positioning

- Acknowledging the behaviour(s) and emotion(s) of others and having an awareness of the impact on oneself
- Being aware of the impact of one's own emotions and behaviours on others
- Being mindful of the use of positional/external power

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1 The concept of 'internal locus of control' was introduced by Rotter and describes people who believe that success or failure depends on their own efforts. In contrast, people with a stronger external locus of control attribute success or failure to luck, chance or powerful others.

2 "It is wisdom to know others; It is Enlightenment to know one's self; The conqueror of men is powerful; The master of himself is strong." Verse 33 Tao Te Ching (500 BC)

Personal Planning

- Having a clear personal vision
- Setting personal goals for development and changes needed in own life
- Being aware of the need for action

It is instructive to compare this definition of personal leadership with UNESCO's (Defors, 1996) description of the four pillars of the education needed for the 21st Century.

Learning to know, by combining a sufficiently broad general knowledge with the opportunity to work in depth in a few subjects. This also means learning to learn, so as to benefit from the opportunities education provides throughout life.

Learning to do, in order to acquire not only occupational skills but also a broad range of life skills including interpersonal and team relationships.

Learning to live together, developing an understanding of other people, an appreciation of interdependence, skills in team work and conflict resolution, and an adherence to the values of democracy, mutual respect and understanding, peace and justice.

Learning to be, so as to better develop one's character and act with ever greater autonomy, judgment and personal responsibility.

This comparison shows that personal leadership is intricately linked to these four pillars. Personal leadership provides the motivation and determination for 'Learning to know' and 'Learning to do'; it provides an individual with the confidence to achieve 'Learning to live together'; and it is 'Learning to be'.

Personal leadership is not a set of skills or competencies that can be taught in a classroom. Instead it should be viewed as a long-term developmental process which is best conducted through positive social interactions (see also Winfield on the development of resilience in urban youth). The two main reasons for this are the quality of relationship between teachers and students, and membership in a stable social group. The relationship needed (for learning personal leadership) is akin to that between a coach or mentor and his charges, and this relationship needs to be sustained over a longer period in order to develop the trust required. Similarly, the relationship between the students needs to be similar to that between members of a 'gang' instead of classmates.

Formal, Non-Formal and Informal Education

Before the article discusses how CCA can play a dominant role in the development of personal leadership, it will introduce three terms – *formal education, non-formal education and informal education*. These terms are usually used in the area of Continual Education and Training (CET) or lifelong learning (Rogers, 2005; Coombs, et al, 1973) where formal education generally refers to 'schooling' while non-formal education refers to the organized training that a worker attends. However, UNESCO defines *formal education* as the hierarchically structured and graded academic curriculum that is taught from the primary through to the tertiary institutions. In simple terms, it is the various academic subjects that are taught in the school. *Non-formal education* refers to organized educational/training activities, outside of the formal curriculum, but with clearly defined learning outcomes and an identifiable group of learners. Lastly, *informal education* refers to the process where an individual learns values, attitudes, knowledge and skills through interaction with family, friends, peers, the media and other influences in the environment. (See Figure 1 overleaf)

This definition suggests that it is useful to regard the total education of a child as comprising of these three forms of
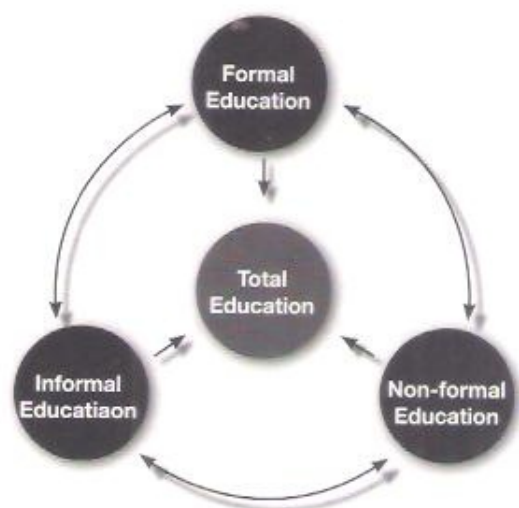
Figure 1: Total Education

education. The intention is not to polarize or create an artificial separation between what, in reality, are three inter-dependent elements of a total system. On the contrary, the intention is to emphasise the need to recognize that each form of education has a unique and important role to play in the total education of the child. Each form of education is also different in the sense that it needs different organization structures, processes and methodologies. Yet all three forms of education are part of a system – each form affects and, in turn, is affected by the effectiveness of the other two forms. For example, personal leadership which needs deep and sustained relationships can best be learned through non-formal education, without compromising the existing, and effective, practice of streaming the students according to their academic abilities in the upper primary and secondary school[3]. At the same time a student with a stronger personal leadership will be more confident and determined in his academic studies. In the same way the values and attributes he learns through formal and non-formal education will help him shape his informal education and vice versa.

CCA is the non-formal education of a child if it has clear educational outcomes,

delivered through a well structured curriculum and under the guidance of an adult. This is not a new concept but basic to CCAs such as Scouting. The Constitution of the World Organisation of Scout Movement (WOSM) states that Scouting is "an educational movement". Scouting as education was stressed by the founder Lord Baden Powell when he said,

"Here, then, lies the most important aim in the Boy Scouting training – to educate; not to instruct, mind you, but to educate, that is, to draw out the boy to learn for himself, of his own desire, the things that tend to build up character in him." (Baden Powell, 1919)

The informal education of a child should also not be ignored or trivialized. Just as the state is beginning to realize its limitations in controlling the influence of the media, internet and people exchanges in a globalised world, education will also need to accept that it is futile to shelter a child from similar influences. For better or for worse, such influence is a part of a child's education. Educators need to understand, appreciate and recognize its influence and use formal and non-formal education to complement its impact. Personal leadership can play a dominant role in this aspect because it provides an individual with a lens through which he receives these influences and the internal locus of control to use them for his positive personal growth.

CCA in Singapore Schools

This section is based on the writer's personal observations, anecdotal evidence and almost 40 years of involvement in CCA at different levels[4]. A search of the theses available in the library at the National Institute of Education revealed that there was no academic research

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3   This essay will focus on upper primary, secondary and post-secondary students. The reason is that the suggested role and outcomes of CCA are more appropriate for students in this age range. Furthermore, CCA is only emphasized from upper primary onwards.

on the impact of CCA on students in Singapore.

Schools in Singapore provide a wide range of 'official CCAs'[5]. Recent changes to the CCA provisions seek to broaden this further. At one end of the spectrum are activities such as the community-based activities and at the other end of the spectrum are the 'uniformed groups'. Scouting is classified as a 'uniformed group and so the term CCA will only refer to this group of activities in this article[6].

Generally, this group of activities are associated with, or valued for its military-like organization structure, culture, activities, and discipline, although some, like Scouting, was never intended to be such. Two related forces contributed to this evolution of these CCAs – industrialization and national identity.

Industrialisation was a period where there was a national push for efficiency. The most efficient organization is the mechanistic model, which drew its inspiration from the military (Morgan, 1986), where the hierarchy, with specific duties, responsibilities and power for each role, compliance and standardization are emphasized. Such a model is most appropriate for an industrial economy where there is low tolerance for deviation and ambiguity. The entire education system was based on this efficiency paradigm. Schools and school leadership were also based on this model. It is therefore understandable that the CCAs were also organized and managed in the same way.

Military-like activities were also introduced as part of the effort to create a national identity. Besides the parades held in schools, CCAs were also required to participate in the National Day Parades and Youth Festival Parades. Foot-drill became a mandatory activity for all CCAs and this not only took up a large proportion of the CCA time, it also introduced the "parade ground culture" where unquestioning obedience was expected both on and off the parade ground. Initially Non-Commissioned Officers (NCOs) from the Armed Forces came to train the students for these parades. This continued even after they left because the 'old boys' who came back to help in these CCAs, during or after their National Service, also brought back this parade ground leadership style. More importantly this form of leadership is appealing (to a young 'leader') because this is a relatively simple form of 'leadership' based on raw 'position power' (Handy, 1976).

The efficiency-driven paradigm and the military culture led many to assume that the existing culture, organization structure and functioning of CCAs is how it should be. This has affected even the 'older' CCAs such as Scouting where present practices were not what they were intended to be. For example, traditionally the Troop Leader and Patrol Leaders of a Scout Troop are members of a Court of Honour. This is a standing committee which, as the name implies, guards the tradition and honour of the Scout Troop. In addition, the Court of Honour also plans and implements the programme of the unit. The adult leader (referred to as the Scouter in this article) is an advisor or mentor at the Court of Honour. Such a body provides the members with opportunities to learn elements of

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4   The writer was an active Scout when he was a student and achieved the President's Scout Award, the highest award in Scouting. He became a Scouter when he became a teacher and held various positions in the movement before assuming the post of the Chief Commissioner. The writer was also a school Principal for almost 10 years and so had the opportunity to observe the impact of CCA on students.

5   These are student activities that attract CCA points which can be used for admission to post-secondary institutions. Recently the MOE recognized that this may not provide for the diverse interests of all students and so have taken steps to recognize activities not provided by a child's school.

6   A uniform serves a more important educational purpose. A uniform provides a visual image of belonging to a group. This sense of belonging is important in developing a sense of identity and security necessary for the emotional growth of a youth. So, in a sense, all CCAs could have uniforms for their members.

personal leadership described earlier. However, this was unconsciously discarded as this form of collective leadership is less efficient than one where the Scouter does all the planning, makes all the decisions and gives specific instructions to the Patrol Leaders.

Another example is the Patrol which is a powerful educational tool in Scouting. The Patrol, comprising six to eight Scouts, is the basic organizational unit in a Scout unit. In the book, *Scouting for Boys*, Lord Baden Powell explained the Patrol system.

> "The main object of the Patrol System is to give real responsibility to as many boys as possible. It leads each boy to see that he has some individual responsibility for the good of his Patrol. It leads each Patrol to see that it has definite responsibility for the good of the Troop. Through the Patrol System, the Scouts learn that they have considerable say in what their Troop does. If the Scoutmaster gives his Patrol Leader real power, expects a great deal from him and leaves him a free hand in carrying out his work, he would have done more for that boy's character expansion than any amount of school training could ever do...The Scouts in his Patrol obey his orders, not from fear of punishment, as is often the case in military discipline, but because they are a team playing together and backing up their leader for the honour and success of the Patrol...So the Patrol Leader who has made a success with his Patrol has every chance of making   success of his life when he goes out into the world."

However the national concerns of the 70's and early 90's led some Scout Troops to dispense with the Patrol and the Scouter

dealt directly with each Scout. Patrols became another term for Sections, the Patrol Leader became the Sergeant and the Troop Leader was the Staff Sergeant. Activities were also conducted at the Troop level and as a result deprive the Scouts the opportunity to learn about personal responsibility, leadership and behaviour in a democracy.

The third example is the Badge Scheme, which comprises the Progress and Proficiency Badges[7]. The Badge Scheme is based on a fundamental principle of allowing a Scout to progress at his own pace. Ideally, a Scout should only take a test when he thinks that he is ready. However the norm in most Scout Troops was to conduct 'courses' for the entire cohort or send them to 'centralized training'. The Scout will then be required to sit for a standardized test after the training. This modus operandi is again efficient and 'equitable' but deprived the Scout of the opportunity to develop personal responsibility, which is far more important than the actual knowledge or skill required by a badge.

The dominant organisational structure, culture and activities of CCAs remained unchanged even though the Ministry of Education recognised the need to move "from an Efficiency-Driven Education paradigm to an Ability-Driven Education (ADE) paradigm" (Teoh Chee Hean, 2002). The changes needed by CCAs to meet the challenges of the ability-driven paradigm should go beyond merely changing the form or kinds of activities. Ironically, while this may be challenging for some CCAs, many need only to re-visit their fundamentals to find the inspiration for the needed changes.

The Key Elements

Scouting, for example, experienced the

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7   The Progress Badge scheme comprises a set of knowledge and skills that every Scout must master to qualify for a badge. The same set of requirements is repeated at a higher level for the next badge. The Proficiency Badge scheme, on the other hand, encourages the Scout to develop his/her interest in a specific area. There is a wide selection of badges ranging from *Artist to Skin Diver to World Friendship*.

same changes described above. However, its fundamentals are still relevant and it can play a major role in developing the personal leadership of its members if it strengthens the following elements.

1. A set of values and beliefs that it seeks to imbibe in every member because these are indispensable for the development of a personal vision which, in turn, is key to personal leadership.

2. The use of small groups, of about six to eight members, as the basic organization structure to develop the positive and meaningful relationships a child needs to learn personal leadership.

3. The support of a suitably trained adult who is able to plan and implement activities which contribute to the non-formal education of the members.

4. A systemic approach in integrating the three elements mentioned above.

The following discussion will use Scouting[8] to explain why these key elements are essential.

Value System

The increasing importance of values education was stressed by the Minister for Education, Mr Tharman Shanmugaratnam (ST April 25, 2005) when asked about the need for classes on the ills of gambling. CCAs has an important role to play in this outcome of education.

The writer believes that all CCAs, or at least the teachers, have values that they seek to impart in their members. However, these tend to be implicit values that are not clearly stated in public documents as the key outcome of the CCA. It is assumed that the members will imbibe these values through the activities. By articulating the values, the CCA makes explicit the values it wants it members to live by – not only while they are in school but as the 'centre' of their lives when they leave school. Values form the lens through which an individual will interpret and respond to events, changes and relationships. As such the values of a CCA must go beyond those needed by a young person and be sufficiently comprehensive to prepare a person for life, particularly in a globalised world.

Values are so important to Scouting, for example, that the Scout Law and Promise "constitute the essential ethical framework within which Scouting functions, and without which the Movement would no longer be Scouting." (World Scout Bureau).

The Scout Promise states that

"On my honour, I promise to do my best:
To do my duty to God and the Republic of Singapore
To help other people, and
To obey the Scout Law"

There are five key values in the Scout Promise. The first is honour which is valued in both Eastern and Western societies. In the West, the knight exemplifies this value and in the East are the Confucian scholar and the Japanese samurai. These are individuals who live by their values and accept responsibility for their actions – a key quality of personal leadership. Learning to live a life of honour is a lifelong journey that starts when one is young. The writer witnessed a Scouter in a primary school explaining this in terms of keeping one's word. Using everyday examples the Scouter told the Cub Scouts why they should always "promise what you will do and do what you promised."

The second value is the phrase '....I promise to do my best' which stresses

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8 Please see the following documents published by the World Scout Bureau for a fuller understanding of scouting as an educational movement: *Scouting in Practice* (1997), *The Essential Characteristics of Scouting* (1998), and *Scouting: An Educational System* (1998)

personal responsibility. The Scout accepts that he must do his best if he wants to live up to the rest of the Promise and Law. The 'promise to do my best' also stresses the importance of commitment to personal growth. The belief that it is the 'enemy out there' which is preventing oneself from achieving one's goals in life is the main obstacle for living a fulfilling life. This value is so important to a Scout that it is traditional to include the statement 'He did his best' in the obituary of any Scout that passed on. The writer strongly believes this recognition of personal responsibility is the first step in the development of personal leadership.

The other values are duty to God, country and 'to others'. Duty to God ensures the spiritual dimension in the holistic development of an individual. Often it is the belief in a higher spiritual being that will help an individual cope with disappointments or find meaning in life.

At first glance no one will deny the importance of duty to country. However educators need to reflect on and discuss the issue of individualism versus nationalism or patriotism, particularly for a young and multi-racial nation such as Singapore. Even 'older' and more homogenous nations such as China are concerned about the mobility of the global professional or global citizen. The notion of a nation based on a physical territory may no longer valid and may need to be replaced by emotional bonds to friends and family. If this is so, then the use of small groups to develop more intense emotional bonds more become more important in developing the sense of rootedness.

'To help other people' provides an important value for behaviour in society. It is directly related to *Personal Positioning* in the Personal Leadership Model described earlier and *Learning to Do and Learning to Live Together* in UNESCO's model of total education.

The Scout Promise also illustrates the difference between actions or behaviour which are manifestations of deeper values and the values themselves. Each of these values can be manifested in different ways. For example honesty stems from a deeper belief about one's honour and one's duty to God, and duty to country encompasses all four pillars of Total Defence. Therefore CCAs should attempt to state deeper and more universal values, but in simple terms that is meaningful even to a young person.

Small Groups

Personal leadership cannot be taught as an academic subject but through positive social interactions. It is about learning how to live in a real social environment. In a sense it manages the informal education of a youth which undeniably also contribute to his value formation. The basic unit of Scouting is the Patrol which comprises Scouts from different age groups. The efficiency paradigm caused many Scout units to put students from the same age group into each Patrol. This arrangement changed the social dynamics and reduces opportunities for the Scouts to learn from and work with people of different ages. The older Scouts were deprived of the opportunity to lead (or take care of) the younger ones, and the latter the opportunity to learn from the former. This is particularly useful for the youth who comes from small families where such emotional relationships between siblings may not be present.

The Patrol system also allows the Scouts to form deep friendships which form the support network in adult life and, as discussed earlier, the sense of belonging to Singapore in a globalised world. Such friendships and commitment should not be under estimated because it is widely accepted that a soldier is prepared to die not for 'God and country' but for his mate next to him.

The use of small groups is possible for all CCAs, including the 'military' activities such as the National Cadet Corps (NCC).

The smallest fighting unit of an army is really a section of about eight men. Therefore the NCC, for example, could organize more activities that make use of the Section instead of the Platoon or Unit.

Adult Support

The quality of adult support, as with all forms of education, is the single most important factor that determines if a CCA is a child-minding agency or non-formal education. The most obvious and visible role of a CCA teacher is to plan and ensure the successful implementation of the activities. It is unfortunate, but understandable, that many teachers regard this as their key and only role. However, this is only one of the roles of a CCA teacher. The other two roles are the *educator* and *group facilitator*. These two roles are often more difficult because they require the teacher to establish a close relationship with, ideally, every student under his charge. This relationship must be based on mutual respect, trust and acceptance of each other as unique individuals with different strengths and weaknesses. Only with such a relationship will a youth dare to test his limits, make mistakes, acknowledge his weaknesses and learn from each experience. The *educator* and *group facilitator* also require the teacher to constantly ensure that all activities and the social interactions within the CCA are positive and have an educational value.

The form of relationship described above is only possible if the following conditions are present. The first condition is time – such relationship needs time to grow and mature. Schools should avoid changing the teachers wherever possible. The second condition is an intimate understanding of the CCA as education and thus ensuring that activities are merely means to an end. This means that the teacher must be required to undergo a comprehensive initial training that allows him to understand the 'why's' and not just the 'how's'. For example it is relatively easy for a teacher to learn how to read a map and compass but he should understand how hiking contributes to the education of a youth. As with formal education, the teacher needs to constantly refresh and extent his knowledge about the CCA through in-service activities. Finally, wherever possible, the teacher should be allowed to say if he wants to be in a particular CCA because he needs to believe in the values of, and methods used by the CCA.

Systemic Approach

The concept of a systemic approach was briefly explained in the discussion on the three forms of education. This same concept should also be applied to CCA. A systemic, as opposed to a systematic, approach means that the teacher must accept that his own values will affect the values the students will learn through the CCA. At the same time the effectiveness of the teacher as a facilitator will influence the learning that can take place through the small group. Neither is the teacher a passive determinant in the system. The success, or failure, of the small group will have a positive, or negative, impact on the teacher's motivation and confidence. Similarly, to what extent do the values influence the life of a student depends on the quality of the small group and the teacher.

This concept is necessary in ensuring that CCAs move beyond the provision of activities to deliberate, structured and meaningful learning opportunities.

Conclusion

The pace of change is unlikely to slow down in the foreseeable future, and may even increase when China and India are fully integrated with the rest of the world. Globalisation will bring with it greater uncertainty about one's values, relationships, and employment. Lifelong learning is now unavoidable because the shelf-life of knowledge has shortened and employment is less important than employability. The scope and intensity of external influences have increased though the print and non-print media, and mobility

of people across the more porous national boundaries. The rapidity with which new products or models are brought onto the market has contributed to the 'use and throw' or 'nothing is permanent' and 'everything is relative' mentality. The unbalanced emphasis on academic achievements by both schools and parents, and the recognition and rewards accorded to the academically-inclined, have had a negative impact on self-esteem of the 'non-achievers' and the inability to accept disappointments in some of the achievers. These challenges and the greater reliance on individualism require our schools to pay greater attention to the development of personal leadership in our students. The non-formal education provided by organizations such as the Scouting can ameliorate the impact of these changes through a structured programme under the guidance of an adult.

Unfortunately, external events, often beyond the control of schools, have caused CCAs to evolve and to lose sight of this important role over the years. There is an urgent need to identify the fundamentals of each CCA and discard practices that do not contribute to its primary function, which must always be the education of youth.

There is a story about a cat in an Ashram in India. This cat loves the company of people and so each evening when the priest led his congregation in prayer, the cat would also wander around the prayer hall. The priest found that this cat was disturbing the concentration of the devotees and so had the cat tied up each evening before the start of the prayers. This practiced continued even after the priest passed away. Then one day, the cat, too died. The temple then quickly found a replacement because everyone thought that tying up a cat during prayers is an integral and important part of evening prayers.

CCAs should ask if tying up a cat is necessary and why was a cat tied up in the first place.

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