All Children Can Learn and Achieve :
The Schools' Challenge

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FOCUS: All Children Can Learn and Achieve: The Schools' Challenge
Selected Papers from Principals' Conference 1993

OTHER TOPICS

LOW GUAT TIN

Inviting School Success

I believe in reading, thus I had told all my 133 Further Professional Diploma in Education (FPDE) participants this year that they will learn more from books than from my lectures. I told them that they should take this golden opportunity to read and thus not only upgrade themselves but to update, uproot and, in the process, be uplifted.

As many have come with all kinds of unfounded apprehensions, I felt that to get them into the reading mode, I should introduce them to some very easy, readable and hopefully helpfully books. I thus told them they could start with "The One Minute Manager meets the Monkey" by Kenneth Blanchard and William Oncken (1989). I had chosen the book for a variety of reasons. Firstly, it is extremely readable, but the main reason is for them to critique the One-Minute Manager series, which was very popular in the 80s.

Two weeks later at the start of class, a participant raised the issue that his friend in the private sector told him that this one minute book of time management is outdated, and that there are new packages on time management in the market. Were they therefore reading outdated stuff?

A number of issues were then raised. Can knowledge be outdated? Can lessons on time management be outdated? Can there be one answer to how time is to be managed? If knowledge in this case is outdated, does it mean that all the great writings of the past are no longer relevant today?

A further issue which I had to grapple with is "Is there a body of knowledge that I have to impart to the

FPDEs? And is this body of knowledge going to help them to become more effective heads of departments when they graduate? Can there in fact be a body of knowledge that we have to impart to children from 7-16. If we are into this body of knowledge issue would it not mean that pupils would have to "heap it up and display it when called for? (However) this static, cold-storage ideal of knowledge is inimical to educative development. It not only lets occasions for thinking go unused, but it swamps thinking" (Dewey, 1916). But is this what we are about in school? Will the accurate regurgitation of the body of knowledge help a child to succeed in today's educational system?

With knowledge becoming obsolete at such a fast pace, it is no wonder that schools today are teaching processes and applications. These are important skills that we want to help children learn and we need to accept the fact that with information multiplying at such a rapid rate, we will become relatively more ignorant each day.

The topic is "Inviting success" but just what is success? What does a successful person look like? What does a successful school look like? Because we believe that nothing succeeds like success, or success begets success, success has for many become the means and end of education. The ranking of secondary schools could lead to a more focussed curriculum, a narrowing in subject offerings, a trimming of ECAs, and a increase in remedial classes, and possibly a teaching to the test. This may or may not be bad. As educators, each of us has to evaluate our programme and stand accountable for what we do. If success

is ability to pass examinations well, and that has been given higher priority than learning (the two are not similar) and if that has hindered learning, we may need to take a re-look.

What is Success?

I asked a number of people what is success. In fact 6 years ago I started interviewing successful people and I have not stopped talking to successful people even though I have just published the book on "Successful Women in Singapore." I am interested today to find out what differentiates a successful person from a non-successful, taking a number of variables into control.

Besides distinct gender differences

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where females feel uncomfortable with the word "success" the following are what they tell me in response to the question "What do you think help you to succeed?" Many, in particular, males told me it is "the ability to strike when the iron is hot or to take risks." This is often mentioned as an important ingredient to their success. The power to go on when you fail. Many talked about their commitment to their work and also their convictions. Some are prepared to work 12-14 hours a day. They have a great capacity for work. They talked about persistence, discipline, singlemindedness and dedication.

For the few who ran their own companies, they talked about their visions, a businesswoman of the year talked about her dreams to go global, "the sky's the limit" she told me. There was a sense of purpose.

They also talked about their tenacity, that they would grapple with a problem and seek multiple alternatives. They also get along well with their staff, i.e., they have good human relationship skills and they know how to get people to work. The successful gentleman who was written up in life a month ago talked about *yiqi*, something he said he got from The Chinese High School. Lastly, something which came through for many I talked to is their enjoyment of work. Be they stockbrokers or regional directors, they shared their love for their work. Some even spoke with such passion and conviction.

Now why do I digressed into this? When I talk to these men and women I often ask in what ways are schools responsible for their success? Did they learn commitment, risk-taking, singlemindedness, discipline, human relationship skills from their schools? Do we teach our students such values or skills in our classrooms? Two told me they attributed their success to the uniformed group which they joined. The uniformed group taught them leadership skills, persistence and the ability to get along with others. Both these successful women were not our brilliant scholars in their school days.

What are we teaching in schools?

Teamwork? Risk-taking behaviours? Discipline? Human Relationship skills? You have the answers. And what is school success? As principals, what do we want to see in our graduands? What is the distinctive mark about the graduands from your school? At the end of 6 years, or 4-5 years in the secondary school or better still for those who run full schools, 10-11 years later, what do you want to see in your graduands for you to say that you have succeeded? Do your graduands leave your school with a distinctive mark that you want to identify with?

To me success is when our students know how to think for themselves. They know how to make decisions, after thinking through alternatives. Do our students know how to think? John Dewey advocated that the schooling experience is designed to cultivate habits of mind. Students to him should internalize the discipline of critical and responsible thinking. Besides thinking, school should teach students how to learn. In this day and age with knowledge exploding at such a rapid pace, success to me is when students know how to learn on their own. They do not need teachers to tell them what to learn and where to get the information. Students carry on developing themselves once they have learned how to learn, no one can stop them from learning what they want to learn.

Success in school is to me when schools help to turn students round from a negative, looser's mentality to a positive one, where instead of saying "I can't", students are saying "I can" and "I did it too!"

Success is when my students can ask questions, substantive questions for knowledge comes from questions. Knowledge is a response to questions. New knowledge, according to Postman and Weingartner (1969), comes from asking new questions, quite often new questions about old questions. When we ask questions, we become "active producers of knowledge". We become active learners not passive receipients.

One of the things which bugs me is

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Effective teachers spend time establishing purpose and helping students understand the worth of what they were going to study and the contribution that knowledge will make to their future.

that my students ask convergent questions and I guess I can't blame them because I ask such questions too. We often ask "What am I thinking?" questions". What's frustrating is the sort of questions students ask of teachers even at university level, and it's not peculiar to Singapore because they ask the same questions in Australia and the United States. Questions such as "When is the, exam? How much should we write? Will this come out in the exams? What about giving us some hints?" No question turns me off more than these questions for they seem to show that the students are only interested in getting through the exams.

Most students and sadly teachers too are answer-centred not problem-centred. The school is the place where answers are found. Students seem to think that there is a right answer for every question. It is heartening that schools are moving away from this and no longer are students rewarded for sheer good memory.

What can teachers can do

Lest I be accused of rambling I will now talk about things which we can ask our teachers to try out in the classrooms, or to become aware of in their own teaching.

First an awareness issue. Many of our students, ourselves included, are very quick to bring closure to our learning and in this way cheat ourselves of significant learning. We are quick to name things. When I teach sometimes my students say "Oh yeh, it's that theory, and we know it already..." When they say that, they close their mind. McLuhan calls this the "label libel gambit" which is 'the tendency to dismiss an idea by the expedience of making it". You libel by label. We find the right label for some processes and we close off. It happens all the time.

What is worst is when we take the joy out of learning from young children. A child sees a bird, is excited, starts chasing it and says, "Mummy, mummy..." points to it and shouts with delight. And what does mummy or daddy say? "Yes, girl, it's a bird. Now say bird." The excitement of seeing different colours, different sizes, different specimens etc is almost gone when the child says "Bird". Just as we have taken the wonder out from our children, schools I feel should rejuvenate in our pupils this spirit of "wonderment" again - to help them to stand and stare in wonder at the sunset or a little insect. Eisner (1991) believe that school "should create the kind of environment and provide the kinds of tasks that elicit and develop respect for wonder and stimulate the imagination."

McLuhan also discussed about the "rearview mirror" syndrome. He said that most of us are like drivers whose eyes are fixed on the "rearview mirror" i.e., looking at where we are coming from and not where we are going to. When confronted with new packages, techniques, our question is will these help my students to pass the "O" level examination or the "PSLE?" It is this syndrome which prevents success, innovation or creative ideas from emerging.

Yet another important area is the need for teachers to keep on updating themselves. Recently, I was asked to show a film which I refused because there are such exciting new videos and film in the market and I think it's our responsibility to know about them particularly if we want to use video or film in our classes. Why show "Goodbye Mr Chips" when there are films like "Dead Poets society?" Two of the best videos I've ever watched and I'm never tired of watching them are Joel Barker's "The Business of Paradigms" and "The Power of Vision." The third is coming soon.

People who develop others must constantly develop themselves for "A lamp can never light another lamp unless itself is lighted. A teacher cannot really teach unless s/he is constantly learning" (Tagore). The same goes for those who are in leadership positions for you are people developers.

Promoting Success in School - what can Principals do?

Let me at this stage turn to another issue - what teachers think principals can do or should do to engender success in school. How can you go about "principaling" for success? What does literature have to say about principal's behaviours or actions which seem to promote school success? Csikszentimalyi (1990) described a condition which enable people to be most productive - pleasure and productivity. He found that *given the right conditions*, the best part of people's lives is when they are engaged in their daily work. From my own experience, I cannot but agree totally with him. Teachers who are productive are

those who love their work, their school and the kids of course. Now what conditions ensure pleasure and productivity in work? To Deming (1986), there must first be a constancy of purpose. Why are we doing what we are doing? We like to know that what we are doing is meaningful and is purposeful. When I can see the end and how I can get there and the end is meaningful, it establishes for me a clear and energizing sense of purpose. The end must be clear and unified. People also work with greater commitment towards a collective goal.

Secondly, there is a need to see that we are getting better at what we do. This is quite a basic need, when people see improvement they are excited. I have the great pleasure of working with a couple of my colleagues recently and when they saw results they were so excited. I get phone calls to go and see the latest creations and you see a couple of men in their forties gesturing excitedly in front of a little computer. Besides improvement, people also like to make things happen. To de Bono (1985) this is a "direct extension of the child's wish to place one block on top of another in order to make something happen."

Thirdly, Deming says there must be a democratic atmosphere. Teachers and students alike can voice their views and know that they will be listened to.

Fourthly, supportive leadership is vital when we want teachers to be productive as well as to enjoy their work. When the principal is supportive of their work, teachers feel good. In the Singapore context, I asked the current batch of 133 FPDE participants to brainstorm a list of principal's behaviour or actions which could help schools to become successful and one point that crops up very often from your Heads of Department (HODs) is *support*. Your HODs feel that it is very important to have your support. They say that if principals were supportive, teachers would feel very encouraged and would be prepared to go beyond the call of duty. The FPDEs also felt that principals should support their students especially when they represent their schools in national or district events. The chief function of management is to encourage and support employees.

And finally, create an atmosphere where teachers would not only be productive but would find teaching pleasurable. Deming noted that teamwork and collaborative effort is important. In short, a purposeful, democratic and collegial environment is very important.

Deming felt that management, and in our case, principals should take pains to create a positive and a productive climate in which workers are kept abreast of the most effective methods and practices. But before you think of developing your teachers, freeing your teachers' mindset, you as people developers must develop yourselves. It is important for leaders to grow for how then can they grow people?

But what do I mean by developing your teachers. As a people developer I am not only thinking of inservice courses, I am thinking of job rotation, job enlargement for your teachers. Some people are discipline masters year in and year out. Let others have a go. The tone of the school may be totally changed with a different discipline teacher. Some of us keep files of each event and when the event crops up, the file is pulled out and the same teachers are assigned the same jobs. One of my participants tell me that it's safer to do it this way. Safety (often it's unnecessary fears) at the expense of developing teachers?

When teachers are stretched and I don't mean giving them more periods or more extra-curricular activities, but when they pick up new skills like running a camp they are excited and their self-esteem could be enhanced and when that happens you have a winner – a positive, excited teacher who in turn would benefit students they teach. Your job as a people developer is to help teachers to see themselves positively. Teachers need to have a positive and realistic attitude about themselves and their abilities before they are able to reach out to like and respect others.

In our case our teachers are fairly

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well in-serviced and they are kept very up-to-date. The issue thus is to know what to adapt and not to adopt lock stock and barrel, to know what works and to use the methods intelligently.

Way before the ranking of schools started, I know that most principals analyse their "O" level and PSLE examination results. Some have even gone into great details. This is important for we need to know such data. However, getting the data, interpreting the data is one thing, the next is to seek ways to improve. It is important that this sensitive process is done without any blame. Once fingers are pointed, teachers will defend and withdraw and this will only aggravate the situation. Dispel fear and blame

and people will work better. Data is collected to look for ways to improve. As leaders your job is to get the data and to ask the right questions not to tell your teachers what to do.

What do your 133 HODs say are things which you can do to help engender success in school? Of the many responses, I categorised them roughly into four categories. Top of the list, one which was mentioned by many of the FPDEs is what I termed "Pupil/teacher relationship". In this category, your HODs feel that principals should (in order of frequency):

- be firm and fair to all teachers;

- talk/relate to teachers;

- support teachers;

- not flog the willing horse;

- create a high staff morale;

- trust teachers;

- give recognition when its due.

These are the ones that cropped up a fair bit, those that were only mentioned by a few are not included in this list. Here we see your HODs stating that one factor that will engender success is your relationship with teachers.

Next on the list is the principal's leadership role. Your HODs feel that the principal should have a clear vision. This was mentioned by a great number of them. In this category, HODs feel that a clear vision will enable you to prioritize activities and be selective and focussed. They also felt that realistic goals are important.

The third category is that of "Principal and Pupil Relationship". The HODs feel that the principal should give strong moral support to students and to attend national or district events where the pupils are participating. They claimed that if the principals take a real interest in the pupils, talk to them and such likes, pupils would be encouraged to succeed.

Finally I have named the last category the principal's behaviours.

FPDEs feel that principals could be a bit more decisive, also be more thorough in planning and be a role model. From this we could see that what the 133 FPDEs have listed as variables that could invite success are quite similar to what was discussed earlier.

Enhancing school success

One of the issues that I'm interested in is to seek out variables that we can alter to enhance success. When we talk about family background, neighbourhood gangs etc, these are not something which we in school can alter; we have no control over them. It is no wonder that Edmonds found that in effective schools he identified, if the students did not learn, the schools do not blame them or their families, their background or the neighbourhoods. Effective schools in his study did not alibi. Schools took full responsibility and they discarded whatever was not successful.

With the focus on input and output, I want now to look at some processes. What are some things which we can do in the classroom to help our students? One of the first things that comes to my mind is again the issue of "purpose". Even teaching at my level, we have to spend time telling FPDEs why we teach certain modules, and how these modules will help them in their work. FPDEs want to know why they are spending time learning things which seemingly are of no use to them. The literature tells us that effective teachers spend time establishing purpose and helping students understand the worth of what they were going to study and the contribution that knowledge will make to their future. William Glasser (1990) remarked that "We should explain much more than we do now...about why we teach the things we do."

Secondly, give students a vision - a vision of their future, a scenario about their future. In the video "The Power of Vision" Barker talks in depth about this need for a positive vision. When children have a vision about their future, what they would like to do in the

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future, this vision will guide and steer them on. He told us how a positive vision of their future empowered a whole cohort of black students to succeed in their academic career. We could get our students to think about their future, what they would like to be and how they could get there.

Thirdly, we need to refocus and relook at the way we think about our students. When I asked secondary school teachers what is the most exciting thing for them in the new year, they told me about all kinds of things. Then when I asked what is one thing which they dreaded most next year, nearly all told me without any hesitation "Normal Tech." Even before these students step into your schools, the anxieties they generate among your teachers, the fears some of them have - are these not quite unfounded? The vocational institutes and the primary schools have had them all these years.

Numerous studies by Brophy and Good (1974), Rosenthal and Jacobsen (1968) have shown that teachers' attitude and opinions regarding their students have a significant influence on their success in school. When teachers believe that their students can achieve, the students appear to be more successful. It seems self evident that for students to learn in schools, they require sufficient confidence in themselves and their abilities to make some effort to succeed. If I know I have a fighting chance I will fight, but if I think there is hardly a scrap of hope, why work? One of the greatest gift you can give your students is confidence. We limit ourselves.

Fourthly, students learn best when there is freedom from threat. But here I am not suggesting that you be permissive. A teacher who disciplines shows he cares. And a word about discipline. As leaders in your schools, take a look at how your discipline master disciplines. Some discipline masters shame teenagers in front of the whole school, other nag, scold, yell for hours! All these often cause students to react negatively and compound the situation.

Fifthly, provide an educational atmosphere of success rather than

failure (Purkey, 1984). Some schools make you feel so good when you enter the gates. Staircases are turned into reading corners, extra space are turned into study areas and such likes. They have such conducive atmosphere for students to study. Others are shockingly bare of life and spirit.

If you walk around most schools, you'll see so many "NO" signs, no talking (in the library); no running (along corridors); no food to be taken out of the tuckshop, no eating etc. Put up encouraging cheerful signs rather than "NO" signs and rules. Put up witty one liners.

Speak to your students, do not talk down or scold. Tell your students your concerns, tell them their plusses, ask them to help make their school count, make them proud to be associated with their school.

Now what about some "handles" that I can share with you? I think amongst yourselves you have a lot of "handles" - tap each others ideas. When I was teaching in Kim Seng Technical, many of my students could not write. After two periods of writing, some only managed to write two paragraphs and most have to take their work home to complete. What does one do? One of the most effective ways to get students to write is called "Spontaneous writing" or "Composition Derby" (Holt, 1967). When I was studying for my Malay examinations in the sixties, I wrote an essay everynight - gave myself twenty minutes and no more. The aim was to help me to write. By the time I sat for my exams, I was writing so fluently. When I taught EL2 students I used this method too and it was extremely effective. Composition Derby literally is getting kids to write quickly as in a race, without worrying about spelling, grammar or sentence construction. Write about anything that comes into their mind which is related to the topic.

I suggest that Composition Derby be carried out everyday, five to ten minutes per day. This should also be a whole school effort. Now, you may ask "What about marking?" You don't mark. Through this method I have seen great improvements in my stu-

dents. The length of their writing doubles, triples in no time. Now what topic? Any topic that excites. We learn writing by writing not by reading about writing.

For those who are shy, lack confidence, do not talk, have "Talking Derby" - where the class is divided into two groups and members in each group take turns to give one-minute talks. The issue again is not content or grammatically correct sentences.

I have been told that many students cannot read and in the oral English examination in Primary 6, some students score as low as 1/10 for reading. I believe in peer teaching because both the teacher and the taught will improve. Have patience - something we don't have in this fast lane which demands instant results. You could pair up a Primary 3 class with a Primary 1 class and have the Primary 1 children read to the Primary 3 children. Research tells us that if a weak reader say in Primary 3 is given the task to help another student who is in Primary 1 to read, his own reading improves. He becomes interested and is concerned that he cannot read Primary 1 work so he begins to work hard on his own. I wonder if we could make more effective use of USSR ('Uninterrupted Sustained Silent Reading').

We have a way of making students dislike reading and writing. We ask them to read and after that we follow up by asking them numerous questions to check on their understanding and also to check if they have read. Why write book reviews? They can get the review from the back of the cover. Also if a 12 year old reads a book meant for an 8 year old it's perfectly okay. And even if he reads one chapter and goes on to read another book, it is okay. Even if he reads the first and the last chapter, it is still okay. The aim is to nurture and help them to enjoy reading.

We should also examine some of our rules and regulations. I remember in my school day I have to do correction and "re-re-corrections" because I may get the part I am supposed to correct right, but I made another mistake else-

where. Some teachers have a rule that if pupils make three mistakes or more they must redo the whole piece of work. The goal is neat and careful work. But by applying it rigidly, the teacher, instead of getting neater and more careful work, received more untidy work because pupils were so concerned about not making three mistakes that they could not concentrate. Having pupils to redo the whole thing creates boredom, anxiety and they become less sharp and make more mistakes.

I feel it is important for teachers and principals to stop and ask themselves a vital question which is "Of all the things we do, which help or hinder learning?" "Of all the things principals do, which help or hinder teachers from giving their best or from enjoying their work? Can I cut down on them?" "Of all the things I do as an inspector of school what help or hinder the principals whom I am supervising to be more or less effective?" How can we do things that will help others in their work, how can we become more aware of the things we do which hinder people in their work?

We assume that when teachers teach, students learn, that all teaching produces learning. I feel that sometimes some form of teaching hinders or prevents learning. Once we can honestly answer these questions and realise that some things we do are not helpful, others useless, yet others harmful, we can begin to improve. Principals should ask where we are trying to go (goal) and is what we are doing now helping us to get there? Another basic question is "Do we know for real why our students fail?" What actually cause their failure? Do we know? Is it a lack of mental ability? Lack of discipline? Poor teaching? Lack of time for study? What is it?

It has been said that children enter school as question marks and leave as full-stops. If this were true we certainly have a lot to answer for. The purpose of education to John Dewey "should be to ingrain into the individual's working habits, method of inquiry and reasoning, appropriate to various problems that present themselves." He saw education as preparing the learner to "fit" into his society, yet fitting the individual into society to Dewey is a process of helping the individual to grow, helping the individual "to progressively realise present possibilities and thus make individual better fitted to cope with later requirements. Growing is a continuous leading into the future." If we can achieve this, if our students were to leave us with working habits that question and reason then we have succeeded.

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LESLIE SHARPE

That's my child you're educating : the changing face of home-school relations.

How far parents should be involved in their children's education has become a central, if not the central, issue in the process of educational reform, particularly in the USA and Britain. In the interests of reform, parents have been led down a path leading from marginalization to empowerment but somewhere along the way their 'real' needs and requirements have become obscured. This paper seeks to locate the 'real' parent by searching through the theoretical structures in which he has been set to work, and in doing so to draw out from overseas experience those aspects that have relevance for developing parent-school relations in Singapore.

Parent's Role : Four Conceptualisations

The role of parents in education is always a socially constructed one and as a consequence is constantly changing. In earlier papers (Sharpe, 1987, 1992) I have identified four broad ways of conceptualising the role of the parent in state-provided education systems.

Marginalisation or Exclusion

The first conceptualisation is one of marginalization or even exclusion. This coincides with the introduction of mass education and the view that education is a form of moral and intellectual rescue of children from their parents. Nineteenth century school-buildings in London were built with high walls not simply to keep the children in, but more so to keep the parents out. Often white-lines would be painted on school playgrounds to demarcate the respective roles of teachers and parents. Parents in the state sector were expected to pass on their genes (the dominant psychometric tradition) but that was about all; given that these genes were assumed to be inferior, it followed that their voices could be ignored.

Partnership

Major in-roads into this way of thinking did not really occur until the 1960s with the rise of the notion of meritocracy to challenge that of a finite pool of inherited talent. The climate of panic following Sputnik was ideal for sociological critiques of the psychometric tradition, and for the 'discovery' of the home as an important agency of motivation. This was the period of the Plowden Report in Britain, of community education and of the birth of compensatory education in the USA. Parents had been discovered to be a 'hidden-hand' in education, a hand that had to be grasped in 'partnership' by teachers.

Consumerism

Just as previous shifts in conceptualizing the parent's role can be traced to changes in the broader society, so too with the reworking of the parent as consumer in an educational marketplace. Here, many would argue, the major impetus was the sense of economic decline experienced during the 1980s in western countries, notably the USA. This decline was laid squarely on the school system which had put the 'nation at risk' (National Commission on Excellence in Education, 1983). The main culprits were centralization, bureaucratization and uniformity in the school system, which had led to mediocrity (Chubb and Moe, 1990). The rationale was that educational standards could be improved by subjecting schools to an entrepreneurial and competitive marketplace environment meeting the needs of consumers rather than professionals and bureaucrats. State educational systems, it was argued, needed to reject command economics in favour of demand economics. Choice, competition and freedom of information were to be the new key words. Though begun in the USA, it is in Britain that marketplace ideology finds its fullest expression, where a long list of educational reforms has been enacted to create an environment in which schools can function as small businesses.

Empowerment

Radical as marketplace changes are, for some they do not go far enough.

Critics argue that though parents have gained choice and information, they have not gained the right to influence school policy directly, and that crucial decisions affecting curriculum and assessment have in fact become even more centralized in the hands of government. The increased powers of parents, especially in their capacity of parent-governors, however, should not be underestimated. Parents in Britain, for example, not only have the right to hire staff and the principal; there have been cases of where they have been successful in driving school principals to resign. As the leader writer in the Times Educational Supplement puts it, "The cry of high-octane parents in full pursuit of a disappointing head teacher is not a pretty sound". Cases of eminent head teachers resigning after disagreements with their school governors include the head mistress of St. Paul's Girls' School in London, the headmistress of Haberdashers' Monmouth School for Girls and the headmasters of the Dragon School, Oxford, and The Hall in Hampstead (TES, 8, 1992). Principals ignore governors at their peril. No doubt in Britain these deeds were done with a certain decorum. In the States, however, where democracy is often synonymous with carnival, the following example of parent power deserves some space. The writer (Fine, 1993), is discussing the operation of local school councils in Chicago, where since 1989 parents have had a majority representation and are empowered to take major decisions such as the hiring, firing and evaluation of the principal :

"I joined a group of parents and community members in one of Chicago's poorest elementary schools. At the school, parents, teachers, and community members were interviewing their top four candidates for principal of their school, in front of a gymnasium filled, from 5:00 pm until 8:00 pm with parents, community members, children, teachers, and food and drink...The smells of democracy were sweet".

Will the price of stocks go up ?

It is probably too early to evaluate the success of reforms, given that they are not all in place, and those that are have been in operation for a relatively short period. A case in point is the educational voucher, the flag ship of consumerism, where implementation has been bogged down in disputes in the USA over the First Amendment prohibition on the establishment of religion. In Britain, with local management of schools in place, and with a voucher scheme already underway in the financing of youth training schemes, a widening of the scheme cannot be very far away. A further obstacle has been the inability to provide clear performance charts and suspicion of the British government's well publicised preference for "clean figures ". League-tables remain relatively unsophisticated, as statisticians grapple with problems of defining and measuring notions such as 'effectiveness' and 'value-added'. The number of applicants for parent-governor posts in Britain has been mixed, leading to accusations that parents typically do not want to be empowered. Not all parents seem to choose schools on rational grounds, often preferring the nearest to the best, and where choice is exercised it is not always honoured. More perplexing still, "bad" schools have not readily faded away, as parents go to great lengths to keep them open, even banding together to pay the salaries of threatened staff. Nor is it always parents who choose schools : there are a growing number of cases where popular schools choose parents.

Research into Choice

There is little published research as yet on the results of the market experiment, though there have been a flood of books and articles on the issue, most especially on the matter of choice (Goldring, 1991; Johnson, 1990; Cookson, 1992). One study, conducted in Scotland (Willms and Echols, 10, 1992), where choice of schools has been in operation since 1980, suggests that choice discriminates against working class parents. The researchers report that the main findings of their five-year

Nineteenth century school-buildings in London were built with high walls not simply to keep the children in, but more so to keep the parents out.

The conventional wisdom is that most parents expect teachers to teach and most teachers only call in parents when problems occur, usually over discipline.

study were increased segregation between working class and middle class children and minimal changes in academic results. Apparently, middle-class parents were found to choose schools on social rather than on purely academic criteria: tradition, reputation and social mix were the key factors for such parents. Similar findings are reported by Lareau (Lareau 1987) in the USA.

The 'real' parent

On this kind of evidence, skeptics have begun to question once more whether reform is really in the interests of all parents. Perhaps, however, the point is that proposed changes were never based on the needs of real parents at all, but rather on the needs of conceptual parents. Parents have been caught up in conceptual schemes. Some would say this is inevitable. This paper has seen them characterised as reproducers, motivators and consumers. There has been 'genetic-parent', 'motivational-parent', 'market-parent' and 'power parent'. Their work has never been dull. However, one wonders whether they have been put to work for themselves or for others. Is there such a thing as the real parent? What do parents want from the educational system and particularly from their children's teachers ?

Partnership Revisited

If concepts like *power* and *control* do not readily spring to the minds of parents when thinking about schools, which do? According to Epstein (Epstein, 1991, 1993) there are three: *information, communication,* and *participation.* Though legislation may be necessary in some situations to oblige schools to accede to these requirements, the ideal is that schools should take the initiative themselves. This is more conducive to good relationships as the politics of power often produce conflict and disharmony.

Though educated parents - a growing number - will be more likely to avail themselves of school initiatives,

international experience has shown that less well educated parents, often from low socio-economic groups, will need considerable encouragement from the school. Epstein suggests a step-by-step programme for school principals for such parents to help them strengthen the support they give to their children:

- increasing information, both from the school to the home, and from the home to the school

- encouragement of parents to attend school events and to act as volunteers

- advising parents how they can help their children at home

- encouraging participation in parent-teacher organisations, committees or councils

- using community resources to strengthen families and aid schools

For Epstein there are numerous ways of developing each of these stages. Some schools will be ready to encompass all five, others will find difficulty moving beyond the first stage. How far, and how fast development occurs is a local matter and cannot be prescribed beforehand. The guiding principle, however, as Sallis (Sallis, 1988) urges, is that schools should take the lead in projecting themselves as service institutions.

Discussion

Most would agree that the dominant model practised in Singapore is that of exclusion. The conventional wisdom is that most parents expect teachers to teach and most teachers only call in parents when problems occur, usually over discipline. Statistics on the relative levels of education of parents and children (Dept. of Statistics, 1993), as well as the overall level of education in the population, do much to explain this thinking. Parents typically have not been well educated and improve-

ments in their children's level of education have represented a form of intellectual, if not moral, emancipation from the home. There have been good reasons, therefore, for parents to leave teaching to the teachers.

However, changes are occurring, as evinced by the community education schemes organised by MENDAKI, SINDA and CDAC; by the growing numbers of schools operating home-school programmes; by the provision of more information and choice to parents in such forms as the Straits Times 100 exercise; and the introduction of independent and autonomous schools. In part, these developments can be traced to rapid changes in the economy and the consequent expansion of the education system which have resulted in a marked increase in upward mobility (Quah et al. 1991), an expansion of the white-collar work-force, a general concern over man-power shortages and educational wastage, and an attempt by government to involve the population more directly in matters of immediate concern.

If overseas experience can be used as a rough guide, increases in the levels of education of young parents are likely to result in increased numbers of them wanting to take an active part in their children's education. There will be many more voices saying, "That's my child you're educating", as parents begin to think about education and to see that the teacher's job is to help them to educate their children and not the other way around. At the same time there will be the attendant risk of an 'underclass' developing as educated parents seek to 'reproduce' their own educational levels in their own children, thus reducing the upward mobility chances of the less fortunate, especially in a situation of lower economic growth. It is such a polarization of parents that has in part led to consumerist and empowerment strategies overseas.

What overseas experience shows is that parent-school relations are likely to flourish best in a non-confronta-tional context, where parents are al-lowed to be parents and their needs,

rather than the needs of conceptual parents, are addressed. Despite its shortcomings, the partnership model comes nearest to meeting these real needs.

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Dr. Leslie Sharpe lectures at the Na-tional Institute of Education, Nanyang Technological University, Singapore.

WONG SIN ENG

Successful Parent-teacher Communication Through Home Visits

To establish good rapport between parents and schools, there must be effective two-way communication. At Red Swastika School, we believe that home visits are an effective way of achieving this. During home visits, teachers can establish good relations with parents, provide feedback to parents regarding their child's progress, learn more about the child and his home environment.

Main Features of the Programme

The Home Visit Programme (HVP) requires the teachers to visit the homes of their pupils. The main idea is to reach out to parents and communicate with them.

In the early 50s, when the school's enrolment was small, all pupils' homes could be visited in one day. Some of the pupils would serve as their teachers' guides as the latter did not know the village very well.

When I became the principal of Red Swastika, the programme was streamlined and reorganised. With the relocation of the school to Bedok in 1981, there were new needs and demands. Hence, the Home Visit Programme (HVP) was restructured to meet the demands of the 80s. The emphasis then was to establish good relations and rapport with the parents. It was also to provide an opportunity to enlighten the parents on our school policies, programmes and activities. This was one of the strategies that the school used to raise the community's awareness of the school in the new neighbourhood and hence encourage parents to enrol their children in our school.

To meet the challenges of the 90s, there is a greater need to ensure that the school communicates effectively with the parents so as to get their support and involvement.

Organisation of Programme

The school's aim is to visit the homes of all its Primary One pupils. Besides that, we also visit the homes of newly-admitted pupils at other levels and pupils with special needs. At the beginning of the year, teachers verify the accuracy of pupils' addresses. The Head of Department in charge of the Home Visit Programme arranges the addresses in convenient groups and form pairs of teachers for the visits. Teachers are paired according to their language proficiency (English or Chinese), experience and car ownership (to facilitate travel). Each pair of teachers is assigned an average of 10 to 12 homes to visit. All the homes of every pupil of Primary One will be visited during the period of the June holidays to the first week of the third term. The Principal and Vice-principal are involved in the home visits as well.

Teachers are given a list of homes they will be visiting about a week before the launch of Home Visit Day. They will then meet the pupils to confirm the addresses and telephone numbers. They will also try to get some background information from teachers who have taught these pupils previously so that they could provide feedback to the parents. Guidelines on how the visits are to be conducted are also given to the teachers involved.

The programme is launched on the first Saturday of the first Semester holidays and this exercise goes on until the first week of Term 3. On the day of the launch, teachers attend a short briefing before they set off on their visits. After each visit, the teachers write a report and the data collected is entered into the pupils' cumulative record card.

The aspects covered in the report are:

- Home & Family Background of the Pupil

- Development of the child

- Feedback from parents

- Teacher's Comments

The teachers will also report on their visits and raise suggestions and other comments made by the parents during the school's contact time. Wherever possible, follow-up action will be taken.

Outcomes

"The Home Visit Programme and research on families with children in the elementary and middle grades have shown that families of all socio-economic, racial, and ethnic groups want to learn more about how to help their children learn and succeed. What families do affect children's learning. Behaviours linked to children's success include parents' positive reinforcement of children's academic efforts, supervision of homework and reading, talking and telling stories." (Davies 1991)

Guidelines for the Home Visit

BEFORE THE VISIT

1   Check the address and telephone numbers of pupils whose homes you are visiting.
2   Discuss with the pupils' teachers so that you have a better understanding of his work, attitude and behaviour in class and in school.
3   Sort out the cumulative record cards of the pupils you are visiting.
4   Be well prepared for the visit. If necessary, chart your route and organise all your materials so that a fruitful discussion could be carried out during the visit.

DURING THE VISIT

1   Be diplomatic, friendly and courteous.
2   Try to conduct a conversation with the pupil's parents. It should be a two-way communication. Do not turn it into an interview session.
3   Be very tactful. Respect the parents' opinions, suggestions and comments.
4   Be sensitive to the parents. Exercise professionalism. Do not be critical of the parents or of your colleagues.

AFTER THE VISIT

1   Discuss the report with your partner. It should be made after the visit.
2   Enter all the observations and data collected on the cumulative record card. Aspects to be covered:
   ● Home and Family Background
   ● Development of the child
   ● Feedback from parents
   ● Teacher's comments.

It is indeed heartening to note that the programme was well-received by both the parents and the teachers. They were happy to meet the teachers as the visits provided opportunities for them to express their views in a non-threatening atmosphere and in the comfort of their homes. This informal interaction with the parents has fostered rapport and greater trust between the school and the home.

While we have received very positive comments on the programme, we encountered some problems. One such problem was the difficulty in arranging the time to meet the parents. As they are working parents, meeting them on a Saturday morning or even on a weekday may pose a problem. The visiting teachers will have to try to accommodate them by arranging for a more convenient time. However, those who are supportive of the programme would apply for leave so that they could meet the teachers on Home Visit Day. Another problem faced was the small number of parents who have planned their holidays for their families as soon as the school vacation begins. Special arrangements will be made to visit them after their trip or in the first week of Term 3.

Benefits

Pupils are excited about their teachers' visits to their homes and many of them have pleasant memories of these occasions. They understand their teachers better and barriers and unwarranted fears are removed. They realise that the visits are not occasions to be used to complain about them but are used to find out how their teachers could help them more.

Parents have a better understanding of the school's policies and aspirations. They have the opportunity to provide constructive feedback on the school's instructional programmes and facilities.

The teachers have a better understanding of the kind of training that the children receive. They get to know that pupils attend lessons like ballet, music, art or tae-kwan-do outside school hours.

With the records that we have from the home visits, teachers who take over the class the following year would be able to understand the pupils better. Teachers would also be able to understand parents' interest in the progress of their children.

Parents have a greater trust for the school and hence their support and co-operation were more forthcoming. Parental involvement in the school's activities is a sign that they care and are willing to provide whatever assistance to the school.

Teachers are generally positive about the programme. They feel that home visits provide a personal touch between the school and the home. The visits have been enriching experiences for them and are an effective way of establishing parent-teacher relationships.

Conclusion

The school will continue to maintain this strong link between teachers and parents. Through home visits, greater trust and co-operation could be generated from the parents and this could lead to better pupil performance.

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Wong Sin Eng is Principal, Red Swastika School, Singapore.

GRACE LOH

Teacher Expectations and Academic Performance

Researchers are concerned about teacher expectations and their effect on students' performance. Will teachers form impressions of their students on the basis of the limited information available to them? Will this initial impression lead to teachers' unrealistic expectations about their students and will teachers' expectations in turn affect students' performance in the school? In Singapore where children in the schools are streamed as early as Primary 4, these questions are of particular relevance.

Much research on this area have already been done in countries such as America, Canada, Britain and Australia, but till now, very few empirical studies of this type have been conducted in Singapore. A quick way to follow the progress made with respect to these questions therefore is to examine closely what has already been written by other researchers.

A review of the literature on the formation of teacher expectations must not be too narrow in its focus. It must not concentrate only on the studies which have provided information concerning the bases of academic expectations. It must also examine the work that has been done in other areas. Studies in areas like the communication and impact of teacher expectations have to be considered because they have contributed additional data concerning the development of teacher expectations.

Studies on the impact of teacher expectations

Research in the impact of teacher expectations, for example, has shown the importance of having a better understanding of the formation of teacher expectations. Without knowing how teachers develop expectations or the kind of expectations which are formed, researchers will not be able to determine the effects of teacher expectations on their students' academic achievement. This is evident from the work that has been carried out by Rosenthal and Jacobson (1968). In their study, *Pygmalion in the Classroom*, the researchers tried to induce teachers to form certain kinds of expectations of students' academic achievement. At the beginning of the school year, elementary teachers in the 'Oak' school in San Francisco were given a list of names of students in their classes who had the potential to 'bloom' academically. These students had apparently been selected on the basis of their results in the 'Harvard Test of Inflected Acquisition'. In actuality, the test could not predict academic blooming. Instead it was an IQ test-Flanagan's Tests of General Ability (TOGA). The students also were not selected on the basis of their performance in the test. They had been randomly chosen by the experimenter. These students formed the experimental group whilst the rest of the pupils represented the control group. When the TOGA was readministered again, the researchers compared the students' performance in the tests. They reported that students from the experimental group performed better. This was especially marked in the first and second grade levels. On the basis of these findings,

Rosenthal and Jacobsen concluded that children in the experimental group showed a greater improvement because teachers were induced to expect more from the students.

The results of this study were subsequently challenged by researchers such as Elashoff and Snow (1971). Elashoff and Snow pointed out that the 'treatment' administered to the teachers may not have been effective. They cited as evidence, the comments made by the teachers involved in the study. The teachers mentioned that they had hardly glanced at the list of potential 'bloomers'. Some teachers were also unable to even recall the name of these bloomers. If teachers did not remember which the students were bloomers, then the better results of the experimental group could not have been due to favourable teacher expectations.

Was the shortcoming of the Rosenthal and Jacobson study due to the fact that teachers could not be induced to form opinions about others, or was it because the experimenters had not done enough in inducing teacher expectations?

Apparently, Rosenthal and Jacobson did not take into account teachers' natural expectations. Although these teachers did not know the students at the beginning, they might have developed their own expectations towards their students as time passed by. Hence, they could not remember or may not have believed what the experimenters had told them.

Hundreds of studies have been conducted since the publication of the Rosenthal and Jacobson paper. Pro-

cedures adopted by their studies are more or less the same. A typical study will start with a manipulation (in the case of induced teacher expectations) or an assessment (in the case of naturally formed teacher expectations) of teacher expectations. A time interval is allowed to pass during which no attempts are made to influence teachers' behaviour or opinions regarding their students. Teachers' behaviour in the class or students' performance at the end of the interval are then taken as evidence of whether teacher expectations does have an effect on teacher behaviour or student performance.

Studies on induced and naturally formed teacher expectations seem to indicate that teacher expectations do affect teacher behaviour and student behaviour. Although evidence shows that the effects are more likely to occur when the teacher's expectations are naturally formed, it does not rule out the possibility that induced teacher expectations can also lead to similar effects. The crucial point is timing. A teacher who has known the students for some time would have already formed his or her own expectations and hence is less likely to be induced to change his or her impressions. If the inducement comes at a time when the students are still new to the teacher, the chances of forming expectations under induced conditions will be greater.

Studies on the communication of teacher expectations

How do teachers convey their expectations to students? Researchers like Good and Brophy (1981) suggest that the teacher forms differential expectations for the academic performance of different students. On the basis of these expectations, the teacher begins to treat the students differently. As a result, the students begin to react to this differential treatment. Teacher expectations over a period of time may affect the students if the latter passively accept the teacher's opinion of their academic ability. Finally, when this occurs, the students will conform to the teacher's expectations.

If teachers convey expectations in the manner suggested by Good and Brophy it is essential for researchers to pay attention to whatever happens in the first phase. This is necessary because the expectations formed in that stage will later be translated by the teacher into differential classroom behaviour.

This brings us to another pertinent question: How does one form expectations about other people? In the school situation, where teachers are constantly seeing new faces, what information are most likely to draw their attention? What are the things or information that are used most often as the basis of forming impressions or expectations?

Studies on the formation of teacher expectations

Research on their bases of teacher expectations often adopt a simple procedure. In many cases, teachers are simply asked to make inferences about some student's present or future academic achievement on the basis of certain kinds of preperformance information. Most of these are hypothetical cases.

In one study, Cooper (1979) asked 124 university students to predict the performance of one student from an average third grade class in spelling tests. The participants were asked to make their judgements based on five kinds of information about the imaginary student. They were also asked to rank the five sources of information according to their accuracy for estimating a student's ability. After analyzing the participants' responses, Cooper reported that they ranked the sources of information in the following order of importance:

classroom observation; standardized tests; comments from previous teachers; family background and physical characteristics.

This rank order is significant because it indicated that the more academically pertinent information concerning the student were the ones shaping teacher expectations.

Cooper also found a tendency for university students to regard expectations based on these sources of data as being more accurate.

Other researchers like Bennett (1979) reported quite similar results. She found that the academic history, race and social class of a student are related to the teacher's expectations of that student's academic performance. Dusek and Joseph (1983) also carried out a meta-analysis of research findings from seventy-seven studies. Both researchers discovered five bases which are related to teacher expectations. The bases are cumulative folder information, conduct, student attractiveness, race and social class. Of the five, cumulative folder information and conduct were identified as the ones providing teachers with objective and academically relevant data. The teachers perceived these sources as being highly reliable and accurate.

There was evidence, however, that bases for forming expectations may change as the teachers become more experienced. Marwit, Marwit and Walker (1978) noted that initially preservice teachers did not have any racial bias but after their teaching practice they seemed to be affected by the race of the students. They also became less tolerant of the transgressions of black students. The three researchers speculated that these preservice teachers may have been influenced by the supervising teachers.

The present study focus on the 'formation' aspect of teacher expectations. It will investigate whether certain kinds of preperformance data are related to the formation of academic expectations and if so whether the choice has anything to do with teacher's experience, children's own ability, or subject content.

From the review of pertinent literature, we have seen that information such as cumulative folder information, standardized tests, conduct, race, social class and attractiveness have often been used as the basis for forming teacher expectations. In the present study, however, only four types of information are provided. They are test

score, conduct, social class, and attractiveness.

The author's prediction is that since Singapore is a highly examination oriented society, most of our teachers will place their priority on the children's past performance, ie. scores of previous tests.

However, it is felt that teachers with more experience in teaching will realise that it is not right to consider a single test score as an indication of a child's academic performance. This implies that they will not put so much weight on test score.

As teaching experience may be an important factor in determine teacher expectations, the sample in this study consists of the 1984 intake of Certificate in Education ('A' Level) and Diploma in Education (English programme) trainees and in-service teachers in the Further Professional Certificate in Education programme.

Instruction

Two questionnaires are designed for the study, each consisted of a series of questions concerning the academic achievement of a hypothetical student. In all cases, the participating pre-service and in-service teachers are asked to choose from among the list of four students, the one who is most likely to perform well in a classroom test. The questionnaires deal with students' performance in Mathematics and English. The subjects, Mathematics and English, have been selected because it would be useful to find out if pre-service and in-service teachers rely on the same bases of information for subjects which are very different in nature. The two subjects differ, for example in terms of concepts, contents and skills. In view of these differences, will teachers still use similar sources of information about students as indicators of the students' academic ability?

Each questionnaire consists of two parts. In Part 1, pre-service teachers and in-service teachers are presented with three cases about so-called top, average and weak students. Three different ability levels are presented be-

cause in the Singapore situation, it is normal practice to stream students according to ability. It is therefore important to find out whether teachers use different criteria to assess the academic performance of students with different levels of ability.

In each case, positive or negative information about four students in a class are given. The respondents are asked to make a guess as to who is the student who did particularly well in the English or Mathematics tests at the beginning of the year, and then to predict which student will be more likely to perform well in the end of year examination. The information that is provide includes details about the student's attractiveness, social class, conduct and previous test score. Thus, for one student, the information given describes the student's attractiveness in appearance. For another student, the information indicates that the student comes from a higher social status family.

To illustrate, one of the cases states that:

> Someone says that Student H's family lives in a semi-detached house. The student's father is a doctor.
> Student G has been praised by a teacher for being well-mannered. The student is very polite to the teacher.
> Student J has an attractive appearance. The student is also neatly dressed.
> Student R scored 80/100 in last week's English test.

This is then followed by a short introduction which states that at the beginning of the school year the teacher gave the class a test. After marking the test papers, the teacher announced that one student performed extremely well. This student is one of the four students described above. Two questions are asked:

1. Who is this student?
2. Why did you select this student?

In Part 2, pre-service teachers and in-service teachers are asked to predict the four students' performance at the end of the school year. The respondents are required to rank the four students (A rank of 1 is con-

sidered as the best performance and 4 is the indicator of the poorest performance). Researchers like Cooper have indicated that it is important to find out if teachers continue to use the same source of information to form opinions about students' academic ability. In view of this, this part of the questionnaire intends to find out if teachers in the present study also continue to use similar sources of information to predict student performance at the end of the school year.

Procedures

The two questionnaires are administered in one sitting. Before the questionnaires are distributed to either the pre-service teachers or in-service teachers, they are stapled together. The stapling is done in a particular way. Half of the questionnaires dealing with the students' Mathematics performance are placed before questionnaires dealing with the students' performance in English. This order is reversed for the remainder of the English questionnaires and the rest of the questionnaires dealing with students' performance in Mathematics. The questionnaires have been arranged in this manner in case the first questionnaire affects the second questionnaire.

The questionnaires were randomly distributed to the participants. The participants were asked to complete both the questionnaires in 30 minutes. Instructions were also given that should they feel that they did not want to answer the questions they might do so but they must return the questionnaires to the lecturer in charge of the administration.

Of the 124 Cert Ed and 135 Dip Ed trainees who were present, 112 Cert Ed and 72 dip Ed trainees respectively submitted the questionnaires duly completed. All the 33 FPCE teachers completed the questionnaires.

Results and Findings

A frequency count of the returned questionnaires showed that whilst 100% of the FPCE teachers com-

pleted the questionnaires, many of the pre-service teachers did not respond. 9.7% and 46.7% of the Cert Ed and Dip Ed trainees respectively opted not to respond to the questionnaires.

The 12 Cert Ed and 63% Dip Ed trainees provided a variety of reasons to explain why they did not complete the questionnaires. Some of the trainee teachers expressed indignation at having to respond to such questionnaires. For example:

You can take the questionnaires and stuff it! Who or what do you think we are? (A Cert Ed trainee comments)

Frankly, this test insults my intellect! (A Dip Ed trainee comments)

Other trainees explained that they could not form any judgements as insufficient information had been provided. For example:

There's no way of answering. Information provided is insufficient to come up with any judgements. (A Cert Ed trainee comments)

Data insufficient to draw conclusion. No correlation. (A Dip Ed trainee comments)

In the case of the FPCE group, one would expect with their teaching experience they would be more reluctant to form impressions of students on the basis of a few sources of information. However, contrary to the investigator's expectations, all the FPCE teachers completed the questionnaires. This could have been due to their attitude. Being a more matured, highly motivated and enthusiastic group, they might have been more co-operative and hence more willing to participate in this study.

The Use of Four Sources of Information Concerning Students as Indicators of Academic Ability

For those who responded to the questionnaires, the study hypothesised that of the four types of information made available to the teachers, (ie. students' attractiveness, social class, conduct and previous test score), a student's score in a previous test would be used as the most probable indicator of the student's academic ability ie. they would choose the student with good test score in a previous test to be the one who would perform best in a later test.

The teachers' responses were generally supportive of this hypotheses. Most teachers (pre-service and in-service) considered the one with a good previous test score as the student who did best in the test. The FPCE teachers' choice seemed to be affected by the known ability of the students. Good SES was associated with good performance on the part of top students whereas previous test score of average students was taken as an indication of good performance in the test. For weak students the FPCE teachers chose test score (Mathematics) and SES (English) as indicators of academic ability.

When the information about negative attributes were provided, the teachers responded differently. Contrary to the previous case (positive attributes), in the case of top students, the most popular choice was conduct. In all instances except one, the majority of pre-service and in-service teachers chose the top student with poor conduct as the one who did best in the present test. The Dip Ed trainees chose low SES as an indicator of good academic performance of a top student in Mathematics.

For average students, there was a subject difference. For English, the choices of pre-service teachers were for unattractiveness. In the case of Mathematics, the pre-service teachers chose low SES. An equal number of FPCE teachers selected unattractiveness and low SES as indicators of good academic performance in English. In the case of weak students, the teachers considered students with low SES as the best achievers in Mathematics and English.

At first glance, the data obtained seem to contradict the hypothesis that teachers would tend to base their choice on previous test score. But ac-

tually what we found here are rather consistent with the hypothesis. If the fact that teachers chose the student who had a good test score in the previous test to be the one who did best in the test reflected this tendency to focus on test score in predicting academic performance, then their belief that someone who did badly in a previous test could not do well in the test can be taken as a reconfirmation of the importance of test score.

Implications

It is evident from the present study that many pre-service and in-service teachers do form expectations on the basis of limited sources of information concerning students. This finding is an important one as it shows exactly what Tversky and Kaheman (1973) found. These researchers have suggested that people generally determine the probability or likelihood of an event by using a number of heuristic principles. The principles of availability and representativeness, for example, are often used by people in making predictions. As test score is normally used as an indicator of achievement in school learning, it is not surprising that when asked to pick a student who was most likely to perform well in a test, most teachers chose the student who had done well in a previous test to be the one but did not select the student who had done poorly in the previous test. There is nothing wrong to base one's expectations on a single test score. What concerns us more are the implications. Are teachers aware that their assessment could be wrong? Will they treat students differently when they hold different expectations? And if so, will the differential treatment affect the students' social and academic development?

Even if pre-service and in-service teachers can form judgements about students before they have an opportunity to observe the students in class, the teachers should realize that the student who performed well in a test may not have the same good performance a year later. Pre-service and

in-service teachers in the present study, surprisingly, did not seem to be aware of this and continued to rank the one with good previous test performance as the best achiever at the end of the year examination.

That teachers may not change their opinions has been stressed by researchers. This brings us to the question of whether it is safe to allow teachers to have access to data concerning a student's record of past performance. If teachers are 'exposed' early in the school year to data concerning students, then this may have affected their perception of the ability of students concerned.

If information were to be released to teachers, then more information needs to be given as they will help the teachers to be more objective in their judgement of the student's academic ability. If teachers are exposed to only limited data from the very beginning, they may form an 'unbalanced' view of the student.

The fact that pre-service teachers and in-service teachers have the tendency to use test score as an indicator of academic performance is of particular relevance to an examination - oriented society like Singapore. The possible effect of teacher expectations on student performance is also a matter of concern. If self-fulfilling prophecies do happen, then the students who will suffer most will be those being streamed into a 'Normal' class. It is interesting, however to note that the FPCE teachers, being more experienced, have also taken SES and even conduct into consideration in making judgements about students.

Conclusion

The findings and implications of this study should, however, be viewed in the light of its limitations. As the population sample only consists of the 1984 intake of Cert Ed and Dip Ed trainees and FPCE teachers enroled at the then Institute of Education, this will necessarily limit the generalisation based on this study. Generalisations are limited by the sources of preperformance information that have been selected. The pre-service teachers and in-service teachers only responded to four kinds of data concerning the students. Finally, as the study is simulational in character, its findings may not be generalised to the classroom setting.

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TAN YAP KWANG AND BEATRICE TAY

Education in the 21st Century
A Peek into the Future

The wise one knows what time it is.

Zen proverb

How aware are we of the times we live in? To what times do our classrooms and we, as teachers belong? These are questions we need to ponder upon if our schooling processes are to remain up-to-date.

There are two schools of thought. One believes that significant improvements can be made under the existing model of teaching, so long as there is more of what appears to be linked with improvement (like better qualified teachers, more in-service training, more homework). The other, an emerging school, believes that once a maturing system has reached its end, there has to be a fundamental redesign before significant progress can be made.

The Aircraft Analogy

Robert Branson (of the State University of Florida) cites the history of aircraft design as an analogy. Speed, payload (how much a plane can carry) and range (how far a plane can fly) - these are the 3 factors that have to be taken into account for any defined mission. All three cannot be maximised simultaneously. If you want more speed, you must give up either range or payload. The first aircraft use piston engine technology. By the time of World War II (1940),

aircraft design in terms of airframe and engine efficiency had reached the upper limit of capability for piston engines.

So, how did aircraft designers improve the performance of piston-engine aircraft beyond their theoretical upper limit? *They didn't.* A totally new power concept was introduced in the 1940s - the jet engine, which represents a fundamental advancement in technology. With the greater power capacity of the jet engine, all of the 3 major flight variables, speed, range and payload, could be completely reset and reconsidered. The same 3 mission requirements must still be traded off, but aircraft with jet engines fly faster, further and carry bigger payloads than was possible with piston engines. What is important is that aircraft designers were aware of the technological advance, and knew what to do with it when it was made available.

The pertinent question for us in education is: "Are we at the piston engine stage, and trying to make our aircraft go faster by waxing its wings more often? OR Have we found the jet engine of education?" Our mission requirements will remain the same, but which system we use will determine the extent to which they can be maximised.

Paradigms of Schooling

Let's consider some paradigms of schooling to determine what stage we are at:

The Socratic Oral Tradition

In the oral tradition, the teacher was the focus, the transmitter of knowledge and experience. The critical issue is that instruction was a one-way delivery. Later, students recited orally, or prepared written work which was evaluated by the teacher.

The Current Paradigm

Under the current model, the teacher is still the principal source of knowledge and experience, the deliverer of information & the gatekeeper and controller of the knowledge-base. Compared with the oral tradition, there is increased interaction between teacher and students. Through time, better and more varied instructional materials have also become available. Interactions among students are also a possibility. Nevertheless, a vast proportion of instructional time is still spent on transferring/presenting information, rather than on learning activities.

We, like most other educationists
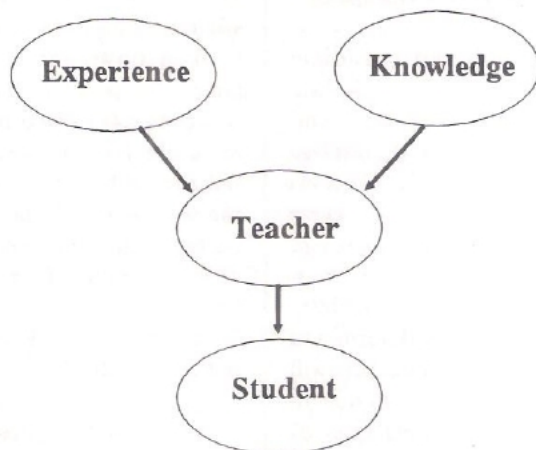
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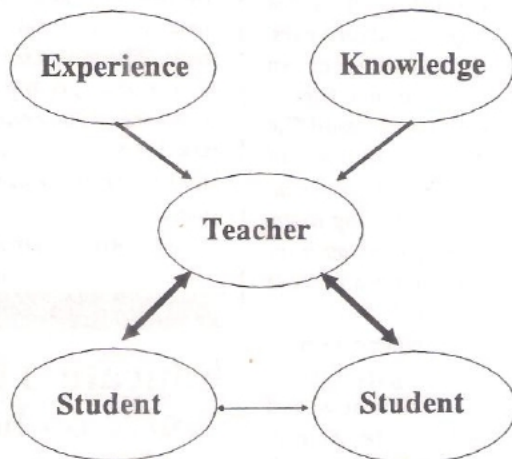
The Current Paradigm
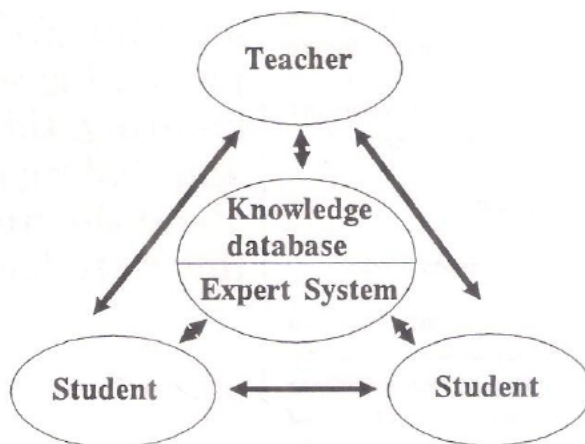
Technology-based Paradigm

Source: Branson (1992)

around the world, belong to the first school of thought. We believe in the improvability of the current system. Hence, we look at what others are doing, regarding say, different course provisions, longer school days and year, better and more intensive teacher training, higher teacher salaries, parental choice. There are however, increasing numbers from the second school who label reform attempts as mere "*quick fixes*" which will have no lasting effect. Why? Because the process of schooling remains the same --- a process which they see as having reached its upper limit of capability and which essentially is technically obsolete.

Is the Current Paradigm Obsolete?

The current system of schooling is teacher-centred and group-based. Critics also liken current education to being taken to the world's greatest restaurant and being fed the menu, that is, instead of eating the food, you eat the menu card on which is printed the food items. Students learn about other's thoughts and discoveries, rather than explore ideas and make meaning for themselves. This rather extreme view illustrates how a teacher-centred model may lose sight of what learning is all about.

And even if learning the menu were important, consider the advent of the microchip which has in recent years powered a rapid technological and knowledge expansion. The microchip has been responsible for developments in personal computers, digital communications and factory robots. There are now CD-ROMS, CD-Is, computer networks, fuzzy logic, and neural logic is on the horizon. In the near future, all possible representations of knowledge will be made instantly available on notebook-sized computers.

How possible is it for the current system to keep up with information expansion and technological advancement? How time-efficient are teacher-chalkboard presentations and how much time and effort is there left-over to deal with problems posed

and monitor students' learning? To begin with, we must move away from looking at the world from teachers' eyes to looking at the world from learners' eyes.

The Technology-Based Paradigm

The proponents for *change* argue for a new paradigm which incorporates technological advances currently available. In the technology-based model, the schooling process emphasizes *learning* rather than teaching. It allows the student to learn directly from a database, an expert system or from other students, without having to wait for the teacher to present instruction. There is an increase in the quantity, and through time, quality of interactions among students and with the knowledge and experience bases. Students access, exchange and process information independently of the teacher and at their own pace. Those who advocate this paradigm estimate that the rate at which information is accessed, exchanged and processed will increase.

Of key importance is student initiative in deciding *how* he learns, as well as the breadth and depth of what he learns. Teachers are then free to deal with exceptions and problems, rather than with routine, repetitive presentation of subject matter. Teachers are facilitators and managers of pupils' learning, not controllers and regulators of the teaching process.

The assumption of this paradigm is that technology is a learning- rather than a teaching aid. Education has to centre on *how students learn*. Teachers cannot lead learning. They can only encourage the learning process by presenting ways of knowing, thinking and finding out about the world to their students. Through doing, seeing and manipulating symbols, student construct their own realities, their own understandings. The starting point is to know that "All understanding begins with our not accepting the world as it appears", for learning/reconstructing is about questioning and finding out for oneself.

Educating for Tomorrow's Workplace

The technology-based paradigm models the processes of the workplace of tomorrow. Both learners and workers will have to ask themselves the same question, which is, *"What do I need to learn so I can decide where next to proceed?"* rather than *"How can I prepare myself for the next promotion/examination?"* In this sense, there will be no fixed and predetermined learning or career path. Learners will have to learn how to learn and how to manage their own learning, just as workers will have to learn how to manage their own careers.

Technology is evolving so fast that it has changed relationships at work, and concomitantly, jobs themselves. It is estimated that the shelf life of work skills will rarely exceed ten years. Lately, a series of articles in Newsweek (June 14 issue) and Straits Times (July 19 & 20) addressed the question of *Jobs* in the workplace of the knowledge age. The main message is: *"If you learn something today and you're still doing it five years from now, the only thing you can guarantee is that you're doing it wrong."*

In fact, companies engaged in high value-added activity recognise that, to be at the forefront of business and industry, retraining has to be integral and on-going. Companies like IBM & Apple Computer are already retraining their workers one day a month, just so they can keep up in their fast-changing industries. What can schools do to prepare students for the changing workplace? Let us consider how views in the world of economics and management have changed.

Economic Paradigms

Yesterday: The Command Model

Peter Drucker, the guru of modern management, sees the world economy as shifting from a *command model* to a *knowledge model*. The command model embraces Taylorism which considers production workers to be incapable of understanding the whole "complex" production process.

Hence, the production line setup, whereby supposedly complex work is broken down into a multitude of simpler repetitive jobs. And since workers don't know better, products are inspected for defects at the end of the assembly line. Management has the monopoly of knowledge and expertise, and assumes responsibility for what is produced on the production line. *Mass production* and *inspection for defects* are the key characteristics of the assembly line model.

Today: The Knowledge Model

Forty years ago, W. Edwards Deming and J.J. Juran began to preach the gospel of quality. But it wasn't till the Japanese economy took off that the Americans heeded the message of Total Quality Management. The most essential requirement is *to stop inspecting for failure* and to focus on *empowering workers* to do productive work which *prevents* failures from occurring in the first place.

Let's consider Deming's 14 points of

> **Education has to centre on how students learn. Teachers can only encourage the learning process by presenting ways of knowing, thinking and finding out about the world to their students.**

DEMING'S 14 POINTS TOWARD QUALITY

1. Create constancy of purpose for improvement of product and service.
2. Management must be responsible for change.
3. Do not depend on mass inspection; build quality into the product.
4. Do not award contracts on the basis of price alone.
5. Improve constantly, and thus decrease costs.
6. Institute training on the job.
7. Supervisors should aim to help people do a better job.
8. Drive out fear, so that everyone may work effectively.
9. Break down barriers between departments to make teams.
10. Eliminate slogans and targets for the workforce.
11. Eliminate numerical quotas for the workforce (& management).
12. Remove barriers that rob people of pride of workmanship.
13. Encourage education and self-improvement for everyone.
14. Take action to accomplish the transformation.

Quality: Central to Deming's Way is that workers must have a stake in continual product/service improvement and that supervisors/managers are facilitators, rather than taskmasters. Peter Drucker defines such a manager as: *"responsible for the application and performance of knowledge."* Workers have expertise. It does not matter whether the job was formerly classified blue-collar or white-collar. What matters is that *knowledge must be treated like a resource.*

For example, machinists can just follow orders given by their supervisors, *or* they can use what they know in their job to anticipate customers needs, take charge of programming their machines to fill highly customised orders, anticipate troublespots, explore possible solutions and in fact, to take initiative and responsibility for productivity and the quality of the product produced. To be the latter kind of machinist would require continual upgrading of skills, to keep up with market demands and improvements in technology. Peter Drucker would classify such a worker as a knowledge-worker, whereas the one who just does what he is told would be called a service-worker.

The knowledge-worker is not a new phenomenon to us. For about a decade, we have had Quality Control Circles and the Productivity Movement. The question is: How can we ensure that when our students leave us, they have the skills and competencies to be effective participants in such workplaces?

Relevance of the Knowledge Age Workplace to Schools

Let's pull the different strands together: The model of schooling we use is still basically the Socratic teacher-centred model. The emphasis is on *teaching*. We present instruction and set the whole group the same tasks, to prepare our pupils to achieve fairly similar academic goals. This is not dissimilar from Taylor's philosophy of production. Out in the workplace, the emphasis on customer service, quality products and on-time delivery has made it necessary to acknowledge workers as decision-makers. Continuing advances in technology have made necessary a workplace ethos of *continual learning*.

The disjunct between the two systems is clear. There is no way that teachers will be able to keep up in terms of knowledge. Some critics of the teacher-centred model contend that reforms pertaining to teacher's pay, qualifications and training will not work because teachers are already performing at their best, with piston engine technology.

Up until recently, it was difficult to envisage catering to individual learner's needs without coming up against the problem of high manpower costs. Critics also contend that teacher presentation of information is variable, not just between teachers but also for the same teacher from day-to-day and from child-to-child. The advent of computer technology has opened new vistas. Instruction can be more *learning-centred*. Computer aided instruction does not vary, and improvements made to that instruction are incremental, that is, they are additive since they can be stored. There is the opportunity too for the individual pupil to learn at his or her own pace - there is no holding back of other's progress and the possibility of deciding how much breadth or depth he or she wants to explore say a certain topic.

A Different Role for Teachers

The role of teachers will therefore be different. The teacher will have to be a manager of learning and be able to help students do a better job of learning. This is less content-based and more skills- and competency-based. The way we look at schooling is different and therefore changes in objectives and in programmes are needed. Schools, that is, principals and teachers will have to *"retool"* towards a jet engine of education. Just as aircraft designers knew about and knew what to do when faced with a technological advancement, we should not just be aware of advances in computer technology, but explore ways of incorporating that technology into the educational process. That way, we ensure that our students are ready to participate in the workplace of the knowledge age when they leave school.

Preparation for Life After School

So what are the skills and competencies needed in the workplace of the knowledge age? The US Department of Labour established a group, the Secretary's Commission on Achieving Necessary Skills (SCANS) to identify the skills and knowledge students need to make the transition from school to work successfully. Their

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first report, *What Work Requires of Schools: A SCANS Report for America 2000*, identifies two elements in *"workplace know-how"*: a set of 3 foundation skills and a set of 5 competencies that are at the core of job performance.

Foundation Skills

There are 3 foundation skills:

- *Basic skills*, such as the ability to read, write, perform arithmetic and mathematical operations, and to listen and speak effectively;

- *thinking skills*, such as the ability to think creatively, make decisions, solve problems, visualize, and know-how to learn; and

- *personal qualities*, such as displaying responsibility, self-esteem, sociability, self-management and integrity and honesty.

Workplace Competencies

The 5 broad competencies which employees need are:

- *Resource management*, that is the ability to identify, organise, plan and allocate resources (such as time, money, human resources, materials and facilities);

- *interpersonal skills*, that is the ability to work effectively with others, eg participating as a member of a team, teaching others new skills, serving clients, exercising leadership, negotiating and working with different kinds of people;

- *information use*, that is the ability to acquire, evaluate, interpret and communicate information, as well as to use computers to process information;

- *systems analysis*, that is the ability to understand complex interrelationships within (and between) systems, monitor and correct performance within the system, and improve or design new systems;

- *technology use*, that is the ability to select appropriate technologies or tools for a task, apply technology to a task and maintain and troubleshoot equipment.

Relevance of SCANS list

The skills and competencies listed are generalised from more specific ones required of workers in high value-added workplaces. We cater for the basic skills, and to an extent thinking skills. Developing the other skills and competencies in our students will require classrooms to be shaped differently, to enhance the chances for learning. The emphasis is on *"utility"*. Just as in the workplace, the emphasis has to be on *applying knowledge*, on knowledge as a means to an end (obtaining social and economic results).

To this end, the Commission argues that learning in order "to know" should not be separated from learning in order "to do". Concomitantly, SCANS concluded that learning should be "in context", that is learning content through solving realistic problems. One example given is the application of chemistry to say the problem of growing grass/weed control (in our context). Another example addresses the question of more realistic contexts for writing tasks. SCANS points to the greater purpose-orientation of workplace writing tasks. This suggests that even for basic skills, the *"how"* and the contexts within which we develop these skills need to be reviewed continually.

Central to the changes are the technologies that have caused the changes in the workplace. Computer technology can provide a range of contexts and resources for learning: There is computer-based instruction which gives feedback and monitors the progress of individual students. On a simpler level, word-processing makes it easier for students to write multiple drafts of a paper. The computer can be used to access and store informa-

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SECRETARY'S COMMISSION ON ACHIEVING NECESSARY SKILLS (SCANS)

An illustration of the need for the five competencies in the value-added workplace.

A worker in the manufacturing sector might be expected to:

- develop a plan to show how a production schedule can be maintained while staff members are being trained in a new procedure [*resource management*];

- help brainstorm ways to involve two limited-English-proficiency team members in discussion on quality control [*interpersonal skills*];

- analyze statistical control charts to monitor error rates [*information use*];

- analyze a painting system and suggest ways to minimise system-down time and improve paint finish [*systems analysis*];

- evaluate and make recommendations on the management of three new spray guns, taking into account the costs, health and safety [*technology use*].

The role of teachers will be different. The teacher will have to be a manager of learning and be able to help students do a better job of learning.

tion. And with the development of networks, databases all over the world can be tapped for information. Through networks too, opinions and results can be sent and exchanged on joint projects, between participants around the world.

Your reaction could well be that this is nothing new, and indeed our schools are very well-resourced. Whatever our level of physical resources, the change-driven times in which we live require that we continually reflect on: *"Who are our customers and how best can we serve them?"* and *"What is the best use we can make of our resources?"* Managing change means that we ourselves have to learn to learn and to question what and how we do things.

The above-mentioned uses of technology represent possibilities by which different modes of learning can be combined - computer-based with more conventional material, indoor exploration and outdoor data-gathering, individual and teamwork. More importantly, the student is an active learner, making choices as to what next to explore and making decisions as to which issue(s) to address, which sources more reliable. He or she needs to be so in order to learn independence and responsibility for his or her decisions. The workplace of the knowledge age offers freedom. Our students need to learn how to manage that freedom, for then they will be able to make sense of and manage change.

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Tan Yap Kwang and Beatrice Tay are from the Monitoring & Evaluation Branch, Ministry of Education, Singapore.

HO YOON KEE AND SISTER MARIA LAU

Transformational Leadership

In the past quarter century, research on leadership has consistently focused on two dimensions of leadership behaviour. These behaviours reflect a concern for accomplishing the tasks of the organisation and a concern for relationships among people in the organisation. The challenge has been to identify attributes to effective leadership and circumstances which particular behaviours or styles are the most effective in different settings.

Characteristic traits of effective leaders

Stodgill (1950) defined leadership as "the process of influencing the activities of an organised group toward goal setting and goal accomplishment." He had earlier attempted to search for common traits in effective leaders but found little consistency in his findings. In 1981, however, Stodgill's analyses revealed a number of traits which consistently characterised effective leaders. These include

- sense of responsibility
- concern for task completion
- energy
- persistence
- risk-taking
- originality
- self-confidence
- capacity to handle stress
- capacity to influence
- capacity to coordinate the efforts of others in the achievement of purpose

Situational contingency theories

Situational contingency theories had been proposed by Hersey and Blanchard (1982) and Fielder, Chemers and Mahar (1977). According to Hersey and Blanchard the situation is defined by professional maturity and psychological maturity and leadership behaviour has two dimensions: the task behaviour and the relationship behaviour. The theory proposes four types of leadership behaviours, each of which is appropriate to a particular level of maturity. With increasing maturity, the leader should move through styles from telling to selling to participating and delegating.

To Fielder, leadership style is an innate attribute of our personality which provides our motivation and determines our general orientation when exercising leadership. Leadership behaviour refers to particular acts which we can perform or not perform if we have the knowledge and skills, and if we judge them appropriate at the time. Task motivated leaders tend to be best suited to situations which are either highly favourable or highly unfavourable according to the extent to which tasks are structured, where there are good leader-member relations and when the leader has position power. Relationship-motivated leaders are best suited to situations which are moderately favourable on these dimensions.

Management and Leadership

Kotter (1990) made a significant contribution by making a clear distinction between the concept of management and leadership. "Management is about coping with complexity ... Good management brings a degree of order and consistency to key dimensions like the quality and profitability of products. The activities of management are planning and budgeting, organising, controlling and problem

Leadership is about coping with change. The activities of leadership are giving directions, aligning the workforce and motivating the people.

low	RELATIONSHIP	high
low	delegating	participating
TASK		
high	telling	selling

Fig. 1 Situational Contingency Theory (Hersey and Blanchard)

solving. In contrast, leadership is about coping with change. The activities of leadership are giving directions, aligning the workforce and motivating the people.

Emergent trends

Today, we recognise some emergent trends from the recent advances in knowledge about leadership.

1. Emphasis should be given to Transformational rather than Transactional Leadership. In 1978, James MacGregor Burns identified two broad kinds of leadership, transactional and transformational. According to Burns, leadership is exercised when persons with certain motives and purposes mobilize resources so as to arouse and satisfy the motives of the followers. Transactional leadership focuses on basic and extrinsic motives and needs. It is based on exchange; the leader and the follower exchange needs and services in order to accomplish independent objectives. They do not share a common stake in the enterprise and thus must arrive at some kind of agreement. This kind of leadership tends to maintain status quo and works within the organisation's culture. It leads to recognised reward for meeting standards and does not lead to high levels of personal commitment and personal growth. The followers are not expected to change personally and the focus is mainly on operational details.

In transformational leadership, leaders and followers are united in pursuit of higher-level goals common to both. Transformational leadership is first concerned with higher order psychological needs for esteem, autonomy and self-actualization and moral questions of goodness, righteousness, duty and obligation. Transformational leaders create a vision of the future and communicate the vision to stakeholders, organisation members and the public. They seek to implement the vision in the organisation, putting great faith in people and creating a positive role model. The focus of such leaders is on big issues, on what is right and good and not on what is normal or popular. They display self-confidence and inner strength and is seen by followers as being fair, of high integrity, open, supportive but firm and with high expectations. Symbolism is used to simplify complex issues. Transformational leadership has significant effects on the followers. It lifts the followers to higher levels of needs; getting them to transcend their own self-interest for the sake of the team, organisation, or larger polity. The followers become self-motivated and self-regulated and display higher self-confidence and increased awareness of the organisation's culture - its values, philosophy and goals and ways of reaching them. The organisation focuses on big issues. Followers are able to produce extraordinary effort beyond the stated expectations of the leader and they display trust, respect and admiration for the leader. This leads to a sense of community, loyalty and commitment among the followers and produces greater productivity, better outputs and increased creativity.

Bass (1985) added the "expansion of the followers' portfolio of needs and wants instead of just altering the need level on Maslow's hierarchy of needs. Secondly, Bass differed with Burns in

> **Transformational leadership is first concerned with higher order psychological needs for esteem, autonomy and self-actualization and moral questions of goodness, righteousness, duty and obligation.**

Leadership forces	Theoretical construct
Technical	the capacity to plan, organise, coordinate and schedule
Human	building and maintaining morale, encouraging growth and creativity and involving people in decision-making
Educational	the capacity to work with staff to determine student needs and develop curriculum and to provide supervision
Symbolic	selective attention, purposing and modelling
Cultural	developing climate, clan, culture, having tightly structured values and a loosely structured system, having an ideology and providing meaning

Fig. 2 Leadership Forces

Real education will depend on a relationship between the leader and the teacher, the teacher and the teacher, the teacher and the pupil, and the pupil and the pupil.

that he placed emphasis on the observed change in followers and argued that the same dynamics of the leader's behaviour can be of short or long term benefit or cost to the followers. Burn, on the other hand, emphasised on whether society ultimately benefits from the leader's actions. The actions are transformational only if society benefits from them. Thirdly, Bass argues that conceptually and empirically, leaders will exhibit a variety of patterns of both transactional and transformational leadership in different amounts and intensities.

2. Transformational leaders have a vision for their organisations and this is communicated to the followers who also share the vision of the leader. A vision is defined by Bennis and Nanus (1985) is a mental image of a possible and desirable future state of the organisation ... as vague as a dream or as precise as a goal or mission statement. Starrat (1986) emphasised that the school vision must pervade day-to-day activities. One facet of this theory is that 'the leader articulates the vision in such compelling ways that it becomes the shared vision of the leader's colleagues, and it illuminates their ordinary activities with dramatic

significance'. Institutionalising vision with its meaning and values embedded in the culture of the school is also important in bringing about 'communal institutionalising of meaning'.

3. In transformational leadership, symbols are important for the communication of meaning by leaders and according to Bennis and Nanus, the communication of vision requires the communication of meaning. Sergiovanni (1987) the person who applied Burns' theory to education asserted that "At the heart of these changes is the view that the meaning of leadership behaviour and events to teachers and others is more important than the behaviour and events themselves. Leadership reality for all groups is the reality that create for themselves, and thus leadership cannot exist separate from what people find significant and meaningful." Symbolic and cultural aspects of leadership have to be a feature in the studies of transformational leadership. Sergiovanni contributed by providing a useful classification of what he called "leadership forces", each of which 'can be thought of as the means available to leaders to bring about or preserve changes needed to improve schooling' (Fig 2). Sergiovanni also emphasized that the leader has an important role in developing the culture of the organisation.

4. Sergiovanni (1990) developed the stages of leadership by bartering - the leader and the led strike a bargain within which the leader gives to the led something they want in exchange for something the leader wants [still transactional]:

- Leadership by building - the leader provides the climate and interpersonal support that enhances the led's opportunities for fulfilment of need for achievement, responsibility, competence and esteem.

- Leadership by Bonding: leaders and led develop a set of shared values and commitments that bond them together in a common cause.

- Leadership by Banking: leader banks the fire by institutionalizing improvement gains into the everyday life of the school.

- Leadership by building, bonding and banking is more transformational.

5. An effective leader empowers his followers by involving him in everything that happens in the organisation and encouraging everyone to take initiative and developing self-managing teams. To foster involvement in the team concept, a leader has to listen carefully, share ideas and information, recognize achievement, and celebrate the "small wins" of day-to-day performance.

6. The leader needs to make a paradigm shift and include reflection in his pedagogical paradigm. His paradigm includes the context, experience, reflection, action and evaluation. Reflection will give depth and quality to the leader especially in a fast paced, complex and technological world. This is especially essential because education is a human enterprise. However much the learning process is pervaded by technology and information now and in the future, the learners will still be human beings with all of the same needs and attributes that humans have throughout history.

Real education will depend on a relationship between the leader and the teacher, the teacher and the teacher, the teacher and the pupil, and the pupil and the pupil. Human relations will continue to lie at the heart of educational leadership.

Ho Yoon Kee is Inspector of School, Schools Division, Ministry of Education and Sister Maria Lau is Principal, CHIJ St Theresa's Convent, Singapore.

JUMAAT BIN MASDAWOOD

Instructional Leadership: Principal and Teacher Perceptions in Primary Schools

Some principals say	*Some principals do*
I don't know how	Manage school routinely with organized systems, and
I wasn't trained or prepared	Demonstrate knowledge of instruction and curriculum, and
I don't have time	Work with teachers on instruction

- Hord, 1984

A school is headed by a principal whose role has changed over the years. In the 1930s, he was looked upon as the head teacher. Later on, he was regarded as the 'leading professional' - a master teacher in the school. In the early 1980s, his role was redefined as the 'chief executive officer and leading professional' (Morgan & Bell, 1982), a concept which is still widely accepted today. The school is a complex social system of people where 'everyone is an observer of others and thus has certain perceptions and expectations of how those in other roles will behave' (Owens, 1970). Hence, the organisational productivity of a school, its academic achievement, was suggested to be related to the perceptions of staff members. It is with these as a backdrop that a study of principal and teacher perceptions in Singapore primary schools was made in 1989/1990.

The literature on educational leadership has established the importance of the principal's instructional leadership role in primary schools. However, researchers and academics (e.g. Brown, 1981; Larsen, 1984; Acheson, 1985; Andrews & Soder, 1987) have come up with different definitions of instructional leadership - some narrow concepts and some very wide ones. The narrow concepts limited it to classroom supervision and curriculum matters only whereas some others included other dimensions like staff development, staff relationships and student discipline as well. Despite the varied definitions, most of them cover several underlying areas of commonality. In this study, Brown's (1981) four dimensions of "management of instruction", "curriculum concerns", "supervision of instruction", and "personnel concerns" were coupled with the dimension of "staff development" identified by Sergiovanni & Elliot (1975), Larsen (1984) and Acheson, (1986) to make up the five dimensions of instructional leadership.

The Instructional Leadership Dimensions

For the purposes of the study, these five dimensions were defined as follows:

Management of instruction

This refers to the principal's management of the school programmes. The instructional programme refers directly to the mode of instruction that goes on in the school. His ability to guide or co-ordinate the work of committees responsible for reviewing plans and teaching methodology can enhance the curriculum. Other activities that come under this aspect of instructional leadership include supervising the selection of materials, the planning and/or selection of the programme scope and sequencing of instruction, unit construction and the design of activities.

Supervision of instruction

This is a very familiar aspect of what principals do as instructional leaders in schools. He has to ensure that the instruction benefits the pupils. Supervising and monitoring teaching/instruction in the school assures the principal that there is effective instruction going on in the classrooms to achieve the curriculum goals. The classroom visits should diagnose problematical teaching methodologies and offer constructive sugges-

tions to improve them. The principal should also check on student work and test scores, and be aware of their interests, aptitudes, motivation and values. All these have an impact on how the principal supervises instruction in the school.

Curriculum concerns

The principal has to provide a meaningful curriculum programme for the pupils. He has to co-ordinate and organise the curriculum as well as address issues related to the teachers and pupils. This will enable him to attain the school's curriculum goals. The concern should also be manifested in his willingness to work with the teachers to study and interpret the changing demands of society that would require a concurrent change in the curriculum and instructional strategies.

Personnel concerns

The principal has to ensure that the human resources at his disposal are judiciously deployed to benefit the school. He needs to know his teachers well - their interests and abilities - to enable him to select and deploy the best teachers for each appointment or task. To do this, the principal has to adopt an open, professional outlook which contributes to staff morale upliftment.

Staff development

The school depends on the expertise of its members for organisational productivity. Teachers, being closest to the classroom situation, have direct influence on the success of the instruction and curriculum. The principal has to focus on staff professional development through the reading of professional and related literature, attendance at in-service courses, workshops and seminars and the conduct of staff sharing sessions. He would also have to induct new teachers, identify the needs of teachers and select suitable courses for his staff.

Methodology and Data Collection

The study employed an ex-post facto correlation design where the researcher "rather than creating the treatment, examines the effects of a naturally occurring treatment after the treatment has occurred" (Tuckman, 1988).

Data for the study were obtained by surveying the perceptions of 70 selected principals and 350 teachers. Five teachers were randomly selected from each of the seventy schools. Only those principals and teachers who had served in the present schools for at least two years were included in the survey. To minimise the occurrence of misinterpretation of the items, only English-medium teachers were surveyed.

The 149 schools with principals who have served the present schools for at least two years were categorised into two strata of high-achieving and low-achieving schools based on the 1988 Primary School Leaving Examination data with 86.0% being taken as the cut-off point between the two categories. A random sample of 35 schools was taken from each of these two strata.

A 34-item Principal Instructional Leadership Questionnaire, adapted from Brown's (1981) study, was utilised to gather data for the study. Parallel questionnaires were distributed to the principals and teachers in the sample. The study received a very high response rate of 98.6% from the principals and teachers sampled. This facilitated the drawing of conclusions that could be generalised to schools in Singapore with similar characteristics.

The study focused on research questions related to the perceptions of primary school principals and teachers regarding the principal's performance of the instructional leadership role. Among the questions addressed were:

1.   How different are the perceptions of principals in high- achieving schools on their instructional leadership role performance as compared

to their colleagues in the low- achieving schools?

2.   How different are teacher perceptions of the principal's instructional leadership role performance in the high-achieving schools as compared to those of teachers in the low-achieving schools?

3.   What is the extent of disagreement between principal and teacher perceptions of the principal's instructional leadership role performance in the high-achieving schools as compared to the extent of disagreement in the low-achieving schools?

These three questions generated eleven null hypotheses which were analysed descriptively and inferentially.

Main Findings

An analysis of the data collated from the principals of high-achieving and low-achieving schools show no significant differences between their self-perceptions in each of the five dimensions of instructional leadership. The overall ratings, however, show that the principals in the low-achieving schools rated themselves higher than their counterparts in the high-achieving schools. The highest scores in three out of the five dimensions i.e. supervision of instruction, curriculum concerns and staff development, were returned by principals in low-achieving schools. Both groups of principals, however, ranked the five dimensions of instructional leadership in the same order: personnel concerns, staff development, supervision of instruction, curriculum concerns and management of instruction.

Overall, teachers in the high-achieving schools perceived that their principals performed the instructional leadership role more frequently as compared to the perceptions of the teachers in the low-achieving schools. The difference in perception is significant in all the five instructional leadership dimensions. This finding is in line with the earlier research findings of Andrews & Soder (1987), Larsen (1984) and Wellisch et al (1978).

An interesting observation was that teachers in both types of schools ranked the five dimensions of instructional leadership in the same order of importance as the principals did, with personnel concerns and staff development similarly being identified as the two most important concerns.

When the principal-teacher difference of perceptions were analysed, it was found that there was less disagreement (or greater congruence) in perceptions between the principals and teachers in high-achieving schools as compared to their colleagues in the low-achieving schools. However, in both high-achieving and low-achieving schools, the principals' self-perceptions were higher than the teachers' perceptions regarding their principal's performance of the instructional leadership role.

Comments

The finding that principals of both high-achieving and low-achieving schools did not hold significantly different perceptions of their instructional leadership role performance suggests that more frequent performance of this role by the principal does not indicate the presence of high school academic achievement. This does not seem to be in line with the earlier research findings of Pink (1983), O'Day (1984), Krug (1986), Andrews & Soder (1987) and Collins (1987) that support a positive relationship between the performance of instructional leadership and school academic achievement. They found that a higher level of instructional leadership performance was linked to high school academic achievement.

The principals' high self-perceptions of their instructional leadership role performance in this study suggest that all principals perceived it as an important responsibility, similar to what the literature has always maintained (e.g. Gorton, 1976; Siefert & Beck, 1981; Hallinger & Murphy, 1982; Keefe & Jenkins, 1984). In contrast, Acheson and Smith (1986:12-13) suggested that principals should project a lower profile as the instructional leader by delegating part of the role to their vice-principals and heads of departments. The study data however, did not seem to support this suggestion since the principals in the study took on the instructional leadership role very often even though more than half of the sample schools had the services of vice-principals and heads of departments.

The non-significant differences between the principals' self-perceptions as well as the high self-ratings is incompatible with most of the literature. This should alert administrators and others interested in the perceptions of principals regarding the instructional leadership role to the possibility of simultaneous over-rating and similarity of perceptions of the principals as subjects of research.

In contrast, the teachers in the high-achieving and low-achieving schools had significantly different perceptions of their principals' instructional leadership role performance. This matches the research literature which repeatedly indicated a positive relationship between the principal's instructional leadership and school academic achievement (e.g. Wellisch et. al., 1978; Pink, 1983; Larsen, 1984; O'Day, 1984; Collins, 1987; Andrews & Soder, 1987). Based on these as a premise, anyone collating data on principals based on perceptions should seriously consider the perceptions of 'significant others' - teachers in this case - and not rely solely on the self-reports of the principals themselves. This is significant in the context of Gorton's (1976) statement that 'teachers are in the best position to develop expectations of the principal's role'.

The study also found less disagreement between principal and teacher perceptions in the high-achieving schools as compared to the data in the low-achieving schools. According to Hencley, McCleary and McGrath (1970), 'if principals are not perceived by their staff - significant others in the complex school organisation - to fulfil the expectations of the role and position, the teachers' satisfaction, effectiveness, confidence in the leadership, and, attitude to work, will be affected'. This could explain the magnitude of the difference in perceptions between principals and teachers in the low-achieving schools. Purkey and Smith (1982) put it more succinctly when they hypothesised that congruent principal and staff perceptions of the principal's instructional leadership may be expected in high-achieving schools. Greater congruence between principal and teacher perceptions in the high-achieving schools could have resulted from good staff support for the principal which Davenport (1984) insisted was a necessary condition if principal instructional leadership were to have an impact on school academic achievement. On the other hand, the lack of rapport between the principal and teachers in the low-achieving schools could have generated a feeling of ignorance or resentment of the principal's actions as the instructional leader. This, according to Caldwell and Lutz (1978), dampens school organisational productivity - school academic achievement.

Conclusion

The study has shown that principals and teachers in our primary schools regard instructional leadership as a very important role played by the principal. It has also shown that there seems to be an association between a high performance of principal instructional leadership and high school academic performance even though there was no attempt to uncover a causal relationship between them.

Improving congruence or reducing disagreement between principal and teacher perceptions of the principal's instructional leadership role will obviously be advantageous for the schools. School principals may want to pay attention to this aspect of their activities since this congruence of perceptions somehow co-exists with higher school academic achievement.

Since principals perceive themselves as good instructional leaders, it is left to the ingenuity of the principals to decide how they can ensure that their

staff are not 'ignorant' of or 'resent' their attempts at performing the instructional leadership role well. It might be prudent for us to guard against being detracted from performing this role well, since,

'A lack of clear perceptions of the principal's instructional leadership may divert the principal towards performing more perfunctory administrative tasks instead of carrying out the instructional leadership role'

(Mazzarella, 1976:12).

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LEE OI KAM

Forging A School Identity -
The Clementi North Experience

Clementi North Primary School, like any other institution, strives to create an identity. The term 'school identity' is a multi-faceted expression which can be interpreted differently by different people. To borrow an expression from the corporate world, identity means 'the sum of all the ways a company chooses to identify itself with all its publics.' (Margulies, 1977). However, in the Clementi North context, it refers to the task of developing a distinctive character and an image with which pupils and teachers can identify with pride.

This paper describes a project carried out at the school with the aim of creating such an identity.

Background Of The School

Clementi North Primary School was established in 1984. It is a typical neighbourhood school. Its first batch of pupils and teachers was drawn from a cross-section of schools in Clementi, Queenstown and West Coast. When it first started functioning, it had a school population of 980 pupils and 49 teachers. The majority of the pupils came from homes whose parents were blue-collar workers and the most common home languages were Mandarin and Malay. The pupils and teachers came to the school bearing their different identities and aspirations.

Forging An Identity - The Rationale

The 'Clementi North' identity serves as a binding force for its pupils, staff and parents so that they can identify with the school's aspirations and goals. Clementi North Primary School

has no illustrious history. Nevertheless, the administration firmly believes that no matter how modest a school may be, it has the potential to grow and scale new heights in terms of pupil achievement and development. All it needs is proper guidance for it to get onto the achievement bound track.

Objectives Of The Project

To inculcate in pupils and staff a sense of :

- corporate pride

- ownership of shared vision and goals

- teamwork and responsibility

- loyalty and love for the school

Project Description

The scope of this project spanned a two-year period from January 1989 to December 1990. It involved pupils, staff and parents.

A committee comprising key personnel of the school was formed in January 1989. Its main objective was to look into different aspects of the school and explore strategies which would help to forge a school identity. The emphasis was on promoting school pride and spirit.

Before mapping out the strategies, the administration examined the strengths and weaknesses of the school in terms of pupil input, quality of staff, parental support and track record. In the context of Clementi North, it was necessary to rescue the

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school from inertia and 'inject' momentum into it. The key lay in stirring the human will and motivating it to optimum performance. This involved capturing the heart and minds of the school community and this psychological thrust could best be effected by the forging of a school identity.

In forging the school identity, the administration had recourse to a repertoire of mechanisms. The mechanisms are the declared goals of the school, its vision, the strategies to promote school pride and spirit, and the attempts made to involve parents as partners in education. Parents are the best advertisers for the school.

Implementation

Forging a Common Identity

For a school, a badge or a motto is a statement of its cherished values and its mission. The significance of the school flag, the crest and its motto were carefully explained to the pupils at assembly. The school's motto 'Strive to Excel' is reflective of the school vision, that is, all pupils can achieve and that the school population plays a pivotal role in making the vision a reality. Sharing the school's aspirations with the pupils gave them a sense of direction.

A 'Code of Conduct' - the 4Cs, was introduced to the pupils. The 4Cs are "Courtesy, Co-operation, Carefulness and Consideration." This code of conduct seeks to foster a sense of identity and belonging among the pupils. The words were set to music by the music teacher. It was, and still is sung by the pupils at Assembly every Monday and at special school functions. This served as a constant reminder that such were the beliefs and values of all those who were part of the school community.

Every aspect of the 4Cs was highlighted. An example was the *Let's Be Considerate Month*. A 'Good Deed Tree' was set up for pupils to record their friends' acts of consideration. A talk on consideration was given by the moral education teacher at Assembly.

Sketches and essay competitions were also conducted. Another activity to help pupils internalise the consideration aspect was 'The Task for the Week' for the whole school population. The identified task was prominently displayed at the foyer.

The school cheer *'Nothing less but all the best'* was yet another way of raising pupils' consciousness of what the school hoped to achieve. The words of the school cheer were composed by the pupils. A Cheer Competition was held to select the best cheer. In addition, the teachers created a design that embodied the school spirit. This design was then printed on T-shirts. In this way, both teachers and pupils were encouraged to reflect upon the school's aspirations. The school cheer team made its appearance at school functions and competitions to energise the school spirit.

School functions were celebrated with solemnity and dignity. Each function had its own set of procedures which were carried out from one year to the next. An example is the Sports Day. The March-Past signalled the commencement of the Sports Meet and ended with the school population participating in the school cheer. In the same vein, the Chinese New Year Concert always ended with the prefects giving oranges and cards to the teachers as a sign of respect.

Thus, by resorting to visual and behavioural manifestations such as the crest and its motto, the 4Cs as the code of conduct, the school cheer and fixed procedures for school functions, a distinctive character for the school would gradually emerge.

Projecting a Positive Image

It was important that a visible signal be conveyed to the school population that Clementi North intends to be an achieving school. The atmosphere of the school contributes quite significantly to the development of a positive image. Step into Clementi North and the 'Strive for Excellence' spirit permeates the air. The Achievement Board, the series of photographs depicting the highlights of the year, the

The atmosphere of a school contributes quite significantly to the development of a positive image.

Good Deed Tree to record good citizenship and the wall mural depicting the school's vision and the 4Cs are proudly displayed at the foyer in full view of visitors.

Trophies and plaques won from external competitions take pride of place in the outer office. The school improved and upgraded its facilities. Besides having a well-kept garden, the school is proud of its air-conditioned, well-stocked library, Reading Corner, Study Corner, Mathematics Activity Room and Computer Room. The message was loud and clear. 'CLEMENTI NORTH IS ON THE MOVE'. The stage was now set to reorientate the mind set of the school population from one of mediocrity to that of an achieving school.

Enhancing pupils' Self Esteem

'People in the school must have pride in themselves if they are to believe in quality and its existence' (Stott, 1992). A concerted effort was made to enhance pupils' self esteem, thereby helping to further raise their level of performance.

We capitalised on opportunities to boost the school's image. In the area of extracurricular activities, we identified areas we could excel. Intensive training in these areas was then given to pupils.

Our strategy paid dividends. The school was first runner up in Sepak Takraw, badminton and table-tennis. The school cheer team was first runner up in the National Cheer Competition. On the cultural side, we were awarded a distinction in the 1990 Singapore Youth Festival for our Chinese Dance. Pupils' pride and confidence in the school was increased each time a success was chalked up.

Praise and reward were used to motivate pupils so that they feel the need to achieve results. Noteworthy pupil performances and achievement were recognised during award ceremonies at assemblies and publicised in the school's newsletter and the 'Achievement Board'. The main objective was to enhance pupils' self esteem and inspire others to strive to excel.

Opportunities were created for leadership training so that pupils could carry themselves with confidence. Pupils compered school functions, entertained visitors from other countries and participated in Talentime, story-telling sessions and quizzes.

Based on the concept of the self-fulfilling prophesy, 'Pep' sessions were held for pupils from the Extended Stream to enhance their self-esteem. Quotations were used to inspire them. They were also entrusted with responsible tasks. An example is the murals done by these pupils. These murals not only enhanced the attractiveness of the school but also gave pupils an opportunity to express themselves creatively and to feel a sense of achievement at having made a positive contribution to the school. A positive self-image is essential if pupils are to achieve success.

The school maintained its ties with its former pupils. Their presence at school functions especially Speech Day, reminded the whole student population of their success and helped the current pupils to see themselves as belonging to a school that produced results.

Promoting Esprit De Corps Among Pupils

Steps were also taken to promote a sense of belonging and ownership of the school among the pupils. The Buddy System implemented at the beginning of the year for Primary 1 and Primary 4 pupils generated a caring spirit among the pupils.

The celebration of one another's festivals helped to foster a community spirit. A Heritage Board was set up so that pupils could be involved when the festivals of different ethnic groups, for example, Chinese New Year, Hari Raya Puasa and Deepavali, were highlighted.

During Art and Craft lessons, pupils would prepare the relevant pictures and make articles depicting the various aspects of the festivals. Concerts and quizzes were also conducted in conjunction with these festivals. Sketches highlighting customary ethnic practices were performed together with songs and dances. These activities helped pupils to understand and appreciate one another's customs and beliefs thereby cementing ties with one another.

Pupils enjoyed performing housekeeping tasks such as maintaining the Nurture Room, Study Corner and Reading Corner. Camping, excursions and 'victory' parties were also occasions for pupils to experience a corporate sense of belonging - it helped them to feel accepted and that they were a part of a happy family.

The pupils were involved in decision-making. They themselves, formulated their own class rules. As such, they would feel the obligation to comply with these rules.

Pupils were also involved in the nomination of the 'Most Courteous Pupil' Award based on guidelines provided by the school. The Students' Council was another avenue to which the pupils could air their views and provide invaluable feedback on issues ranging from the quality of tuckshop food to services rendered by the bookshop vendor. A sense of ownership would thus be felt.

Fostering a Collaborative Culture

The principal's task in forging a school identity should not be an isolated one, but rather, one of a collaborative nature. The more we involved the teachers and pupils, the better it would be, for 'less authority' translates into greater achievement when the principal join teachers and pupils in decision-making teams (Macniff 1993).

The School's Vision was shared with the staff so that their help could be enlisted to translate the vision into a reality. To foster a collaborative culture in the school, a concerted effort was made to promote joint work, mutual trust, shared challenges and togetherness. For example, the staff brainstormed to draw up a profile of what a Clementi North teacher should be, using the acronym 'PMCC'. It

To foster a collaborative culture in the school, a concerted effort was made to promote joint work, mutual trust, shared challenges and togetherness.

stands for 'Pride In One's Profession', 'Motivated to Excel', 'Committed to Grow Professionally' and 'Confident to Perform'. Since the profile was drawn up by the teachers themselves, they would take ownership of it and seek to acquire these qualities.

The administration also pitched in to provide support by promoting co-operative professional development. This included organising school-based workshops, small teams of teachers working together to achieve joint goals, small group discussions at Contact Time and peer coaching.

Newly-qualified teachers were attached to their more experienced counterparts for the 'developmental' process. Pair teaching was practised and interesting classroom lessons were video-taped for viewing by the staff. Teachers were thus provided with crucial collegial support in their efforts to 'Grow Professionally' and thus be 'Confident to Perform'.

Quotations pertaining to the 'PMCC' qualities were shared with the staff at Contact Time under the agenda 'Food For Thought'. Articles from professional journals were also circulated. This would help to reinforce the importance of 'Pride In One's Profession'. The 'PMCC' qualities, related quotations and articles thus served as motivational tools to inspire and focus the staff's efforts in working towards the school's vision. A climate of mutual trust and shared challenges would prevail since teachers were not working in competition with one another but in tandem.

In Clementi North, there was a shift towards a more consultative style of leadership to foster a sense of joint ownership of the school. The administrative and organisational styles of the school were revamped. The new organisational structure provided greater participation, opportunities and collective decision-making process by the key personnel of the school. This was done through EX-ECOM, the acronym for an executive council, comprising the Principal, as Chairman, the Vice-Principal as Vice-Chairman, the Heads of Department, the Sports Secretary and the Coor-

dinators. Any decisions made would be noted by the Coordinators concerned, who would meet the members of the respective subject committees to deliberate and plan the implementation strategies. Within EXECOM is CORCOM (Core Committee), a standing committee, comprising the Principal, Vice-Principal and Heads of Department, which would handle issues that required immediate or urgent decisions.

On the social front, activities like folk-dancing, sing-a-long sessions and party games were well received by the staff. Opportunities for teachers to socialize outside school hours were created by the Staff Welfare Committee. The staff also looked forward to 'Pot Luck' sessions to celebrate important festivals like Chinese New Year and Hari Raya Puasa. The non-teaching staff was not forgotten. There was a concert to celebrate Labour Day. School attendants also received presents from the Staff Welfare Committee as a token of appreciation. A sense of belonging was thus established.

Strengthening Ties with Parents and the Community

The role of parents in image building cannot be under-estimated. If parents are satisfied with the school's progress, they are the best advertisers for the school. Parents must be acquainted with the school's special curriculum and extra curricular strengths. During the Primary 1 orientation, parents viewed a slide presentation entitled 'Profile of Clementi North Primary School'. Our newsletter 'Reaching Out' further served to update parents on the school's activities and achievements. This strengthened communication lines with parents.

Meet-the-Parents' sessions helped to drive home to parents the message that the school cared for the academic progress of their children, and expected, in return, parental commitment and support. Attempts were also made to involve parents in school activities so that they would know the school's aspirations and achieve-

ments. Parents were also involved in the giving away of prizes on Sports Day and at other school functions.

We were also concerned about having a favourable image in the eyes of the community. We invited residents to sit on the School Advisory Committee. The response was good and we selected eight residents. They gave full support to school functions such as Speech and Prize-Giving Day, Sports Day and Teachers' Day.

Every year, our pupils perform at the Bukit Timah Community Centre's National Day Concert. At times, the Community Centre also makes use of the school hall for games. Through such interactions, the school was brought closer to the community.

Outcomes

The greatest pay-off for the school was in the realization of its vision as an achieving and effective school. The academic performance of the school improved. The pass rate increased from 77.5% in 1987 to 94.3% in 1990. The school has also achieved championship status in Sepak Takraw, Badminton and Table-Tennis at Queenstown District level for the past three consecutive years. We have also made our mark in the Singapore Youth Festival 1990. Our Choir has also been given a Merit Award.

The project also yielded the following outcomes:

- Improved school image

- Better pupil behaviour

- Improved self-esteem of pupils and staff

- Climate of high expectations

- Better pupil performance

- More co-operation and involvement among members of the school community

- Demonstration of a caring and sharing spirit

Conclusion

Forging a school identity is a long process which takes time, energy, enthusiasm and self-confidence. However, once achieved, it can add strength and vigour to the school. It also serves as an impetus for pupils to strive for excellence and for the school to grow from strength to strength.

Clementi North Primary School has been able to sustain its growth. Since 1991, the school continued to improve its Primary School Leaving Examination (PSLE) performance; its pass rate of 95.6% in 1991, for instance, was increased to 96.7% in 1992. The Extended Stream, in particular, made significant improvement. Its pass rate improved from 81.6% in 1990 to 94.4% in 1992. In the area of extra-curricular activities, the school graduated from first runner-up to National Champion for Table-tennis and District Champion for Sepak Takraw and Badminton.

Perhaps, its greatest test came about when the school had to share premises with another school. Despite constraints, the school managed to achieve. Our dance item 'Healthy Eating Healthy Life' was selected for the Closing Night of the Singapore Youth Festival 1993. Pupils even participated in the 'Flow Display' for the National Day Celebrations at the *Padang*.

Clementi North Primary School has shown that the school, by itself, is nothing more than a building. Its success is dependent on the degree to which it can cultivate and apply productively the talents of both its pupils and teachers.

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Lee Oi Kam is Principal, Clementi North Primary School, Singapore.

TAN YAN SONG

Project YUMIN

Making Mathematics More Interesting for Pupils

The school adopted its name YUMIN as the acronym for its project. It stands for 'Yes, to Uplifting Mathematics through INterest'. The project aims to improve her pupils' academic performance in Mathematics by generating and sustaining interest in the subject with both teacher and parental involvement.

Rationale

A study of the school's Primary School Leaving Examination (PSLE) Mathematics results showed an overall declining trend from 73.1% passes in 1985 to 64.6% passes in 1989. Pupils' performance in Mathematics in the school-based exams had also been disappointing. Teachers reported that it was a subject not well-liked by many. It was certainly a cause for concern.

We felt that there should be a school-wide effort to arouse and sustain pupils' interest in Mathematics. This was to be achieved by introducing many highly interesting and supportive activities outside curriculum time. With greater interest and motivation, learning will be enhanced and lead to better academic results.

Teachers' teaching strategies and the extent and effectiveness of parental involvement in pupils' work were considered crucial to sustaining a high level interest among pupils. Hence, there is a need to raise the effectiveness of teachers' pedagogy in Mathematics and to help parents to be more actively and effectively involved in their children's learning.

Project Objectives

The objectives of project YUMIN are:

- To raise the percentage of passes in the PSLE from 64.6% in 1989 to at least 75% by 1993.

- To cultivate a love for Mathematics.

- To enhance teachers' competence in the subject.

- To increase parental involvement and effectiveness in their children's education.

Carrying out the project

From January to March 1990, the school's Executive and Mathematics Committee met to seriously discuss the school's Mathematics programme. During the next four months, the principal, vice-principal and teachers carried out a needs assessment to identify problems and determine the appropriate interventions. Project YUMIN was launched in July 1990, starting with activities conducted to generate pupil interest in Mathematics at all levels. This was followed by a Staff Development programme initiated in August 1990. In January 1991, we involved parents by forming the PArents as PArtners (PAPA) committee to implement various activities.

Project Activities

The main focus of the project is to generate and sustain interest in Mathematics among pupils through a host of innovative and supportive activities. These are to be carried out mainly outside curriculum time. The activities include:

Mathematics Camp

This is an annual 3-day camp for Primary 5 pupils. The camp, held away from the school, aimed at enabling pupils to learn Mathematics in a fun way. Pupils are divided into small groups and given interesting and practical tasks to do.

Mathematics Week

This is organized bi-annually to make our pupils realise the importance of Mathematics in everyday life and that Mathematics can be fun. Activities like guessing the number of soft drink cans, rubber bands and the volume of a tank, and the making of Mathematics apparatus attracted much interest. This activity is for all pupils and prizes are given for each activity.

Mathematics Trail

The trail brings pupils from the school canteen to the field and the eco-garden. At each station, the upper primary pupils are given activities to experience Mathematics in everyday

situations and they are challenged to work on the tasks presented. This activity is held once in two years.

Mathematics Brain Station

This station is easily accessible within the school building and involves outdoor activities which allow pupils to be purposefully engaged in interactive Mathematics displays and workcards either individually or in groups. Pupils gain access to this area on production of their activity card on the days allotted for their level. The area was developed in 1992 with a grant of $2000 obtained from Ministry of Education.

Monthly Quizzes

An average of 15 puzzles and quizzes are put up on the notice board each year. They are highlighted at the school assembly so as to give all pupils a chance to participate. The objective is to stimulate interest in Mathematics among our pupils. Prizes are awarded to the best 3 entries for each puzzle and quiz.

Think About ... Talk About

This is a 10-minute activity in the hall whereby a problem, task or discrepancy is presented to the pupils on the overhead projector. Pupils are asked to 'think' about the problem for about 1-2 minutes. Next, they are asked to 'talk' quietly with their classmates beside them to find the solution. Pupils are encouraged to come forward to present their answer. This activity is carried out monthly.

Mathematics Club

The Club was started in 1992 to give pupils enrichment Mathematics activities and to promote creativity, thinking and solving of mathematical problems. Activities include tangram puzzles, visual thinking mazes, brain teasers, Mathematics investigation, quizzes and Young Mathematician Badges activities.

Parental Involvement Weekend Worksheets

These are enrichment worksheets, with tasks presented in interesting and novel ways. Each worksheet starts off with a short introduction inviting parents to work on the tasks with their children. The aim is to involve parents in their children's schoolwork so as to increase the children's motivation to learn. About 8 such worksheets are produced in a year. A survey among the Primary 2, Primary 3 and Primary 5 classes in July 1990 showed that 64.7% of parents were directly involved in working with their children on the tasks presented.

Reward Tokens

This activity rewards pupils for good work. It was started in January 1990 by a few teachers. After a sharing session at Contact Time, it soon caught on to become a school-wide effort. Teachers reported that pupils looked forward eagerly to be rewarded with stickers or small stationery items for good work shown. To-date a total of $2039.18 had been spent on the materials. It was generously funded by the schools' School Advisory Committee members.

Staff Development

As efficient and effective teaching in the classrooms is important to sustain interest, the following staff development activities are conducted:

- in-house workshops by Curriculum Planning Specialist Inspectors, CDIS officers and teachers of the school,

- sharing sessions at contact time,

- professional discussion at level and subject meetings,

- collation and dissemination of useful articles

- developmental supervision.

Parental Involvement

In order that parents can play a more active and effective role in their children's education, the PArents as PArtners (PAPA) Committee was formed. Parents were invited to help out in many of the school's activities because of the positive influence they have on pupil achievement. We believe that parental involvement will bring about a happy relationship which can enhance pupils' learning. Two Mathematics workshops were conducted to enable parents to be more effective in giving help to their children. PAPA parents also helped out in the making of Mathematics workcards for our Mathematics Brain Station.

Monitoring

Feedback and review of each activity were carried out either immediately or termly so as to identify areas that required attention as well as enhanced their effectiveness. The Mathematics Trail and Camp activities were modified to make them less intensive and more enjoyable. Stickers and small stationery items which were used as rewards were introduced on a larger scale when teachers reported that these greatly motivated their pupils. The procedure for the loan of English tapes to parents to listen to with their children was simplified. This resulted in all tapes being loaned out. Pupils responded enthusiastically to each 'Think About....Talk About' session.

Evaluation

The overall PSLE Mathematics results from 1989 to 1992 and the Mathematics final term results of 3 cohorts from Primary 3, Primary 4 and Primary 5 in 1989 were analysed to determine if the programme had any significant effect on the academic performance of these pupils. Unobtrusive observations and survey questionnaires were also used to evaluate the programme.

Overall PSLE Mathematics Results
1989 - 1992
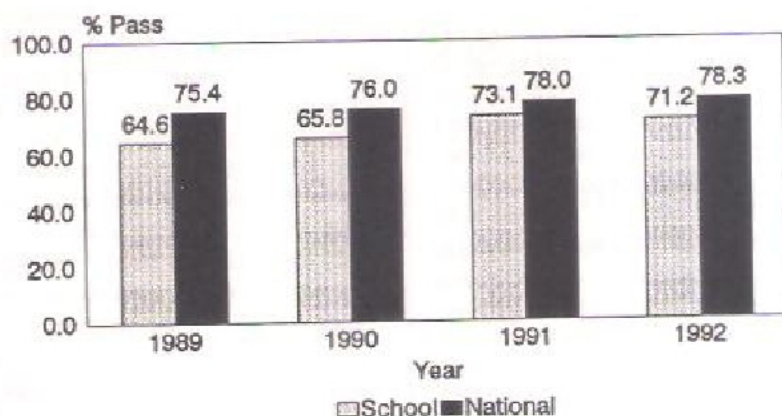
Performance in Mathematics

The PSLE Mathematics results for 1992 showed an improvement of 6.6%, from 64.6% in 1989 to 71.2%. Quality grades in terms of grades A and A's rose by 5.9%, from 21.7% in 1989 to 27.6% in 1992, while those at the national level remained fairly constant at about 37%.

As the programme involved more of the upper primary pupils, the Mathematics final term results of 3 different cohorts of pupils in the school from 1989 were traced. The performance of the 1989 Primary 3 cohort of pupils in Mathematics improved by 16.3%, from a pass rate of 64.4% in 1989 to 80.7% in 1992. The performance of the 1989 Primary 4 cohort also improved significantly. The percentage of pupils passing Mathematics jumped from 55.6% in 1989 to 84.7% in 1991. Likewise, a greater proportion of the 1989 Primary 5 cohort passed Mathematics, from 53.4% in 1989 to 79.0%.

Unobtrusive checklist observations of pupil participation and interest at the various Mathematics Centres of Interest revealed increased levels of interest in the subject. Of the 48 parents who responded to a survey on the school's Mathematics Programme, 83.4% reported that the school had been able to stimulate and sustain their children's interest in Mathematics. 89.6% of them felt that their children were now more interested in Mathematics than in the past. More pupils are taking part in the school's monthly quizzes. In March 1992, three pupils of the school captured both the individual and team championship titles in a Mathematics competition organised by Tampines Secondary School for all the schools in the East Zone. In September 1992 the school excelled at the annual Mathematics Olympiad Competition organised by the Singapore Chinese High School. In spite of having to compete with pupils in the gifted programme, Zheng Jinxi beat all the primary schools in Singapore to emerge as the overall champion in the individual section, while he and his classmates came in third in the team championship. This has motivated the school to intensify its programme.

Teachers now have a more positive perception of the school's Mathematics programme and have shown greater competence in their classroom teaching.

Parental support has been very encouraging. Project PAPA is now on a firm footing as we have a list of about 25 active parents involved in various school projects. 12 to 15 of them meet every month to discuss their involvement in many of the school's activities. With the assistance of the PAPA members, the school conducted 2 mathematics workshops for parents who wanted to know how to help their children in mathematics. 220 parents attended Workshop I on 8 May 1993 while another 130 attended Workshop II on 22 May 1993. In a survey on parents, 79.2% of respondents reported that the school had succeeded in increasing their support for their children's work while 70.9% reported that the school was able to increase parents' support for various activities of the school.

Conclusion

Project YUMIN is well on its way in achieving its stated objectives of instilling in its pupils a love for Mathematics as well as raising its performance at the PSLE. With the necessary co-operation and the unity of perception among the staff, active parental involvement, the availability and high utilisation of resources, the project will achieve success. We owe it to all our pupils to make Mathematics interesting and meaningful to them.

SEAH YONG MIN

Helping Academically Less Inclined Pupils to Achieve

Pupils' academic success, while being the direct outcome of an effective teaching strategy, is also dependent on a host of other *basic* factors. I would like to discuss how the principal can use a few of these basic factors to complement an effective teaching strategy in order to bring about success for his pupils who are academically less inclined.

Characteristics of academically less inclined pupils

To begin, I would like to describe the academically less inclined pupils.

(1) These children are *not* despondent. On the contrary, they are cheerful, optimistic and physically active.
(2) They like hands-on work, work better in groups and are visual learners. They are not keen on chalk-and-talk method of teaching and have difficulty picking up abstract academic concept.
(3) They have short attention span.
(4) They may even possess qualities that promote disruptive behaviours.

Some basics that need to be attended to

A school with a pupil intake ranging from average to weak is likely to have a large proportion of pupils that can be considered as *academically less inclined*. To help these pupils to achieve, the school should concentrate on some essential basics instead of rely on short-cut methods or short-term programmes to address the problem.
The few important basics that I would like to talk about are:

Academic emphasis

It is very important that the school set its academic expectations clearly.

(1) The principal should make it known to staff and pupils that academic learning time is very precious and should be jealously guarded, since it is difficult to arrange for supplementary or remedial lessons. Teachers should set a good example by going to class punctually and ensuring that teaching and learning take place in class all the time. They should also ensure that teaching time is fully utilised, that written work is generally done at home and that notes are printed for distribution.
(2) The school should have a well-planned calendar so that school functions, examinations and other school activities do not encroach too much on curriculum time.
(3) The GCE 'N' level examination ends some time in September after which there are still about seven weeks before the school closes for vacation. During this period of time, 4N pupils should attend lessons as usual so that 5N syllabus can be taught.
(4) Teachers should administer adequate class tests to monitor pupils' progress. But the school should ensure that the same test papers are not used repeatedly for tests conducted on different days and that test papers are marked promptly.
(5) Pupils would adopt a serious attitude towards the school examination if it is well prepared and properly conducted. As soon as the examination is over, the results should be analysed and immediate actions taken to remedy the identified areas of weakness.
(6) If remedial lessons are to be conducted, then their effectiveness should be closely monitored.

Efficacy of teachers

The next important basics to take note of is the efficacy of teachers.

(1) It is important that teachers know their pupils' capabilities so that only suitable topics are taught and at a pace that suits pupils' abilities.
(2) When teaching in the classroom, teachers should help pupils progress through small steps by giving clear instructions, ample examples, immediate guided practices, corrective feedback and positive reinforcement.
(3) Teachers should guide their pupils how to identify activities that waste time or are unproductive.

School climate

A very important basic factor for school success is its climate. What are the indicators of a favourable school climate?

(1) The school's atmosphere should be an open and caring one.
(2) There is much rapport between teachers and their pupils. Teachers try to reach out to their pupils. They discuss and plan activities and programmes with their pupils so as to give pupils a sense of shared ownership.

They have empathy with their pupils and adopt a positive view about them. It would be good if an informal contact time could be held weekly to encourage teacher-pupil interaction.

The support system

For the basics that I have just discussed to be effective, there must be a strong support system in the school. This support system can be built in three areas:

(1) **Principal's support.** The principal must have the vision and energy to create an environment conducive for teaching and learning. He should have good knowledge of the teachers' workload, so that all the tasks performed by the teachers including ECAs, remedial lessons, marking load, duties at special functions etc are accounted for in their workload.

(2) **Parental support.** The school should keep parents informed of their children's academic progress, conduct and ECA from time to time and encourage them to discuss their children's progress reports with teachers. Parents are also encouraged to provide a good learning condition in the home. Their assistance is also sought in discouraging their children from taking on part-time employment and in reducing other competing demands on their children's time.

(3) **Pupils' peer support.** Low achieving pupils learn better in co-operative groups. They are strongly motivated to learn since their achievement will win them acceptance by other group members. Therefore study groups should be encouraged. Facilities should be made available in the school for pupils who want to study in groups.

Pupil motivation

The last basics that I would recommend that you focus on is the all important factor of pupil motivation. Academically less inclined pupils need an extra dose of motivation than other pupils. The school can contribute much towards this need.

(1) The school should try hard to promote learning opportunity by organising relevant projects and meaningful activities to stimulate pupils' interest in studies.
(2) Pupils need constant encouragement. Due recognition should be given to them when they deserve to be rewarded.
(3) The school should strongly encourage school attendance and discourage tardiness. It could consider the use of class diaries for the checking of pupils' attendance every period of the day.
(4) While teaching, the message that should be explicitly put across is "I believe in you, and I won't give up on you."

A Test and Retest Strategy

The tasks involved in implementing this strategy include the following steps:

- Split each core topic into small units so that each unit covers about two weeks.

- Set unit objectives and mastery level.

- Write formative tests which are not to be used in pupil evaluation but rather in diagnosing learning errors.

- Plan and develop corrective measures.

- Set up "item bank" to facilitate the setting of papers for retests.

- Arrange a time schedule for remedial lessons so that they would not clash with other school activities.

- Develop summative examination which can be used to assess and grade pupils on their attainment at the end of the term or semester.

- Set up a "learning development centre" where peer tutoring is offered to those who need more time to attain mastery of certain topics.

Monitoring the implementation of the strategy

Close monitoring of the test-retest strategy includes:

- *Checking written assignments and test scripts regularly*

To facilitate checking, pupils should be trained to file their written assignments and marked test scripts properly.

- *Issue progress reports in March and September*

Parents should be kept informed of their children's progress in school and their support solicited

- *Analyse the school examination results*

Analysis of mid-year examination results serves as a good indicator of the progress of strategy.

- *Conduct developmental supervision*

Offer assistance to those teachers who have to reteach very often and also to those whose pupils have to sit the third test frequently.

- *Unflagging effort to cope with some behaviourial problems*

Behavioral Problems

There are a few behavioral problems that affect pupils' studies greatly. They are late-coming, truancy, skipping classes, not bringing textbooks to school and not handing in homework. The school should come up with some effective measures to deal with them. Parents' co-operation should be sought when dealing with recalcitrant cases. The school could consider set-

IDENTIFY THE CORE TOPIC

Heads of Department and Level Coordinators to Decide

TEACH THE TOPIC

A topic may need to be divided into smaller instructional units

TEST

Formative test, basically short objective tests, for immediate feedback

RETEACH THE SAME TOPIC

Inside curriculum time if a majority fail

CONDUCT REMEDIAL LESSON

Outside curriculum time for the minority who fail

RE-TEST

To be conducted outside curriculum time, and test should be similar to the previous one, but not the same test. Pupils who passed are allowed to take the re-test, but the test and re-test marks will be averaged out

RETENTION

Pupils who still fail will be retained in school and coached by peer tutors for the third test.

SYSTEMATIC REVISION

Our pupils need help, guidance and supervision in doing revision before examination.

SUMMATIVE EXAMINATION

Questions on the core topics which have been taught will carry about 50% of the total mark for the examination paper

A test and retest strategy

ting up a "retention centre" where peer tutoring is provided for those who have missed lessons or are unable to do homework.

Mounting special programmes

Some special supportive academic programmes need to be implemented.

(a) English Programmes - Uninterrupted Sustained Silent Reading (USSR) and Vocabulary Programme.

Every pupil reads for 20 minutes every day. A short, simple multiple-choice test is administered after a pupil has read a school reader for two weeks, so as to monitor his reading progress. For the next two weeks, the pupil will read a book of his choice from the school library and complete a review questionnaire.

Vocabulary Programme : Pupils learn 10 new words in context every week under the Vocabulary Programme. A vocabulary test is administered weekly and reinforcement tests are carried out after every four weeks.

(b) Mathematics Tutorial Programme

At least once a week, all lower secondary pupils attend mathematics tutorial classes where pupils' capability in doing exercises is closely monitored and weaker pupils are given more attention.

Conclusion

To sum up, we can help less academically inclined pupils to do better in school.
We need

- A BELIEF that all children can learn and achieve.

- An environment with ACADEMIC EMPHASIS

- GOOD DISCIPLINE and

- some EFFECTIVE TEACHING STRATEGIES.

ALL these will MAKE a DIFFERENCE in school academic outcomes.

MAY CHEW

Project SELP

Project SELP, or Spoken English through Listening and Practice, was initiated as English language teachers at St. Margaret's Primary School became more and more aware that our pupils were not using English as a medium of communication as frequently as they should.

Rationale for Project

A survey was carried out before and after Project SELP. The pre-project survey results showed that only 40% of our pupils used English in their conversations. This finding and the fact that only 50-60% of our pupils came from families where English was not the language most frequently used at home prompted us to launch Project SELP. Our pupils lacked the opportunity to listen and practise English. They found it easier to use Chinese, for example, as a tool for communication because to them it was a more convenient language to use. We view English as the foundational language of the other school subjects because it is taught as the first language. In the light of these facts, project SELP was formulated. Project SELP was not intended to downplay the importance of the mother tongue languages.

Project SELP aimed at encouraging our pupils to form the habit of speaking English and to reduce the tendency among our pupils to use literal translation in their conversations. For example, they tend to say, "Faster run" instead of "Run faster" and "You go where?" instead of "Where are you going?". Project SELP also tried to provide our pupils with more opportunities to listen and practise English.

Activities

To achieve our objectives, we devised a game to encourage our pupils to use English as a means of communication. All the pupils in our school, from Primary One to Primary Six, were involved in the game. Each game lasted a fortnight and this is how we played the game. At the beginning of each game, every pupil was given twenty tokens. The idea of the game was to use English in all conversations except during Mother Tongue lessons. Any pupil who was caught speaking in another language would lose a token to the one who caught her. At the end of the fortnight, a review was made and special badges were awarded to the first three pupils in each level, who had collected the highest number of tokens. Those who had lost all their tokens were identified and partnered with a pupil in the same class who always spoke English. The tokens were then redistributed and the game started again.

Next, to give our pupils more exposure to the English language, commercially produced audio cassette tapes of songs with good, clear English lyrics and children's stories told by native speakers were played through the Public Address System at recess time every day, except Wednesday. On Wednesdays, at recess time, we had story telling sessions by pupil story-tellers. These story-tellers were pupils from the Upper Primary classes who had good diction and a flair for telling stories. They stationed themselves at shady areas around the school field at recess time and told or read their stories to all those who were interested in listening to them. Mats were placed on the ground for the pupils to sit on and posters were made to advertise and to draw the crowds.

Outcomes of Project

A survey was conducted at the end of the intervention. This was carried out in the same way as the pre-project survey. Selected pupils were stationed around the school at recess time at strategic spots such as the tuck-shop, the basketball court, the school field, the bookshop, the exercise stations and play area and also outside the toilets.

Each of our "agents" listened to the conversations of the pupils as they came into the area where she was surveying. She then noted the language used by ticking in the appropriate column on the Observation Sheet. She 'listened in' to as many groups of pupils as possible and after recess, she would hand in her Observation Sheet to the teacher-in-charge. The ticks were then added and the percentage calculated.

The post intervention survey showed that the percentage of pupils using English in their conversations had risen from 40% to 90.5%. There was a marked increase of 50.5%. The English language teachers were delighted. Project SELP was a success.

The outcome of the project were as follows:

- Both the pupils and the teachers became more aware of the benefits and need to practise spoken English.

- The pupils became less self-

Use of languages before and after Project SELP

English 40.0%

English 90.5%

Other languages 60.0%

Other languages 9.5%

BEFORE
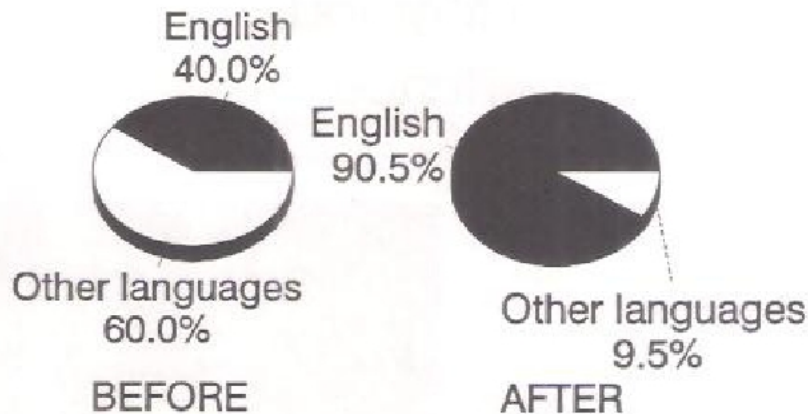
AFTER

conscious and less apprehensive when using the English Language.

- The increased usage gave the pupils a better grasp of the language.

After the intervention and during the follow-up period, the percentage of As and A*s for English rose from 64% to over 70%. This could have possibly been due to our intervention.

To sustain the trend of using English in school, a series of follow-up activities were carried out to further encourage the listening and the practise of spoken English.

Selected parents were invited to tell stories in the Library. These parent story-tellers were given time slots after school hours. Pupils who were dismissed earlier or who were waiting for extra-activities to begin would go to the Library for these sessions if they so wished.

An English programme, ESOL (English for Speakers of Other Languages) was introduced. Pupils who were interested in improving their spoken English attended these classes which were conducted once a week. These pupils were prepared for the examinations conducted by Trinity College, London. One of our former pupils, even while attending secon-

dary school returned for lessons to complete Grade 12. She went on to become a compere in a local children's television programme.

English video programmes were screened during lunch break for pupils who stayed back for extra curricular activities during English Language Week. Selected English video tapes were also screened at the end of each semester after the examinations, for the different levels.

Library Week Activities were conducted on a yearly basis and provided more opportunities for the pupils to listen and practise English.

A Drama Club was set up and the members have been very active.

Concerts and plays were staged at the end of each year by the pupils.

A new game, "Passing the Key Tag", was introduced. This was played within the class. Pupils who were "landed" with the tag too often were made to do forfeits at the end of the week such as telling a story, talk about a given topic or sing a song.

A Buddy Check system where Primary One and Primary Two pupils were paired off with Primary Five and Primary Six pupils respectively during recess time was introduced.

This provided opportunity for the older pupils to interact with the younger ones in English. This activity

was carried out during the first two weeks of the second semester.

We are in the process of building up an audio and video cassette library for pupils to borrow home to listen/listen-and-view. We have yet to conduct a singing contest and to develop our Talk Show.

In conclusion, we would like to say that we are greatly aware that it is beneficial for our pupils, if we maintain a high level of spoken English amongst our pupils. To do this we have to continually promote the use of the language so that our pupils can be effectively bilingual.

DORIS AND DANIEL GWEE

The Montessori Method: A Local Experience

In this article, we will discuss some of the well-known principles of scientific education which Dr Montessori discovered in her practical research on the education of young children. These are the ABSORBENT MIND, PREPARED ENVIRONMENT, NORMALISATION and SENSITIVE PERIODS. We will also discuss the teaching methodology in Montessori education.

The Absorbent Mind

In her book, THE ABSORBENT MIND, Dr Montessori said "At three, the child is already a man. Yet he is still far from having exhausted this strange power that he possesses of absorption from his surroundings." Much research has already been done since the time of Dr Montessori and many experiments have proven that children have a great capacity for learning from the time of birth till the age of 6. After this, the learning capacity begins to diminish. According to Dr Montessori, the child has laid down the foundations of his personality as a human being by the time he is three. The conquests he has made are so great that he is already a little man. We work on this premise in our centre and we set up an environment with as many interesting learning materials as we possibly could. We allow the child to absorb as much of the surrounding culture as he is able to. We try to make our teaching methods interesting in order to build up a stimulating environment.

The Prepared Environment

The child must be given a stimulating environment to work in if he is going to utilise his absorbent mind. By Prepared Environment, we mean that the environment must be thoughtfully and deliberately provided with materials and equipment which are appropriate to the child's stage of development. So, one would find for instance, that a Montessori environment would have appropriately-sized furniture, materials laid out in neat order on low shelves so that the child can get at the materials easily, a neat room with simple decor so that the child will not be unduly distracted by too many posters and clashing colours, a peaceful environment where the directress (teacher) and children are to speak slowly and softly to one another. With such an environment, a child can be encouraged to work with the materials suitable for him and to learn the art of concentration.

Normalisation

It is unlikely to find a two or three year old child coming to a centre fully prepared to concentrate and work on the materials provided. Many of the children go through a short period of insecurity where more crying than learning is done. It is at this time that parents get worried and wonder if their children will ever learn. The anxiety is of course unnecessary as the children get over this phase soon. Initially, children are usually unable to concentrate on any of the materials

Closing and opening of bottle lids and caps ... part of "Practical Life" traininig

they work with and move from one item to another. This is partly due to their short attention span at this time and the fact that our children have too many toys to play with these days. They flit from one toy to another when they play in their own homes, thereby not learning to concentrate on any item long enough for the learning process to take place

In the Montessori method, we initially allow the child to go through a process we call normalisation. Our children do not play with the materials because they are not toys as many people mistakenly believe. During the process of normalisation, we show the

child how to string beads, fold napkins, open and close bottle lids, polish silver and so on. This is not play but work as it is a beginning to helping the child learn how to be independent. However, the most important feature of these exercises is to teach the child to concentrate. Some of our children are so fascinated by these items, they can work on them for long periods, repeating the process again and again. Once the ability to concentrate is achieved, the child is given more intellectual forms of work to do.

Sensitive Period

What is this sensitive period in children? This is a certain period of time when a child begins to show great interest in a particular area of learning. It could be writing or reading. At such a time, which a directress in a Montessori programme must learn to recognise, the child must be given the appropriate materials immediately to encourage him to learn. According to Dr Montessori, if this is not done, then the interest for learning will diminish and it becomes difficult later for the child to regain the same level of interest in learning. So, if we want our children to be competent in the various skills he has to learn, we must learn to recognise his sensitive periods. These periods occur at certain ages but may be different for each child. In our experience it varies from half a year earlier to half a year later for the majority of our children, for any particular interest in learning to surface. Some children learn faster and others slower. A Montessori programme allows children to learn at their own pace so that a strong foundation is attained before they enter school. Many children are confused when they first go to school and our observation indicates that the children were not given the proper foundation at pre-school stage.

Learning Materials

Learning materials are designed to allow the child to ultimately acquire skills such as writing, reading and numeracy. The control of error is either done by the directress or built into the material for the child to correct himself. For example, 45 spindles are required to fill up the 10 compartments in a box numbered 0-9. The child is to place the appropriate number of spindles according to the number shown in each compartment. If there are any spindles left over after the last compartment, the child will know that an error has occured. He will then have to check the number of spindles in each compartment once again to find out where the error occured. Three year old children are able to do this, i.e., after going through a short learning process.

Learning materials help children to enhance their sensory skills during the learning process. This means that they will learn to be sensitive to sight, sound, touch, smell and taste and we learn through our five senses throughout our entire lives. It is also believed that our brain's learning capacity increases in proportion to skills we achieve with the use of our senses. So the aim is to develop children's sensory skills and to guide them into independent work. Through every piece of teaching aid, children are given the opportunity to learn how to improve their motor, sensory, language and numeracy skills. For example, since the decimal system is used, the maths materials are numbered in tens or are fixed in exact increments from 1 to 10. A child not only sees exact increments in size but can also feel exact increments in weight. This is truly learning through the use of the senses. The materials are designed so that the child begins with the concrete and eventually proceeds to the abstract form of learning. This helps to build a solid understanding and provides a strong foundation for more advanced learning.

Learning in a Montessori Environment

How is the learning done? Montessori courses concentrate on 5 areas of learning. They are Practical Life Exercises, Sensorial Training, Language (Chinese is included in our centre), Maths and Cultural Activities. Practical Life Exercises help the child to learn how to care for himself and his environment. Sensorial Training helps the child to be more sensitive to his environment through skilful use of his 5 senses. Our Language programme teaches the child letter sounds from the earliest stages. This is to help the child understand that words are a combination of letter sounds. In Chinese, children are taught to recognise the basic strokes which combine to form words. In addition, there is the writing programme

Visual and muscular perception of dimensions

"Spindle Box" for counting in The Zero Concept Mathematics Programme

and the learning of basic grammar. The Mathematics programme helps the child to understand the concept of shapes, sizes and values. The language of Mathematics such as *more, less, longer than, shorter than,* and the like is also learned at the same time. In cultural activities, the children learn how to be creative through various forms of artwork. They learn about simple plant and animal life, landforms and the passage of time with reference to present, past and future. They also learn to appreciate music and poetry.

All children learn through the 3 stage lessons. In the first stage, the child is shown how to use the material correctly. Then, the directress names a component of the material, and the child is expected to identify it. In the third stage, the child is to name the component he identified earlier. The child is now encouraged to work with the material as long as he wishes in order for him to thoroughly understand the principles. The child has freedom to work with any material. However, the directress' duty is to observe the work of the child without interference. This is to allow the child to concentrate. If the material is too difficult for the child, the directress persuades the child to work with something more appropriate. Children are not allowed to play with the materials. In other words, the child is made aware that rules must be followed. The Montessori child is expected to be independent and disciplined. Classes are small in order to allow for better interaction between the directress and each child. A class has children of mixed ages and the age differential is about three years. This is to enhance the social skills of the children. The younger can learn from the older and the older can help the younger. The younger children tend to learn faster this way. Parental involvement is very important in the education of the young. Regular conferences are held with parents so that they may become aware of their child's progress and in which areas of learning, reinforcement is necessary. Finally, when the child has completed the Montessori programme, in our case, he will undergo a specailly designed Transition Programme by our centre so that he is well prepared to enter primary school with confidence.

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Doris and **Daniel Gwee** manage the Praise Learning Centre at Bukit Batok. The Centre is a member of the American Montessori Society and the National Association for the Education of Young Children, USA.

PAMELA C. THURAISINGAM

Revised History Syllabus for Secondary Schools - Implications for the Classroom Teacher

The revised history syllabus augers well for the history teacher who has not seen change in the history curriculum for some time. With this revision and change, in the words of Ballard, the history teacher now has to prepare to abandon the shallows where he has lived for so long and 'launch out into the deep.' He has to re-examine how best to effectively translate the aims and objectives of the syllabus into classroom teaching.

The Syllabus and its Requirements

The aims and objectives of the syllabus, according to the Ministry of Education's Curriculum Planning Division, not only provide a balance between regional and world history, but also seek to provide a balance between the acquisition of skills and content. The syllabus seeks to imbue values in the pupils, develop in them a sense of identity and pride in their country and to provide them with the cultural ballast necessary in a fast-changing society. As our global city opens to the influences of a rapidly changing world, pupils must be aware of the importance of adapting to regional and international developments. Pupils need to be taught historical understanding, how to process historical information and understand points of view in history. They are also expected to be able to organise and present information using a variety of appropriate forms.

Immediate Concerns of the Classroom Teacher

With the change in the syllabus and its requirements, the immediate concerns of the history teacher would be the following:

Methodology

What changes would he have to do to his teaching methodology? What is historical understanding and how can he teach it? How does he imbue in the pupils values and a sense of identity and pride?

How can he develop in his pupils critical thinking? How can he train pupils to be more analytical and empathetic?

Skills of Study

How does he incorporate the teaching of skills with content? What kind of skills is required of a history student? What are the historian's "methodological skills" (Booths, 1987) which need to be taught to pupils? What are Information Skills? How is he to teach skills of information gathering processing and presenting?

Modern World History

Does the teaching of contemporary world history require a different methodology? What kind of assessment strategies should he adopt? What kind of source materials should he use in the classroom?

An Interpretive Approach

An interpretive approach would be one where the pupil and the teacher try to "make sense of" (Brophy) historical events and facts. In the Interpretive approach, the teacher provides the opportunity for the pupils to think out things for themselves and there is interaction between the teacher and the pupils. The teacher stimulates thinking by asking a number of "Why" and open ended questions. The pupils in turn are also

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encouraged to question the teacher and one another.

The Interaction study by Thuraisingam (1990) of the classrooms where the teachers use the Interpretive Approach shows the following:

(a) "Teacher talk" is interspersed with teacher questions.

(b) Teacher relates to pupils' own experience and draws on their imagination.

(c) Teacher uses open and rhetorical questions to arouse and awaken in the pupils a sense of curiosity and to get them to think.

(d) Teacher responds to pupil's answer by reflecting on pupils' answers, sometimes clarifying and sometimes even using pupils' answers and ideas to build upon.

(e) The pupils in the Interpretive classroom use more genuine or "exploratory" language as they grapple with language in order to come to grips with the concepts.

(f) Pupils in the interpretive classroom initate talk to the teacher and to other pupils.

(g) There is more laughter in the classroom

(h) More praise is given to pupils for their ideas.

(i) Fewer instances of rejection of pupils' ideas.

(j) Fewer choral answers.

(k) More wait time is given.

Why an Interpretive Approach?

Current theory and research on history emphasise the importance of teaching history for understanding, appreciation and application, and not just for knowledge memorization and skills practice. Brophy in his recent study on the fifth graders ideas of history mentions that,

"...many students thought of history as an exact science that would establish facts unequivocally. They did not appreciate the degree to which history is interpretive and they had difficulty imagining how either historians or they themselves might attempt to resolve conflicting accounts."

He goes on to say that if pupils are to enhance their quality of life and if the value of history is seen as civic education, they will need to learn to appreciate history's interpretive nature. This, he says can be done through activities that engage them in historical interpretation. According to Nichol (1984), the propositional knowledge, or the facts of history, can be obtained from textbooks, but the procedural knowledge can only be obtained through the process of enquiry. Thus according to Nichol, there is a need for teachers to be as concerned with the process of enquiry as with the imparting of received knowledge. Pupils have to be given an opportunity to be involved and to tease out information from the historical facts.

Activities

What kind of activities would

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develop in our pupils critical thinking abilities and a sense of reflexion. How can we teach this?

James Smith's Interrogatory Approach

Smith has suggested a technique which he calls the interrogatory approach, an approach which can be tried in our own classrooms. Here pupils themselves raise problems or questions about the past which need to be examined understood and explained. These questions provide a frame of reference in gathering information. According to Smith, pupils, guided by this interrogatory, know beforehand what they are looking for. Their reading is kept "active" and "alert" and allows them to probe through sources critically. In addition, an Interrogatory directs the pupils' notemaking activities. It indicates what information should be selected, and so helps cope with the total information found in a source. When pupils do the write up, the interrogatory provides the framework around which they can arrange their notes. He believes that the "interrogatories involve pupils in the skills of historical analysis. They can also be used to encourage pupils to hypothesize and engage in historical reasoning". He also suggests that such an approach can be used to revise past examination questions.

Concepts

In order to teach pupils historical knowledge and understanding it is necessary to teach them concepts. "Concepts serve as catalysts for knowledge. They help to make sense of the past by giving it structure and coherence. They raise historical knowledge...to that of historical understanding." (Booths 1987). Concepts can be taught graphically and by concept mapping. (Loh 1987).

Empathy

Booths (1987) also mentions that pupils should be taught empathetic understanding. It is a difficult objective to teach and it requires imagina-

tion. "In essence, empathy is the attempt to get to grips with the strangeness of the past... Empathy is therefore at the heart of historical understanding. "This can be taught by giving the pupils a historical problem to tackle on their own."

Teaching of Skills

The challenge for the history teacher lies in his ability to teach pupils how to learn history so that they become independent learners. This pedagogic approach is something the teacher himself must master before he can pass it on to his pupils. As he moves from a transmitter of knowledge to a facilitator, he has to teach the pupils to become "versatile learners" (Ann Irving) of history. The history student will be deluged with information and facts. He has to be able to read for information, select what is relevant, take notes, process the information and finally present the information.

Irving believes that study skills should not be taught in isolation and out of context. She believes it should be taught across the curriculum. Some schools have incorporated the Information skills programme in the English curriculum. It now remains for the history teacher to provide opportunities for the pupils to develop, extend and practise these skills.

Contemporary Modern World History

According to Burston & Thompson (1967), there is a difference in the way history of the past is written from history of the present. The historian, in writing of the past, is somewhat detached from the scene that he is portraying. He knows what followed the event or period. In contrast, the contemporary historian is inevitably involved in the events for he is a participant rather than a detached spectator. In writing his account the contemporary historian is limited by evidence which is often incomplete. Most of the time he is questioning events. His writing might be coloured by prejudice and it might not be impartial. He predicts and makes assumptions. The teacher will have to be aware of this and teach the pupils to distinguish fact from opinion and pupils need to be taught to reflect critically.

In discussing the problems of teaching contempororay history in schools, Burston and Thompson say, "Contemporary history ... is a mature and sophisticated form of history, a history in which the questions asked are more important than the answers, sometimes only partial answers are given ...". Here they feel that it is necessary for historical analysis and criticism to be applied to contemporary history. The teacher and the pupils must remember "not to accept what they should question nor to accept as closed a discussion which should be the beginning"

Resources

For resources, the teacher and pupils of contemporary history might also have to resort to newspapers and magazines on current affairs to keep abreast of the rapid change taking place around them, although the the period of history taught is only up to 1963 for Malayan History; 1954 for South east Asian History and 1952 for Modern World History.

Assessment

For testing pupils on Modern world history, the teacher might not be able to use the usual method of marking according to one fixed answer. The teacher might have to be open to alternate answers, because there are no right answers.

With the revised syllabus, history has more to offer to pupils. The success of the revised syllabus rests in the hands of the classroom teacher. As mentioned by Mrs Mok Choon Hoe, Director of Curriculum Planning Division, "We are counting on our teachers who have supported the revision of the syllabuses to enthuse and fire the imagination of our pupils."

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Pamela Thuraisingam teaches history at St Theresa's Convent, Singapore.

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