TEACHERS' PERCEPTIONS ON THE SMART SCHOOL TRAINING PROGRAMME: ITS APPLICABILITY TO CLASSROOM MANAGEMENT

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99-02-0400

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1999/2000
DEDICATIONS

For my beloved wife
who has been very understanding and supportive

For my sons Hafiz and Mu'iz, my daughters Nur Hafidzah and Nursyafika,
hoping that they are inspired to do better in their studies

For my dear father
who has given me the strength and patience to achieve what once was impossible

For my brothers and sisters
There is nothing to be proud of in life except our family bonding,
So let's think for a better tomorrow today

For my colleagues and friends
For their advice and assistance.
ACKNOWLEDGEMENTS

I wish to thank all the people involved in Master of Science, Human Resource Development programme especially the Dean, Supervisors, Lecturers, Tutors and Staff of the Faculty of Cognitive Sciences and Human Development, University Malaysia Sarawak (UNIMAS),

Guest Lecturers from various agencies,

Staff of Institute Aminuddin Baki, Ministry of Education,

Principals and Staff of the six Smart Schools in Sarawak,

Colleagues and members of Cohort 5, MSc. HRD. UNIMAS

And many others for their kind assistance
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This research aims to study teachers’ perceptions toward Smart School training with respect to classroom management to classroom management in six Smart Schools in Sarawak. The study is restricted to the computer aspect of the training and will not in any way describe other aspects of the Smart School training programme. Data is collected through the use of a questionnaire distributed to 90 respondents from six Smart schools. The data collected will be analysed using the Statistical Package for Social Sciences Version 10.01. Descriptive statistics will be used to record the general details and respondents’ profile. Independent t-tests will be used to analyse the significant differences in perceptions towards Smart School training between respondents who owned computer and those who do not, and between respondents with different number of years experience using computer before training. Similarly, analysis of variance (ANOVA) will be used to analyse and identify the significance difference in perceptions toward training between respondents with different type of computer training. The rest of the research questions will be discussed descriptively based on frequency count. The results obtained from the tests indicated that there is no significance difference in perceptions toward Smart School training. It was also concluded that there are factors that encouraged teachers to use computer in classroom management. Nevertheless, the study indicated that teachers disagreed that deterring factors presented deterred them from using in classroom management. Internal factors like the availability of facilities, time constraints and heavy workload were found to be some of the contributing factors for not applying training in classroom management.
CHAPTER 1: INTRODUCTION

1. Background of the Study
The Smart School project is one of the seven flagship applications in the Multimedia Super Corridor (MSC), which is geared towards ensuring the nation’s success in moving from an industrial economy to a knowledge-based economy. A knowledge-based economy requires human resources who are able to participate in a global environment and capable of using technology to improve productivity. Acquiring computer skills will be a critical factor in creating a knowledge-based economy.

Training and educating future workforce in computer knowledge and skills is the primary responsibility of the education system. This can be achieved through the introduction of Information Technology (IT) in schools. Teachers as the primary movers for IT literate generation need to be able to perform their jobs well by preparing themselves with the necessary knowledge and skills in IT. As teachers are entrusted with the responsibilities of imparting IT knowledge and skills to future workforce, they need to be IT literate and able to apply knowledge and skills in classroom situation. Ceriello and Freeman (1991) mentioned that most institutions see learning as a valuable asset in corporate world. Thus, to enable learning to be effective, systematic planning, implementation, and evaluation of training need to be emphasised by training providers.

Since its independence, Malaysia has introduced various steps to develop the nation. It has embarked on a target-based nation building strategy. Among the strategies implemented included the five-year economic plans. Based on the layout of seven application flagships, Malaysia was ready to forge ahead, guided by Vision 2020 (Ahmad Sarji Abdul Hamid, 1993). Vision 2020 is more futuristic in nature, promising an even better quality of life that Malaysians had ever experienced through the successful implementation of both the five-year economic plan and the National Economic Plan.

Vision 2020 envisages that Malaysians need to overcome nine challenges in order to achieve successful future in the increasingly challenging world. One of the nine challenges is to establish an information-rich and knowledge-intensive society. In this Malaysians are required to engage in research and development in electronics, an area that requires intensive use of information technology. IT literacy, thus become a prerequisite for all future Malaysians. All dimensions of life in Malaysia will be subjected to and dependent upon knowledge and information (Shotoku, 1993). The need to create an information-rich and knowledge-intensive society led to the development of Multimedia Super Corridor (MSC).

Subsequently, as one of the means of preparing the future generation to face responsibilities of developing the country in the IT age, the government introduced and implemented the Smart Schools projects as one of the seven flagship applications in the MSC (Sia Pon Won, 1999). The Smart School project is one of the seven prime flagships of the Multimedia Super Corridor project. The implementation of Smart School project covers the systematic change in classroom management. The aim is to produce intellectual, creative, innovative, and efficient classroom management that are compatible in the global challenges.
The demand for knowledge workers would not be achieved without the successful implementation of Smart School. This leads us to question the training aspect of Smart School teachers. Teachers are the frontliners who are integral to the process of educating future knowledge workers. With such a heavy responsibility, teachers too need to be sufficiently trained with all the necessary knowledge and skills.

To ensure that the project achieves its objectives, various trainings have been carefully planned and organised to upgrade teachers' professional practices. In order to be able to facilitate teaching and learning effectively, teachers who are already in service were offered computer courses. Teachers as the frontliners need to equip themselves with all the necessary knowledge and skills to enable them to face new challenges. They were expected to be able to facilitate teaching and learning activities, use the presentation facilities and network resources such as access to the Internet. It is predicted that by the year 2000, most teachers would be able to use the computer (Wan Zahid, 1995).

Other than the effort to transform schools into Smart Schools, the Ministry of Education (MOE) also encouraged efforts by schools to turn “Smart” on their own initiative. According to the Academic Sector, State Education Department Sarawak, currently there are 20 ordinary schools in Sarawak that have registered to be Smart Schools with their own initiatives. Teachers from the schools were involved in courses and workshops related to Smart School teaching and learning. Lecturers from various Teacher Training Colleges were given the responsibility to give talks and facilitate training in schools. With the help of various relevant parties, these schools will gradually succeed in implementing Smart School programme.

The Teacher Education Division (Bahagian Pendidikan Guru - BPG), Ministry of Education (MOE), gave a 14-week in-service training course to teachers teaching in Smart Schools. The training is aimed at enhancing the practice of teachers to undertake their roles as facilitators and guide in various Smart Schools (http://202.190.218.3/smartschool/professional.html).

In a Seminar on National Educational Issues (1998), Mohammed Sani Ibrahim stated that in 1999, a total number of 264 lecturers from various Teacher Training Colleges were sent for attachment programmes and short courses in various international institutions abroad. Among the focus of the training programme includes various fields related to Smart School concept. Once they have completed their attachments and courses, they were required to develop modules in their respective disciplines and later organise courses to other lecturers. Out of the total number of lecturers, 32 had been identified and appointed as trainers in Smart School Training Centres. They were responsible to develop five modules, namely: Facilitator skills, Learning skills, Thinking skills, Evaluating and Assessing skills, and Information Technology skills.

1.2 Statement of the Problem
Since the implementation of the Smart School project in 1999, many teachers have attended Smart School training. One of the aspects of Smart School training was the use of computer in classroom management. However, to date there have been few researches carried out on the aspect of “classroom management”. Researches were mostly focused on teaching-learning aspects of Smart School project. Among local researchers involved in such studies include Azhari Tauhid (1995), Abdul Wahid Rosli (1998), Mustafa Sidi (1995) and Ridzuan (1998). Studies on attitude toward computer were also carried out by Jusni Nasirun (1995), Mariatun (1995), and Ting (1998).

Thus, this study aims to look at perceptions of teachers who have attended Smart School training toward the classroom management aspect of the Smart School training; whether there is any difference in perception towards Smart School training between teachers with different demographic background; factors that encouraged teachers to use computer in classroom management, and factors that deterred teachers from using computer for classroom management; and how far teachers are able to use knowledge and skills gained from Smart School training in classroom management.

1.3 Research Questions
Specifically, this study attempts to answer the following questions:

i) What are the perceptions of teachers in the Smart Schools in Sarawak toward the Smart School computer training?

ii) Is there any significant difference in perceptions toward the classroom management aspect of Smart School computer training between teachers who owned computers and those who do not?

iii) Is there any significant difference in perceptions toward the classroom management aspect of Smart School computer training between teachers with different number of years of experience using computer before training?

iv) Is there any significant difference in perceptions toward the classroom management aspect of Smart School computer training between teachers who attended different type of training provided by different training organisers?

v) What are the factors that encouraged Smart School teachers to use computer in classroom management?

vi) What are the factors that deterred Smart School teachers from using computer in classroom management?

vii) To what extend were the Smart School teachers able to apply knowledge and skills gained from the SSC training in classroom management?
1.4 Research Hypotheses
Based on the above research questions, the following null hypotheses are formulated:
Ho1: There is no significant difference in perceptions toward the classroom management aspect of Smart School computer training between respondents’ that owned computers and those who do not.

Ho2: There is no significant difference in perceptions toward the classroom management aspect of Smart School computer training between respondents with different number of years of experience using computer.

Ho3: There is no significant difference in perceptions toward the classroom management aspect of Smart School computer training between respondents who attended different type of training provided by different training organisers.

1.5 Significance of the study
The findings of this study will provide information on the extend Smart School training was perceived to have benefited teachers. The study will shed some light on the strengths and weaknesses of the Smart School training, and the extent the training can be applied in classroom management. The results of this study will be important to various bodies involved in education especially the Teachers Training Division and the Schools Division of the Ministry of Education, the various teachers training colleges, the Sarawak State Education Department, Divisional and District education offices which are responsible for the training of teachers in Smart Schools. By knowing teachers’ perceptions toward Smart School training and its applicability to classroom management, appropriate follow-up actions can be planned and relevant corrective measures can be implemented.

In addition, the study and its findings would serve as a foundation for further similar research in other areas of Smart School project, which to date is minimal.

1.6 Operational Definitions of Terms
For the purpose of this study, the following terms are defined as follows:

1.6.1 Classroom Management
Classroom management in the context of this study refers to how teachers use computers to deliver and convey information, and to assist in various classroom management tasks such as for keeping students’ profile, students’ tests results, examination details, inventories and other types of records related to classroom management activities (Davis, 1993).

1.6.2 Computer Experience
Computer experience in this study refers to the number of years teachers have been using computers at a regular basis.

1.6.3 Computer Ownership
Computer ownership refers to the private ownership of a computer or computers.
1.6.4 Perceived School Support
Perceived school support refers to the perception of the individual respondent regarding the support and attitude of the schools' administrators toward the usage of computer in classroom management among Smart School teachers (Koh Chee Kiat, 1998).

In this study, effectiveness of training refers to how teachers perceive knowledge and skills gained from training.

1.6.5 Perception
Perception is defined as an organised and enduring set of beliefs and feeling towards some objects or situations and a predisposition to behave towards it in a particular way. It is related to affective, behavioral and cognitive component. It is also defined as how one sees things around him. Perception occurs through seeing, listening, and feeling (Nessier, 1976). This will depend on pre-existing structures in the human brain called schemata, which directs perceptual activity and are modified as it occurs. It refers to the entire process by which people perceive visual information and act accordingly on the basis of that information.

1.6.6 Smart School Training
Smart School training in this study refers to formal training attended by teachers related to Smart School programme. This includes the 14 week training organized by MOE, Teacher Training colleges, and in-house training organized in schools (http://www.mdc.com.my/flagship/school/index.html/, 1998).

1.6.7 The Malaysian Smart School
Smart School Conceptual Blueprint defined the Malaysian Smart School as a learning institution that has been systematically reinvented in terms of teaching-learning practices and school management in order to prepare children for the Information Age. Smart School is synonymous to a school having facilities that incorporates information technology in classroom management and in daily teaching and learning processes.

The Malaysian Smart School is a learning institution that has been systemically reinvented in terms of teaching-learning and management practices to help children cope with the Information Age. The Malaysian Smart School was initiated by the Ministry of Education in 1996. This nationwide project is aimed to enable learning to be self-paced, self-directed and self-accessed and to provide students a conducive environment to develop their potential suited to their pace and styles (Yap Cheng Theng, 2000).

Smart Schools in this study refer to the six secondary schools in Sarawak selected to implement Smart School programme at a trial basis. In 1999, 81 schools were involved in the project. In the year 2000, another nine schools were included into the Smart School project making a total number of 90 schools nationwide.

1.6.8 Training
Pont (1991) defines training as developing people as individuals and helping them to become more confident and competent in their lives and in their jobs. According to him, the
learning process is at the core of training and the ways of, and opportunities for, learning are numerous and varied. Ibrahim Mamat (1996) defined training in organisation as an organised learning process to bring about attitudinal change, to upgrade knowledge and skills of workforce in order to improve job outcome. While Blanchard and Thacker (1999) described training as an Opportunity for learning, but what is learned depends on many factors: the design and implementation of the training itself, the characteristics of the trainees, and the learning climate of the organisation.

Training in the context of this study refers to the planned training organised by various educational institutions like Curriculum Development Centre (Pusat Perkembangan Kurikulum – PPK), Teacher Training Division (Bahagian Pendidikan Guru – BPG), training colleges and schools to upgrade teachers’ knowledge and skills in various aspects of Smart School curriculum. However, the study is limited only to the computer aspect of the training.

1.6.9 Training Programme
Training programme is defined as a systematic training schedule designed or developed to increase teachers’ knowledge and skills in various subjects or disciplines. Training can mean those organised formally by special bodies like the Ministry of Education, Teacher Colleges, State Education Departments or those run by individual school authorities such as in-house training.

1.7 Limitations of the study
This study will attempt to explore teachers’ perceptions toward Smart School training in six Smart Schools in Sarawak. However, the training looked into in this study is limited to the computer aspect of the training with regard to classroom management practices as perceived by teachers in the Smart Schools. In addition, the study will also explore the factors that encouraged use of computer in classroom management as well as factors that deterred teachers from using computer in classroom management.

Due to the above conditions, this study is expected to face deficiency especially in relation to literature review. Lack of research has been done on the effectiveness of Smart School project. Furthermore, due to the limited number of Smart Schools in Sarawak, limited samples will be used in this study. Thus, additional information will mostly be obtained from a few sources such as the selective websites available in the Internet, records provided by various responsible parties like the State Education authorities, Teacher Training colleges and the MOE.

The short span of time allocated to carry out the study and the location of schools, which are situated all over the state of Sarawak (Kuching, Sri Aman, Sibu and Miri divisions), posed some constraints in obtaining full support from various parties involved especially with regard to data collection.
Another aspect that will probably pose some problems is that, the study is restricted to Smart Schools in Sarawak with a sample population of 90 people out of an estimated population of 1200 teachers in Malaysia. Finally, although there may be other constraints and problems faced with regard to Smart School training, this study focuses only at a portion of Smart Schools training as perceived by teachers in the six schools, in an attempt to identify possible reasons for using computer in existing classroom management practice in Smart Schools.

1.8 Conceptual Framework
This study looks at several variables that can influence the overall implementation of knowledge and skills gained from training in classroom management. Perceptions were looked into from two angles: (i) Respondents’ perceptions toward classroom management aspect of knowledge and skills gained from Smart School training, and (ii) Respondents’ perceptions toward the Smart School training programme and the ability to use computer in classroom management. The following diagram shows the conceptual framework used in this study.

![Conceptual Framework of the Study](image-url)

Figure 1: Conceptual Framework of the Study
CHAPTER 2: LITERATURE REVIEW

2.0 Introduction
This chapter presents review of literature related to classroom management in Malaysian Smart School project and training programmes designed and carried out for teachers in the Smart Schools. The literature reviewed was based particularly on the Malaysian experience since the introduction of Smart School concept to the present day. Literature review on training focuses on in-service training programmes which were designed and developed mainly for serving teachers within the Ministry of Education.

Smart School project is one of the nation's prime agendas in preparing the country to face global challenges by the year 2020. The bases for its successful development lie upon the achievement of its generation in economy, science and technology as stated in the nation's mission and vision. A society of a wide range of knowledge and able to use the knowledge in the best possible ways would further enhanced achievement of the national philosophy. The development of individual needs to be balanced in all aspects: economic, moral, spiritual, and physical.

Certainly, what distinguish Smart Schools from other schools is the use of technology to support and enhance teaching and learning (http://202.190.280.3/smartschool/index.html). Self-accessed, self-paced, and self-directed learning can be practiced with the aid of multimedia technology. IT as one of the vehicles to enhance better understanding of the whole concept of Smart Learning will allow students to develop their strengths to a level of excellence and breed a generation of inventors and innovators. Students undergoing Smart School programme are expected to develop analytical, creative thinking and the ability to make decisions and solve problems efficiently.

Malaysia needs to make the critical transition from an industrial economy to a leader in the Information Age. In order to make this vision a reality, Malaysians need to make a fundamental shift towards a more technologically literate, thinking workforce, able to perform in a global work environment and use the tools available in the Information Age (http://www.geocities.com/athens/parthenon/2686/blueprint-smartschool.htm). To make this shift, the education system must undergo a radical transformation.

The schooling culture must be transformed from one that is memory-based to one that is informed, thinking, creative and caring, through leading-edge technology. According to the blueprint, it is against this background that Smart Schools has been made one of the flagship applications in the Multimedia Super Corridor (MSC). Smart Schools is therefore no longer a fashionable luxury but the only way forward. According to the Ministry of Education (1997), the change being brought about to develop all Malaysian schools into Smart Schools is indeed a serious one that can cause apprehension in all those involved. A major part of most resistance to change may be attitudinal. Thus, other aspects of the implementation of Smart School project are assumed to be smooth going. These include the training aspect of the project.
There are various moves taken to enhance development in the Smart School Project. Eighty secondary schools throughout the country have been selected to undergo the pilot stage. By the year 2010, all the approximately ten thousand Malaysian schools will be ‘Smart Schools’ (available online at http://www.geocities.com/athens/parthenon/2686/blueprint-smartschool.htm). These schools will provide self-directed learning, individually paced, continuous and reflective. This will be made possible through the provision of multimedia technology and worldwide networking. With these facilities, learning will shift from being teacher centred to student centred, supported by a flexible and open-ended curriculum.

Smart Schools are not for the smartest students. These schools aimed to lead full democratisation of education in Malaysia. They are the smart way of ensuring that every student – strong or weak, rich or poor – stretches to his fullest potential in a way that is best suited to his learning pace and style. The curriculum will therefore recognize that students have different learning needs. This effort will probably narrow the opportunity gap between the affluent who can advance technology in their homes, and the less affluent in society.

Perkins (1991) stated that among the reasons why Smart School is necessary, is that the problem of knowledge is much more that a problem of missing knowledge. Students’ knowledge is generally quite fragile in several different and significant ways. According to him, four distinct problems are:

i) Missing knowledge - Sometimes important pieces of knowledge are just plain missing;

ii) Inert knowledge – Knowledge sometimes present, but inert. So, it lets the student pass the quiz but does not help otherwise;

iii) Naïve knowledge – Sometimes the knowledge takes the form of naïve theories and stereotypes, even after considerable instruction designed to provide better theories and combat stereotypes; and

iv) Ritual knowledge – The knowledge that students acquire often has a ritual character, useful for schoolish tasks but not much else.

Perkins noticed that these four problems with knowledge run contrary to the goals of education underscored in the introduction-retention, understanding, and the active use of knowledge. The problems of missing, inert, naïve, and ritual knowledge combined in a learner to display a distinctive cluster of behaviours, the fragile knowledge syndrome. These problems will then contribute to a more complex learning difficulties.

Another writer, Gardner (1983) made the point that conventional educational practice focuses largely on linguistic and mathematical intelligence. Whereas the multiple character of human intelligence demands a wider horizon if we are to honour people’s varied abilities. According to him, this would include finding ways to make music, the visual arts, dance and
sports, interpersonal skills, and skills of self-reflection more substantive and salient presences in classroom and curricula.

Among the activities that should be included in the practice include:

i) Involving students in projects that allow many alternative modes of symbolic expression – visual art, language, and music;

ii) Creating group projects that invite students to work in media and symbol systems with which they feel most closely attuned; and

iii) Bringing a greater diversity of symbol systems into subject matters; for instance, engaging students in writing essays in mathematics class, or essays about mathematics in English class, or doing cartoons with witty captions in English

The idea of multiple intelligences goes beyond highlighting the diversity of human ability and the consequent need to diversify instructional opportunities. Therefore, Smart School curriculum needs to be flexible and open to cater for differences among students’ following the programme. Smart School programme is not meant only for the intelligent and clever students. Its curriculum is designed to cater for the diverse nature of the students. As such, it is crucial that students’ diversity be taken into consideration in the planning, designing and implementation aspects of Smart School.

2.1 Training Programme

Most writers and experts in the field of training recognised a more useful training model that the designer of the training needs to determine the evaluation design of the training soon after identifying the training need. Effective training according to Blanchard and Thacker (1999) must address the personal needs of the employees, helping them to learn, to grow, and to cope with the issues that are important to them. Focusing on Knowledge, Skills and Abilities (KSAs) that don’t meet the needs of the organisation according to them will not be productive. Likewise, unless the new KSAs are seen as relevant and important by the employees, they won’t transfer back to the job. In the new training model, evaluation can occur anywhere along the process. In addition to evaluating the long-term effects of training on participants, the evaluator might decide to evaluate the course as it is taking place so that he or she can modify the content to make it even more effective.

Training programmes are part of an integrated system in which each programme builds on the learning achieved in earlier programmes. Blanchard and Thacker (1999) believe that employee training enables companies to adapt to changing conditions and be more effective in the marketplace. This is accomplished by providing employees with the opportunities to learn how to perform more effectively and by preparing them for any changes in their jobs. However, training doesn’t always result in these outcomes. Training according to them is an “opportunity” for learning, but what is learned depends on many factors: the design and implementation of the training itself, the characteristics of the trainees, and the learning
climate of the organisation. Among the basic things that need to be considered to maximise the effectiveness of training includes:

i) Provide a supportive environment in which learning is facilitated

ii) Design training programme so that trainees are motivated to learn

iii) Work with the others in the organisation to identify and remove barriers to using the new knowledge and skills on the job.

Learning according to Blanchard and Thacker can be separated into different categories. Traditionally, organisational psychologies have used the categories “Knowledge, skills, and abilities” (KSAs) to label the different types of learning outcomes. However, one drawback to this categorisation is that it is difficult to differentiate between skills and abilities. Abilities have been defined as general capacities related to performing a set of tasks that are developed over time as a result of heredity and experience (Fleishman, 1972: In Blanchard and Thacker, 1999). Skills however, have been defined as general capacities to perform a set of tasks developed as a result of training and experience (Dunnette, 1976: In Blanchard and Thacker, 1999).

Blanchard and Thacker (1999) further stated that the effectiveness of training should be based on the learning outcomes it brings to trainees. They classified learning outcomes into three different domains as shown in the following diagram:

![Classification of Learning Outcomes](image)

Sometimes skills are categorised as psychomotor (behavioural) while abilities are defined as cognitive. Therefore, the definition of knowledge covers both the facts people learn and the strategies they learn for using those facts. On the other hand, attitudes are relatively easy to distinguish from knowledge or skills. It is scientifically well established that attitudes influence behaviour and that they are learned (Oskamp, 1991: in Blanchard and Thacker,
Thus attitudes must be part of any paradigm or model attempting to describe the categories of learning or outcomes of training.

The following diagram in Figure 3 shows the New Training Cycle.

![Diagram of the New Training Cycle](image)

Figure 3: The New Training Cycle (In Reeves, 1994)

### 2.2 Transfer of Training

Training programme is said to be effective if it can bring about behavioural or attitudal change among trainees once they were back at their respective workplaces. Training, in addition to learning and retraining new material, employees must also use what they obtained from training on the job to improve performance. According to DeSimon and Harris (1998), transfer of training can take one of three forms; Positive transfer, Zero transfer and Negative transfer.

Positive transfer occurs when job performance is improved as a result of training. Zero transfer occurs when there is no change in job performance as a result of training. Whereas negative transfer occurs when job performance is worse as a result of training. The three forms of transfer may occur due to various interferences that may have detrimental effect on learning and performance.

Ellis (1965) suggested that transfer could be enhanced when training contains a variety of stimuli, such as using multiple examples of a concept or involving the trainee in several different practice situations. Another factor that may enhance training transfer is support in the work environment. The extent to which a trainee perceives support for using newly learned behaviour or knowledge on the job would also affect transfer of training. This includes supervisory support and support at organisational level.

Baldwin and Ford (1988) developed a model that offers an explanation of the training transfer process.
Goldstein (1986) found that it is often difficult to identify and include in training those principles that maximize positive transfer. It is still not clear whether training programmes that apply general principles theory to a certain group of tasks will actually result in skilled performance on those tasks, thus he suggested further research need to be carried out in the area. In later study by Rouillier and Goldstein (1993) entitled, “The relationship between organisational transfer climate and positive transfer of training”, they stated that an employee’s perception of the transfer of training climate, which they defined as “those situations and consequences, which either inhibit or help facilitate the transfer of what has been learned in training into the job situation”, affected learning and behaviour back on the job. The opportunity to perform what has been learned back on the job is an important element of the work environment.

The following table presents suggestions for increasing the chances training will transfer back to the job.

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>i.</td>
<td>Maximise the similarity between the training situation and the job situation.</td>
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<tr>
<td>ii.</td>
<td>Provide ample opportunity during training to practice the task.</td>
</tr>
<tr>
<td>iii.</td>
<td>Use a variety of situations and examples.</td>
</tr>
<tr>
<td>iv.</td>
<td>Identify and label important features of a task.</td>
</tr>
<tr>
<td>v.</td>
<td>Make sure trainees understand general principles.</td>
</tr>
<tr>
<td>vi.</td>
<td>Provide support back in the work environment.</td>
</tr>
<tr>
<td>vii.</td>
<td>Provide ample opportunity to perform what is learned back on the job.</td>
</tr>
</tbody>
</table>

Table 2.1: Suggestions for increasing the chances training will transfer back to the job

Another important aspect that needs to be given attention in the organisation of training is individual differences. Trainee characteristics can play a role in the learning, retention, and transfer of skills and factual material. Three additional factors that account for differences in individual learning processes: rates of trainee progress, interactions between attributes and treatment and the training of older workers.

2.3 Professional Development for Smart School Teachers
The mission of professional development programme is to nurture the qualities and develop the professional practice needed to facilitate learning in a technology enriched environment. The framework of teacher education for Smart Schools identifies aspects of a teacher's responsibilities that promote learning. The curriculum to be taught is standardised and developed centrally. In order to develop a generation of inventors and innovators require a very open, student-led curriculum. However, due to various logistical constraints, this cannot be implemented at this early stage (available online at http://202.190.218.3/smartschool/professional.html). Briefly, the curriculum contains the following elements:

i) Knowledge acquisition
ii) Values inculcation towards the development of the good person
iii) Analytical thinking and the ability to make decisions and solve problems,
iv) Creativity and the ability to generate new and innovative ideas
v) Proficiency in an international language, networking skills and a global outlook and,
vi) IT competence

These responsibilities defined what teachers should know and be able to do in carrying out their professional practices. Without a systematic and efficient training programme, Smart School teachers would not be able to perform effectively.

2.3.1 Evaluating Training
Organisations are interested in determining the impact of training on individuals within their organisations and on the bottom line. The most frequently asked questions are, “What did we get out of this training? Was it worthwhile in the end, considering the costs?” Thus, training needs to evaluated and validated to check on whether the standard of performance is achieved and worth the time and money spent by teachers and the schools involved. Some of the thorough evaluation objectives according to Reeves (1994) include:

i. Assessing the training as it is carried out so that problems can be dealt with as they arise
ii. Measuring the overall success of the training from the trainer’s perspective
iii. Identifying areas of weakness in the training and making recommendations for change
iv. Determining whether trainees can transfer their learning from training to the job