

22May 2002

The Committee Secretary
House of Representatives Standing Committee on Education and Training

Dear Mr. Rees

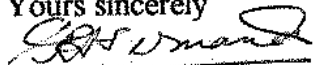
This is a supplementary submission to the inquiry into the education of boys. Since I made my last submission I have moved on to running a pilot project to prove the effectiveness of a Constructivist Learning Environment 'Classroom of the 21st Century' to overcome the problems facing students and teachers. I have enclosed the relevant information about the project. It would start on 1 June and end on 31 November at Osborne Primary school in Mornington. I would send you the final report when it is available.

The Project has been approved by the CEO of the Innovations Commission of Victoria Ms. Vivian White and the Faculty of Education of Monash University. It is supervised by the President of the International Congress for School Effectiveness and Improvement Associate Professor Tony Townsend at Monash Frankston Campus, Telephone: 03 9904 4230, E-mail: tony.townsend@education.monash.edu.au I have the approval and support of the Principal and teachers of Osborne Primary School.

Though the project is run at a Primary School, its full potential would be seen in overcoming problems of teaching and learning in the middle school. It is designed to undo the enormous damage done by subject specialisation in the middle school. In 2002 it is no longer possible to squeeze in, the ever expanding knowledge into the traditional subject areas, integration and interdisciplinary studies with students exploring and taking responsibility for their education guided by teachers, using all the available Information and Communication Tools (ICT) is the way forward. This design allows the teacher to play a decisive role in pastoral care and individualised teaching. The ICT tools would empower the teacher and the division of the class into small groups would enable the students to engage in self-paced, contextual, independent learning as well as work collaboratively on projects. Music learning is brought within the reach of every student every day. It was one of the major subjects in Classical times and Medieval times till the onset of the Industrial Revolution. It is a sure antidote to depression, mental illness and suicide.

If funds are available I would be able to help another twenty schools on the Peninsula, the cost of transforming one classroom in each school is around \$2500, it is cost effective and once the students, teachers and parents see the effectiveness they would give their full support and pressure the politicians for funds. Please keep me informed about the progress of the inquiry.

Yours sincerely



Anderson Fernando, BA, Dip Ed. M.Ed. Final year D. Ed. Student at Monash, 35 years of teaching experience in UK and Australia

The Background

Education reforms aimed at enhancing the quality of education for all is a major priority in Victoria. In the last ten years many structural changes dealing with the administration of state schools were enforced together with reforms to examinations and curricula and standards. Recognising the importance of Information and Communication Technologies (ICT) to enhance the quality of education, The Department of Education, Employment and Training (DEET) established the Victorian Educational Channel, SOFWeb Resource Centre, The IdeaBank, The Global Classroom Project, and the Navigator School Project.

The Kirby Report and the Public Education -Next Generation evaluated the impact in the year 2000, the expected school effectiveness and improvement were not spectacular. One of the major reasons that I have uncovered in my investigation was that, most classrooms in the primary and secondary schools have not been restructured to benefit from the use of ICT to enhance the quality of education and many teachers are not involved in the use of ICT in the classroom.

In contrast in private schools, every student is armed with a laptop computer, school buildings have been modified or purpose built for the maximum exploitation of the potential of the ICT to enhance the quality of education. An effective constructivist learning environment need the extensive use of the ICT.

The Potential significance of the Research Project

My research project is geared to finding out the most effective way of using ICT in the classroom, in spite of funding constraints and pedagogical resistance in state schools. It would reduce the gap between private and state schools and provide an opportunity for every state school student to maximise his/her talents.

The aims and hypothesis of the research project

My hypothesis is that an effective deployment of ICT tools in the classroom under the supervision of the class teacher would enhance the quality of education. It would empower the teacher and create an opportunity for the students to engage in self-paced, flexible, contextual, interdisciplinary and independent learning.

Constructivist Learning Environments have been tested around the world and found to be very effective. The Victorian Curriculum and Standards Framework (CD ROM curriculum at work) lists the following benefits to students and teachers.

1. The students are more engaged in the learning process, and are able to participate in a more varied range of learning activities matched to their individual needs, interest and capabilities.
2. They learn in an environment characterised by collaborative work, problem solving and effective communication of ideas.
3. They take greater responsibilities for their learning.

4. They access resources and work with peers and mentors world wide via the internet.
5. They acquire knowledge and skills which are essential for success in the global information economy.

Teachers

1. They employ wide range of teaching strategies and find increasing job satisfaction through the creation of engaging learning environments.
2. They are more readily able to monitor and plan the learning progress of individual students.
3. They have access to an extensive range of learning support materials and a net work of professional colleagues and mentors via the internet.
4. They use technology to streamline administrative duties.

All these factors would lead to an improved quality of education for all

Method

Participants, materials and procedures for the research project

Grade five class students, teachers, principal and parents at Osborne Primary School in Mornington.

Procedure and Materials

A Constructivist Learning Environment would be created following the design 'Classroom for the 21st Century'

Five learning stations would be established in the classroom

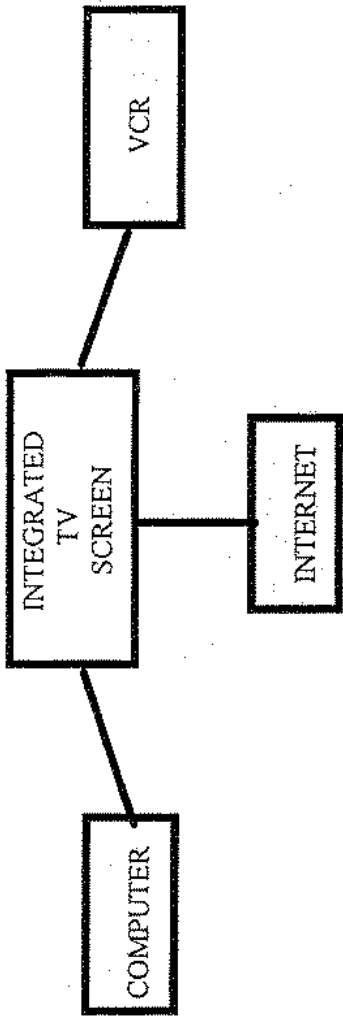
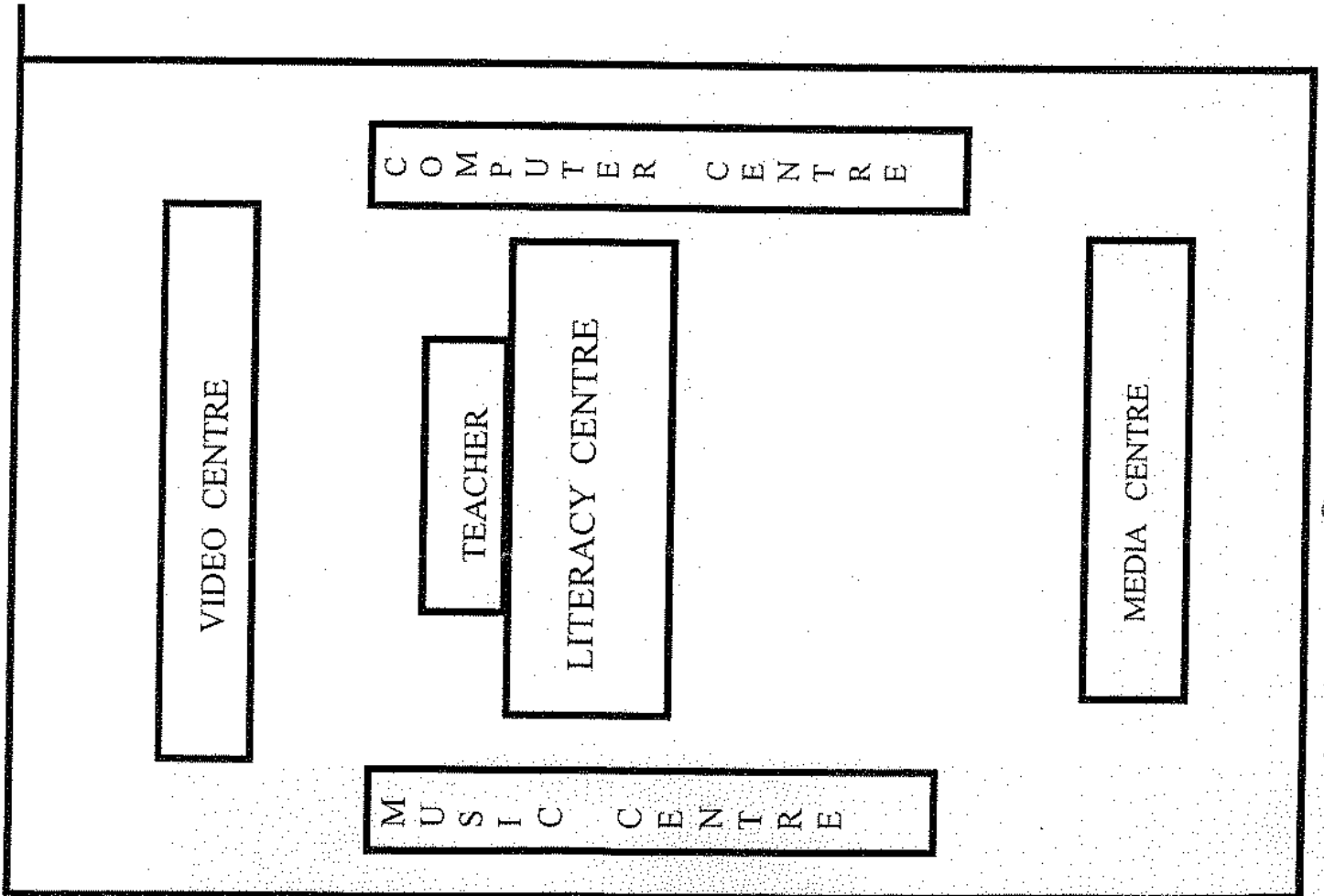
1. A computer station with five computers to gather information from CD ROMs and the Internet.
2. A VCR station to access information from educational videotapes produced by ABC and other educational institutions.
3. A music station with five electronic keyboards and headphones to master the basic skills in music making.
4. A media station for the students to engage in creative activities using art, craft, music photography, software designing and documentary making.
5. A literacy and numeracy station under the direct supervision of the class teacher, this provides an opportunity for the teacher to engage in individualised instructions and pastoral care work.

The student would record their daily work in a log book.

The relevant software for each theme would be provided with the help and advice of other teachers, parents, educational professionals of the Department and Monash University.

Action Research would guide the working of the project. The stakeholders would act as monitors and evaluators. Qualitative and quantitative measurements would be made during the project, I would act as the facilitator and write up the final report.

CLASSROOM OF THE 21ST CENTURY



INTEGRATED, INTERACTIVE, TEACHING UNIT

This unit is designed to empower the teachers to achieve maximum results in the difficult task of effective information transfer in the classroom. Teaching mixed ability groups, with different styles of learning, varying interests and some with crippling emotional baggage is a formidable task. The teachers have to carry out this challenging task every day of their working life. This is a tool to lighten their burden and brighten their day.

Instead of the traditional methods of engaging the attention of the students, the teachers would be able to flash on the TV monitor, pre-selected multimedia presentation from a CD ROM, Video tape or from some exciting site on the internet. This would lead to information analysis and synthesis. Once the students comprehend the issues presented they could engage in independent learning activities like reading, writing and experimenting and proceed to creative activities using drama, painting, music, TV or computer presentations. This would make learning a pleasurable and an attractive task.

Whatever the subject, whatever the age group, It would be possible to locate fascinating, relevant multimedia presentations to cast that magic spell in the classroom. Information explosion is a great boon to the teachers. Contextual learning and interdisciplinary learning would become realities. Today it is possible to give each child an education for life.

