St. Ailbe's School

Information Communications

And

Technology

PLAN

St. Ailbes School ICT Plan

A vision for the incorporation of ICT' in the whole school

The future is a knowledge-based world. To operate in this world, people need to be able to access this knowledge, add to it, and evaluate it. Knowledge will be distributed through networks with people interacting in groupings, free from the geographical spatial constraints of the past.

The school of today must prepare us all for this world. In particular, the delivery of the curriculum must incorporate the possibilities of this technology and so involve the teacher and student in new ways of interacting with the world and with each other. The learning experience in every discipline can be enhanced by this technology and the student can take more ownership of their learning by having greater access to a wider range of learning experiences, not just confined to the classroom.

If we were building the school from scratch today with unlimited resources, we would build a very different school. We would take into account that;

- students could be part of a learning group or community and participate from home,

- experts and tutors from different parts of the country or world could participate in the delivery of the curriculum,

- students themselves could be from a disparate geographical area for specific courses.

The methods of presentation and the interaction between students and teachers using current technologies would be radically different from existing methods.

We urgently need to fit into the frame of mind that sees the benefits and possibilities of this new world. We have taken several valuable steps along the way over recent years and we now need to invest further to take advantage of the opportunities. Continued investment is required in infrastructure and skills development.

An audit of current infrastructure and staff skills indicates that we incorporate ICT technology in general and specialist classrooms to a great extent. Staff are extremely motivated and relatively competent in the use of ICT in the classroom. However, further training for staff to improve competence in basic networking technologies in particular, would bring on stream the reality of new methods of interaction between students themselves and students and teachers.

Infrastructure

As listed in the hardware audit, St. Ailbe’s School has 106 PC's and various peripherals. All PC's in the school are networked using CAT 5e/6 and WiFi for laptops. We operate 3 servers in the school. One is Win 2003 Server providing File, DHCP and DNS services using Active

Directory. The others are a Linux Server providing proxy Internet Access and filtering functionality. Our servers are connected to a central switch which in turn distributes the network to 10 other switches serving all ICT equipment. (All operate at 1 GBit). As well as having a RAID File Server we also operate a 1 TB NAS providing extra backup security.

ICT's change so rapidly that existing hardware and software can become obsolete quickly. Research suggests that three to five years is the life span of a computer. The computer will normally remain functional for a longer period but will date and may not be capable of using modern software. Consequently, ICT technologies and workstations require replacing each year. We currently have 88 PC's and 16 Laptops/Tablet PC's. in St. Ailbe's School and have lowered the student to PC ratio from ~25:1 to ~4:1 in the school. In Computer Studies classes every student has access to a PC. We try to keep out ICT facilities as up to date as possible within the current financial constraints.

Most classrooms have audio-visual and ICT facilities. More needs to be done. We also need to have one PC in every room which is what we are working towards.

It is hoped to implement Sharepoint services in to coming year so that we can centrailse and share resources in an easier and more efficient manner as well as provide online resources for out students which they can access from home.

We also have a school website http://www.ailbes.com

The ICT Committee

In planning for ICT in St. Ailbe's School, the ongoing process must involve the whole school community to ensure that "all pupils receive a quality of education in terms of both holistic development and academic achievement" (SDPI, 2000, p12). The school community encompasses all those people affected by the education provided by the school; the stakeholders. The key stakeholders in St. Ailbe's School are the VEC, Board of Management, the Principal, the Teaching Staff, Parents, Pupils, local communities and businesses and the Department of Education and Science. The Education Act 1998 requires the involvement of all of the stakeholders in the planning process.

Our current ICT Committee consists of a number of Teachers in the school. It is hoped to develop and evolve this over the coming years.

Budgetary Provision

We try to ensure that provision is made for purchasing, developing and maintaining ICT hardware, peripherals and software. We will endeavour to ascertain the operational costs of sustaining technology after installation. These operational costs will cover the following items:

- Maintenance and Technical Support
- Consumables, such as printer ink jet cartridges, paper and disks
- System upgrades and equipment renewal
  Software licensing

ICT Co-ordinating Teacher

The role of the ICT Co-ordinator

- Co-ordinating and compiling the ICT Plan.
- Identifying training needs and facilitating staff training.
- Liasing with the Principal and members of staff in relation to ICT development.
- Evaluating the use of ICT in the school and encouraging greater use by teachers and pupils.
- Developing a means by which the ICT structure can be maintained and upgraded.

Resources

- Previous ICT Policy
- ICT Planning and Advice for Schools Pack (DES/NCTE)
- Limerick Education Centre
- Tipperary Institute

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The Proposed Role of the evolving ICT Steering Committee

- To look at the application of IT in the world in general and to advise on how we might prepare ourselves for future changes.
- To help finance the ICT budget for the school.
- To acquire estimates of costs of replacing, maintaining and increasing the quantity of school hardware and software.
- To develop a partnership of public and private sectors that will channel funds into the provision of ICTs for St. Ailbe's School.
- To contribute to the development of the vision for the application of ICT in the school.
- To revisit and revise the plan annually.
- To elicit feedback and suggestions from the school community continuously.
- To establish a feedback loop in the implementation process based on the vision and mission that is ongoing.

The committee will need this clearly defined role in order to contribute to the effectiveness of the ICT plan. "Committee members should be given job descriptions so their roles and responsibilities will be clear" (Graduate Students at Mississippi State University, 1996, Internet, p18). Classroom matters, such as course delivery and the use of ICT by teachers for teaching are the remit of the individual teachers.

Rationale for the use of ICTs in St. Ailbe's School

Although there is much controversy among educational psychologists as to the etiology of the effect of ICT on learning, all literature is in agreement that ICTs positively affect a students learning. To mention one such research, a meta analytical study by Kulik & Kulik (1991) points to two major findings:

- Firstly, that students usually learn more in classes in which they receive computer based instruction.

- Secondly, that students learn their lessons in less time with computer based instruction.

One does not however, need to read the vast amounts of literature on the benefits of using ICTs in the classroom to recognise that the use of technology facilitates learning.

The following are some rationale for the incorporation and integration of ICTs in St. Ailbe's School:

- "Students need to learn how to use these technologies for their own personal and professional development in the knowledge economy" (Galbreath, 1999, p19).

- Students are exposed to vast amounts of external stimuli every day at home. The fashionable nature of ICT technologies and the Internet lead to a greater diversity of learning experiences which make the classroom a more interesting place and therefore appeals to a wider range of students.

- Due to their interactive capacities, multimedia technologies enable the creation of environments in which constructivist/active learning can take place rather than passive reception of information.

- Computer based, independent learning results in a non-threatening, non-judgemental environment.

- Research has demonstrated that an ICT based learning environment results in greater collaboration, co-operation, and peer tutoring among students if PCs are networked.

- One consequence of the information explosion is that the individual teacher cannot know everything of value to their students. However, with the aid of ICTs, they can often guide their students to the information they seek. Consider the revised Leaving Cert. Biology Syllabus; which incorporates examinable social, political, and personal aspects of biology. ICTs provide fantastic opportunities for students to access up to date information about dynamic Science research, Datalogging in Biology and Physics.

- ICTs can help to speed up and improve effectiveness of preparation for the delivery of classwork by teachers.

- The learning benefits associated with ICT for pupils with special needs include improvements in motivation, participation, socialisation, skills development, confidence in their ability, development of potential, continuity for students who have to absence themselves from school for medical reasons, peer tutoring, and pride ("Connecting Schools, Networking Peoples", BECTA, 1998).

- ICTs can challenge the more able student to a greater extent than traditional classroom methods. It provides an opportunity to further their knowledge on a wide variety of subjects and become creative, independent, life-long learners.

- The benefits of the use of ICTs for administrative purposes are self-explanatory and mandatory to function effectively in our current Education System.

The list of various rationales is endless and hugely out numbers the reasons not to integrate ICTs into St. Ailbe's School. The process of integration however, will be a gradual one that consists of measurable objectives that can be easily evaluated and revised by all stakeholders through the ICT Steering Committee.

Evaluation of the ICT Plan.

Although reflection on the plan will be ongoing, formal evaluation will take place at each meeting of the ICT Steering Committee. Different parts of the plan may be evaluated at different times. The results of the evaluation should be used to determine the future course of the plan;

- If the plan is successful in achieving its targets, it will continue to be implemented,
- If the plan is only partly successful, then it will require modification to some degree,
- If the plan fails to achieve any targets/goals, then major changes will be made or the plan

will be completely revised.
The evaluation process itself must involve the discussion and answering of the following questions;
- What has been or is being accomplished? (Implementation)
- How can it be improved? (Evaluation)
- What is our next step? (Revision)

Mission Statement

- To provide quality education that meets the actual needs of young people in the best quality learning environment, creating an atmosphere of trust and confidence between students, parents, and staff which enhances self-esteem and self worth.

- To help all pupils reach their full potential in all areas of life, moral. Academic, social and vocational, recognising that there is no single standard that applies to all.

- To help pupils grow in confidence with a positive outlook on life and with the due consideration for others and for property.

The Role of Technology in the School.

The aim of St. Ailbe's School is to provide students with a level of competence in the use of ICTs and to encourage individual teachers to integrate ICTs into their classrooms.

There are various methods of achieving a level of student competence by means of a "Hybrid approach" as proposed by Crawford (1997). By this we intend to teach the students some basic skills in formal computer classes at Junior Cycle and as an option at Senior Cycle, and that the students will also learn about ICTs by exposure to them in their other subjects. St. Ailbe's School recognises that ICTs cannot be forced on any individual teacher. Discussions and decisions will take place at a subject department level as to how and when ICTs can be integrated effectively into the teaching of that specific subject. As indicated by the teacher's

survey, many teachers are willing and eager to integrate ICTs into their pedagogy. Approximately 75% of the staff surveyed, said that they would like to develop their IT skills to a level that would allow them to effectively use IT in their classrooms. This means that given the level of ICT skills among the staff, that they too must achieve a certain level of competence to effectively incorporate ICTs into their classrooms.

Student Instruction

- 1 period per week at 1st Yr. level for Computer Studies classes
- Schemes of work for Computer Studies to be based on a graduation of skills in applications such as MS Word, Excel, PowerPoint, Paint, Publisher, Windows Explorer, Basic File Management, E-mail, the Internet, and small amounts of relevant computer theory to further their literacy.
- Students will apply their knowledge from Computer Studies classes in other subjects, for example; for JC Home Economics, Junior Certificate Science, Woodwork projects, Physics, Biology, LCVP etc.
- Students will develop an appreciation for the proper use of ICTs in their everyday lives.

Teacher Training

- Teacher training will be provided in relevant applications as requested by the staff as much as possible.
- Any training provided will match peoples perceived needs and will preferably be school run.
- Teachers will be informed of any in-service training courses provided by the NCTE and other organisations.
- The ICT co-ordinators will provide assistance to teachers with problems in acquiring ICT skills.

Equity

NCTE (2000) suggests that equal access to ICTs for all students should be an objective of our ICT plan. Students from different socio-economic backgrounds, students of different gender,

and students with special needs may have unequal access to ICTs. Our students survey however, indicates that most of the students in St. Ailbe's School have equal opportunity to access ICTs if they wish to do so. As a preventative strategy, all students in various years will be timetabled for equal amounts of Computer Studies classes. The Transition Year and Leaving Cert. Applied classes will however, be timetabled for more Computer Studies classes given the project based, IT integrated modules that they study. At Senior Cycle, ICT's are an integral part of the LCVP program and the new Leaving Cert. DCG Program..

Curriculum

As previously stated, an IT department scheme of work has been written as a guide for the teachers concerned. It aims to standardise the level of student competence at the end of each Junior Cycle year and to integrate IT across the curriculum. How ICTs will be integrated across the curriculum will be the remit of individual teachers as a member of a subject department. The subject departments will discuss with the ICT co-ordinators, the possibilities and realities of integrating ICTs into their subject. Each department is encouraged to discuss and produce the following:

- A list of suitable websites for that subject,
- A list of ICT resources that they may have, use or wish to acquire,
- To identify an area of their course that can be readily applied, where the teachers will set and accept an exercise/project that will be supported by the IT teachers in Computer Studies class.
- To identify an area of their course where learning or presentation could be enhanced by the use of ICTs.

Many teachers already integrate ICTs into their preparation and delivery of their own subject content. They may simply wish to request further resources for their department. Progress will be discussed at department meetings each term.

Maintenance

The ICT plan will be published on the St. Ailbe's School Intranet/Website and revised if necessary after each meeting of the Steering Committee.

Special Needs and ICTs.

Technology is an excellent tool that students with disabilities may use to access and facilitate learning. The NCTE has published an excellent booklet on "Special Educational Needs and Information and Communication Technology". Our excellent resource department recognise the lack of ICT resources and are currently researching and producing a list of adaptive technologies that will specifically assist students in St. Ailbe's School overcome disabilities.

Exceptional Students.

"Technology can be used imaginatively to improve the curriculum for talented and gifted students" (Schools IT 2000, p6). Exceptional students, with respect to ICTs, may be given tasks or special responsibilities to challenge their skills and further their knowledge. Differentiation of teaching methodologies through the use of ICT's will also accommodate exceptional students in the classroom. A computer club has been established to facilitate constructivist learning at lunchtimes.

In addition, the Students Council, students who are entering the BT Young Scientist Competition, students involved in Gaisce, Formula1 in Schools Technology Challenge and the Green Schools committee have full use of all our ICT facilities. This means that they have the capabilities of holding discussions and surveying their peers on various issues.

The Role of the ICT Co-ordinators.

St. Ailbe's School has chosen a team of ICT Co-ordinators in order to delegate the vast amount of responsibilities of such a post as advised by the literature.

Collectively the team's duties will include the following:

- To co-ordinate the compilation and production of the ICT plan,
- To inform staff of and to facilitate training,
- To collaborate with subject departments to develop strategies for the integration of ICTs across the curriculum,
- To liaise with senior management and advise on IT strategies,
- To evaluate the use of ICTs in the school in conjunction with the ICT Steering Committee,
- To develop a means by which the IT system can be maintained and upgraded,
- To provide technical support and further training as required.

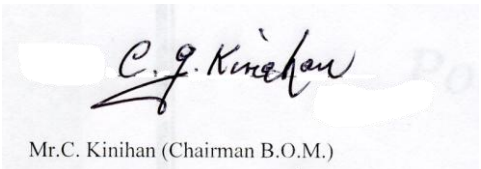
Goals

The ICT Steering Committee have decided on the following goals for the ICT Plan for the 2008-2009 academic year:

- To facilitate collaboration among all Subject Department areas of the school.
- To further develop use of Intranet and consequently reduce photocopying costs for the school
- To incorporate Share Folders and thus facilitate teachers to share resources with students and assign work/exercises to them
- To provide staff training in any areas identified by Subject departments
- To increase bandwidth of existing broadband connection to increase access to school website

- To incorporate the use of PC Tablet technologies into the classroom, having first tested same technology as towards their usefulness in the classroom.
- To provide Data Projectors and other ICT resources where possible, in all class rooms as requested by teachers
- To implement our Video Conferencing facilities and establish ongoing sessions with schools throughout Europe.
- To provide wireless network connectivity in the whole school building
- To establish a peer tutoring team of staff members who will provide training for staff in use of the school website/portal for attendance, Class Server, e-mail, …etc

This plan was ratified by St. Ailbe's School Board of Management on January 20th 2009 and will be reviewed again during the school year beginning September 2011 or as the need arises.

Signed: 

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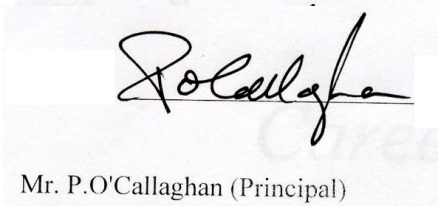

(Secretary)