

# **OECD/CERI ICT Program ICT and the Quality of Learning**

## **A Case Study of ICT and School Improvement at Glen Waverley Secondary College, Victoria, Australia**

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**Adjunct Professor Ron Toomey  
Centre for Lifelong Learning  
Australian Catholic University  
(Principal Researcher)**

**with**

**Christine EkinSmyth  
Department of Education, Employment and Training, Victoria**

**Colin Warner**

**Glen Waverley Secondary College**

**Darrell Fraser  
Glen Waverley Secondary College  
(Associate Researchers)**

<http://www.gwsc.vic.edu.au>

## 1. Overview

### *Vision Statement*

*The educational program at Glen Waverley Secondary College is designed to support the development of the whole person; a person with a positive self image, who seeks excellence and respects the rights of others. All students should develop an international perspective which recognises the importance of acquiring the skills which will allow them to operate successfully as global citizens.*

*The fundamental assumption underpinning the program is that all students have the ability to learn and to progress and this will be enhanced by the use of appropriate technologies.*

*We aspire to support the development of students as autonomous learners, whose preferred learning styles are facilitated and extended by teachers who have a wide variety of teaching strategies to draw upon.*

Extract from the vision statement of the Teaching and Learning Charter, the platform for whole school reform at Glen Waverley Secondary College.

The charter was developed collaboratively by staff during 1996 and continues to shape the innovation today.

## 1. The School and Its Context

### Introduction

Glen Waverley Secondary College (GWSC) is a coeducational school with an enrolment in the year 2000 of 1830 students in years 7 to 12. It is located in the eastern suburbs of the Australian State of Victoria's largest city, Melbourne. There are 30 international full fee paying students at the school. The staff numbers 155, 125 teaching staff and 30 non-teaching staff. It has an annual global budget<sup>[1]</sup> of approximately \$9 million.

The college was opened in 1960 and many of its buildings are from that era. However, the college has recently undergone extensive refurbishment to create

a modern and vibrant learning environment that reflects the changing nature of teaching and learning that is taking place there.

The remodeling commenced with the construction of a new Science and Technology Centre in 1995 that created contemporary, open and transparent learning spaces that would allow teachers and students to interact in their learning in a way that was restricted in traditional classrooms. The extensive use of glass is a noticeable feature allowing all aspects of learning and teaching to be easily observed throughout the college. College resources have been redirected to the remodeling of the remainder of the buildings. The transparency of classes through the use of glass is an ongoing feature of the college architecture.

Some major features of this rebuilding work have been the computer networking of all areas of the college and the creation of withdrawal spaces where students can work independently from their classroom teacher. At GWSC it is a routine occurrence to see a teacher operating with students in two or three separate locations so that learning is not restricted to the a single, teacher-centred classroom.

The students also have access to modern landscaped outdoor spaces at the Glen Waverley site and access to a rural campus, Nayook Outdoor Education Centre located 100 kilometres from Melbourne. Nayook provides an outdoor program for all students in the junior school. Students in year 7 and year 8 undertake a sequential outdoor program covering experiences such as canoeing, water watch activities, cycling, bushwalking, rock climbing, caving, adventure rope courses and navigational events. Two and a half full time teachers conduct the Nayook residential challenge involving an elective activity program.

In general terms, the school community is relatively affluent. GWSC is in Group 3 Like School category<sup>[2]</sup> assigned by the Department of Education, Employment and Training. GWSC is considered to be a high performing school. It has a high proportion of students who speak a language other than English at home. There are 20 language groups among the LOTE speakers whose origins largely are Asian countries such as Malaysia, China and Sri Lanka. The school is very highly regarded in the community which is also served by several large high profile and expensive non-government schools.

The school prides itself on its student retention rate. It retains virtually all of its students through the final years of secondary schooling, with over 90% of those graduating from Year 12 proceeding to tertiary education.

The college has a very considered policy on student individualisation, relating to the first goal of the school's Strategic Focus: *Care of the Individual Learner*. The school emphasises the teachers' responsibility to all learners to enable each student to access the support they require to make progress. Initiatives have included the Junior School Curriculum Trial of 1999-2000, which consisted of teams of teachers working with smaller groups of students. The main goals of this trial were to improve student welfare and a sense of belonging, enhance student learning, enhance teacher professional growth and improve teacher welfare. Evaluation of this trial has led to a restructure of the curriculum in years 7 to 10 beginning in 2001.

A literacy program in years 7 and 8 targets students whose literacy levels inhibit their ability to access the curriculum. Consequently, a Corrective Reading program was implemented in 2000 producing excellent outcomes for the students involved. Feuerstein's Instrumental Enrichment<sup>[3]</sup> has been undergoing a trial with a group of students to assist them with their organisational skills. Four teachers have now been trained to conduct the program which will be expanded in 2001. The FORCE Program<sup>[4]</sup> targets groups of students at years 8 and 9 encountering problems with their schooling. 'Study Hall' is offered to all students; it consists of study time outside of normal classes where students can access additional assistance from teachers and specific support programs are provided, such as study skills, presentation skills and training in the use of a range of application software packages.

The ongoing improvement of the quality of teaching and learning and the innovative use of Information and Communication Technologies (ICT) has been the major focus of school reform for six years. This has seen substantial resources being redirected into professional learning and programs that will assist students to become effective lifelong learners.

A constant stream of visitors through the school observes teachers and students in action. The visitors come from all around the world as well as locally, some staying only an hour or so, others participating in professional development activities for several days. Over a thousand visitors come each year. Students and teachers at GWSC are the centre of international attention. Visiting educators, politicians, industry people and others investigating innovations

in teaching and learning are invited to request staff members to explain and elaborate their everyday practices.

The overwhelming impression one forms after being in the school is that it is a place that values learning. It describes itself as a learning organisation and assiduously works on achieving that as a major goal. In classrooms, students are engaged and enjoy a challenge. In return they challenge teachers to provide a learning environment which leads to higher learning. Teachers participate in a personal program of on-going professional learning. The senior management consistently advocates processes and programs designed to continually improve learning and teaching at the school. ICTs are an integral part of GWSC. They are found in all areas of the school, including all classrooms and staffrooms, enabling routine access for students and staff. The college is a technology rich learning environment, where students and teachers access the technology tools they require not only from all areas within the school but from home as well.

## 1.2 Background

GWSC was formed from an amalgamation of three secondary schools: Glen Waverley High School, Lawrence Secondary College and Syndal Secondary College. As a result of declining enrolments in the late 1980s, a reorganisation of the three schools was initiated by Lawrence and Syndal Secondary Colleges. In the amalgamation process, it was agreed that the name Glen Waverley be retained, that the main campus be at the Glen Waverley location and that the Principal of the new school would be the then Principal [\[5\]](#) of Glen Waverley Secondary College.

The administration at the original Glen Waverley Secondary College had been particularly active in the 1990s trying to secure additional resources for the school. One member of the then administration team remembered the time as one of *austerity. Buildings were run down. Resources were scarce. We were constantly trying to attract additional resources.*

### Design Laboratory

The college council at the time was concerned to develop a clear vision for the college within the community, in light of the emerging challenges for education in the twenty-first century. It agreed to send the Principal and Assistant Principal on a study tour to research best practice and gather ideas for embarking upon a new vision for education at the college. This forward thinking move by the college council enabled the Principal and the Assistant Principal to develop a proposal for a state of the art Science and Technology Centre. The Council anticipated support for such a venture as the development of science and technology in schools was part of a broader Government policy at the time about the economic reconstruction of Victoria. Similarly, they had anticipated the future importance of ICT. They had invited outside experts in the field to address the issue of ICT with staff during curriculum planning days. Professor Hedley Beare from the University of Melbourne was especially influential in this regard because he set the need to change in the context of emerging global trends. The Assistant Principal recalled:

*We were considering a range of things in the early nineteen nineties. I remember we invited Hedley Beare to address the staff on the future for schools. He gave a lot of people a shock when he said that if we did not start to take ICT seriously we would be obsolete very quickly.*

The new school began life on three campuses in 1993. To support the consolidation of the school onto the Glen Waverley site, the Department of Education made funds available to refurbish the buildings on the current site, and to build, fit out and equip a new Science and Technology Centre. From the outset, because the amalgamation involved very different institutions, there was a need to establish common policies especially regarding curriculum and teaching and learning practices. The new Glen Waverley Secondary College faced a challenge to establish a distinctive identity.

The amalgamation provided a catalyst to shape a new identity for the college, which included a review of curriculum, review of teaching and learning, rethinking of appropriate infrastructure to support new models of teaching and learning and a review of the management structure required to make the vision a reality.

In 1995, Glen Waverley Secondary College was named as one of Victoria's seven Navigator Schools. These schools were to pioneer the effective integration of ICT in an effort to improve teaching and learning and school administrative practices. Becoming a Navigator School was a natural progression for GWSC. As a Science and Technology Centre, it had already become a pioneer of innovation in Science and Technology and had established the infrastructure to integrate ICT into its program.

In keeping with the intention to establish a distinctive identity for the college several major changes had been made at GWSC by the end 1995:

- The Years 7 to 10 curriculum was revised and restructured in line with the National Curriculum Profiles.<sup>[6]</sup>
- A Science and Technology Agreement was signed in 1994, revised science and technology programs were implemented in 1995 and a Science and Technology Centre Business Plan was subsequently produced to provide the basis for a fully functional community resource with a Board of Management and a Manager.
- Technology teachers participated in an intensive retraining and professional development program related to multi-skilling and the use of ICT in the design process.
- At their request, Curriculum Program Coordinators participated in professional development related to management skills.
- All Curriculum Program Coordinators and Curriculum Leaders were required to be appraised for the first time. As part of this process, Curriculum Program Coordinators were required to develop goals for their learning areas.
- Curriculum Program Coordinators determined the program for a two-day review of teaching and learning in 1995. The program was designed to meet learning area goals related to learning technologies, effective teaching and the Curriculum Standards Framework
- A Professional Development Working Group was established in 1995 to oversee the development of a comprehensive, long term plan to meet all teachers' needs, to provide highly targeted, easily accessible and ongoing professional development for teachers that would enable them to meet the college's vision
- Teachers were required to develop personal professional development plans
- Trials integrating ICT in the classroom began in a range of learning areas
- A Learning Technologies Working Group, with whole school representation, was set up to plan, monitor and stimulate the development of learning technologies in the school, recognising the importance of technology not just being in the control of those with existing technical expertise.

All of this was managed by the leadership group at the school as it tried to shape a new identity for GWSC. It was difficult to get all the staff committed to the changes. Hedley Beare had given some staff cause to rethink their teaching. The Curriculum Coordinator then arranged for Dr Julia Atkin, an education and learning consultant, to conduct a two day workshop on teaching and learning in 1996. This had a significant impact on many staff members as they learned about themselves as learners.

Since 1995, GWSC has been involved in numerous activities in keeping with its reputation for innovation. It attracted Professor Peter Hill as its Chair of Council. Hill, at the time a parent at the college, has an international reputation in the school improvement movement. The leadership group at the college

had specifically sought him as president with the expectation that he would make a significant contribution to the program of change at the college. This proved to be the case. In the words of the Principal :

*His (Hill s) period as Chair of Council was important because he made us think hard about effective learning.*

The college has also been involved in the **MYRAD Project**<sup>[7]</sup>, the Victorian Government s Department of Education, Training and Youth Affairs funded **Innovation and Best Practice Project (IBPP)**<sup>[8]</sup>, a major, externally evaluated, **Junior School Curriculum Trial** and has become the Australian school involved in the NASA *Space Technology and Research Students (STARS) Project*.

The college has also pioneered a thinking skills program, now known as the *Learning to Learn* program that it has embedded into its curriculum. It was recognised that strategic thinking tools would have little impact unless all teachers were explicitly teaching students to use the same tools and strategies in all classes. The learning to learn program integrates cooperative learning, higher order thinking and metacognitive processes and is designed to encourage students to recognise their patterns of learning and capitalise upon them in their school work. Professor Michael Barber described the program in the Times Education Supplement in the following terms:

*The best example (of teaching thinking skills) that I have seen was in Glen Waverley Secondary College in Melbourne. There it was embedded in the mission statement, infused through its curriculum and implemented with a substantial investment in professional development. Finally, as if to symbolise the whole project, the staff who led the change, researched its impact and refined the program.*

Importantly, engagement in all this activity has had a single primary focus:

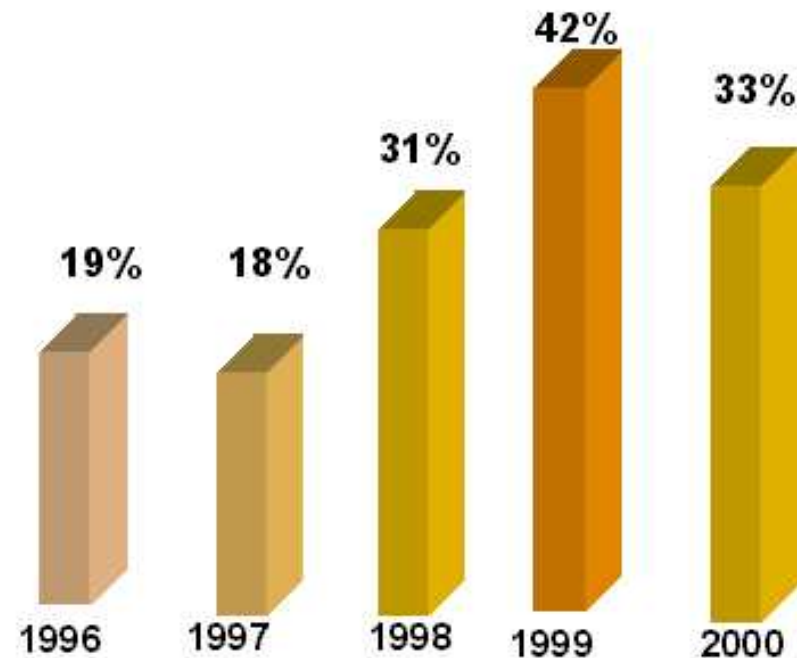
*Our pursuit of the teaching and learning agenda during the past five years has been relentless. The work of the college and that of all teachers has been primarily focussed on improving the quality of the learning and teaching that occurs in all classrooms.*

### 1.3 The School s Reform Agenda

The school leaders describe the innovation with which the school has been working for the past seven years in very similar terms. The Principal s account is:

*I would argue that we have been working from the outset with a whole school change model that involves six inter-related elements....improved teaching and learning, the use of technology, leadership and management, the use of external research and re-skilling staff through professional development both within school and from without. Through all of this we have been striving to develop a shared view of the skills and attributes of an effective lifelong learner and a shared language for describing it. Over the seven years our understanding of these six elements has grown and become more sophisticated. We have learned how they can be made to interact and produce improved learning outcomes. So the innovation here is a process of whole school change very much with the emphasis on improved learning outcomes.*

Initially, this reform agenda had to be vigorously promoted with staff, students and the wider college community. The attempt to shift the emphasis from passive to active learning had to be argued. The students in their final year were achieving excellent results. This is one of the major reasons for the high demand for places in the school.



**Percentages of Students at GWSC Who Received ENTER Scores of 90 or Greater in 1996-2000<sup>[9]</sup>**

One of the major reasons for the high demand for places at Glen Waverley Secondary College is the consistency and quality of the Year 12 results. In 1999, 42% of students received an ENTER of 90 or above. This represents more than four times the State average. In 2000 the performance of GWSC students over three times the State average. In recent years therefore GWSC has been an exceedingly high performing college. In the year 2000, 234 out of 284 students secured University places (82%) and another 46 students obtained places at other tertiary institutions.

Because the college had such a reputation, the need to change the approach to learning was not immediately clear to all staff, nor to all parents and students. However, the leadership group at GWSC had developed its own particular, shared view about whole school change. It is primarily concerned with improved learning and teaching. The keystone of this concern is autonomous learning. Encouraging autonomous learning involves changing both staff and students perceptions of learning. Staff and students are encouraged to see learning in the following terms:

*Over the past six years the college has initiated and implemented a process designed to change the way in which teachers and students engage in the learning process. Central to this process is a strong belief that all students can learn and have the right to learn and that every human being has a strong personal desire to create personal meaning and to understand the world in which they live. Energy and resources have been invested in clarifying and modifying our educational vision as the knowledge and understanding of staff has grown and an increased understanding of our educative purpose has emerged. The work we undertook was often an intuitive response to what we saw as the key issues and tasks but many of the strategies we adopted have*



*proven to be very consistent with current management theory. There now exists within the college community a greater sense that we have the capacity and the skills to shape and improve our future.*

Introduction to the Triennial Report 1997-1999[\[10\]](#)

During interviews, several staff members characterised this process of whole school change in terms of a journey or a process of discovery that involves continuous action research, an emphasis on examining practice and having great reliance on a capacity for reflection as a tool for improvement. It involves a process of continually constructing and reconstructing views of effective teaching and learning. When such active reconstruction has taken place, this has led to teachers substantially changing their curriculum practices. The extent of the changes is recounted in the report of the Innovation and Best Practice Project (IBPP) study. The report indicates that:

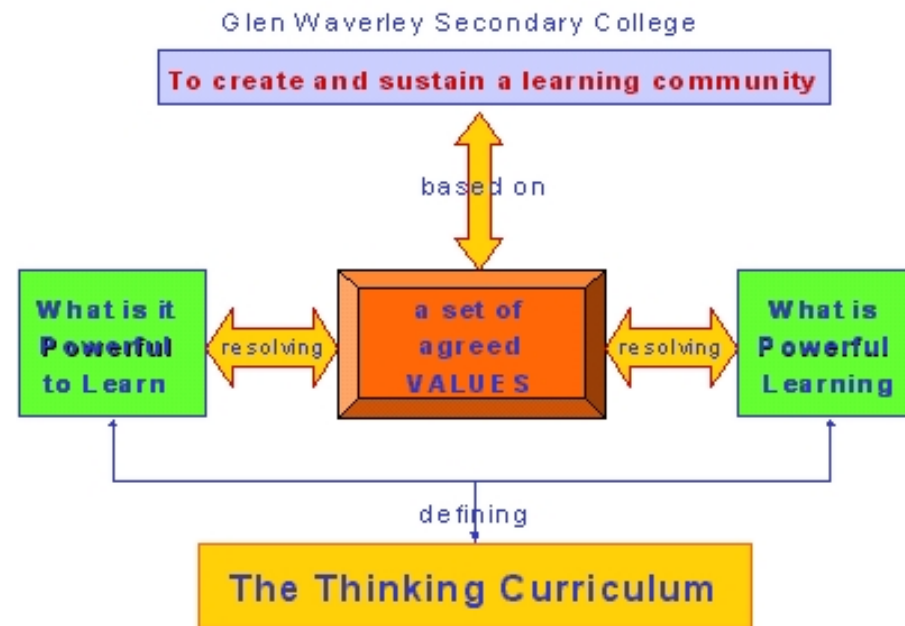
*82% of teachers either agreed or strongly agreed with the statement that the school's ongoing focus on improving teaching and learning over the past four years has assisted me to improve my classroom practice and*

*91% of teachers of Year 7 and Year 9 students either agreed or strongly agreed with the statement that assisting students to become autonomous learners is an important goal for me as a teacher.*

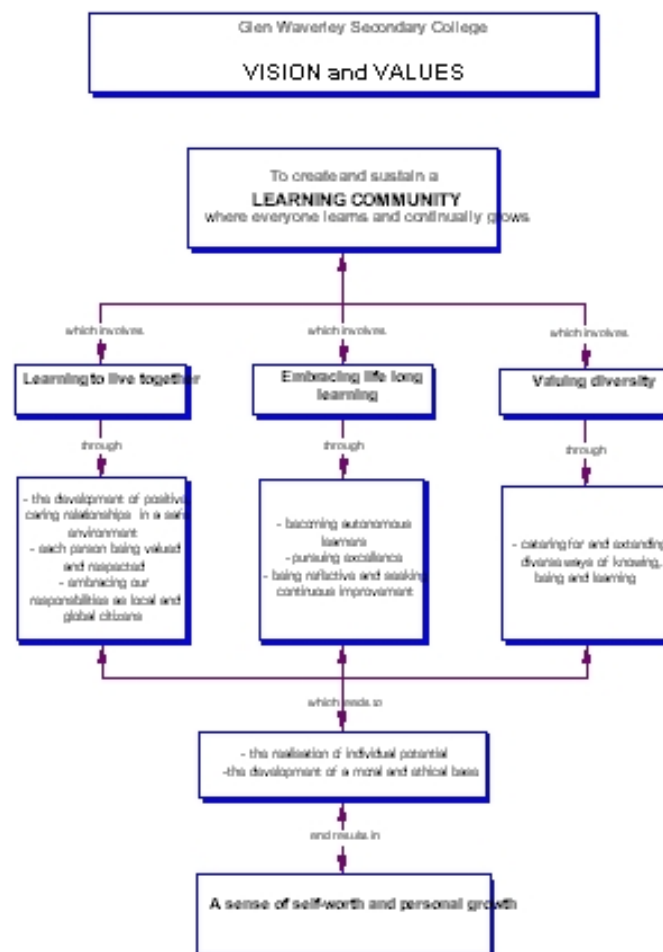
The annual staff survey, conducted to establish, amongst other things, patterns of staff changes to learning and teaching, reveals other staff attitudes. In October 2000, 91% of the 124 staff surveyed agreed or strongly agreed with the statement that **the school has a clearly stated set of objectives and goals**.

Throughout 2000, staff were involved in a range of activities and processes designed to clarify the educative purpose and the vision and values of Glen Waverley Secondary College. The college's vision or the picture of the future it was seeking to create was captured in the phrase *to create and sustain a learning community* and during 2000 staff members agreed on the set of values that should underpin the school as it pursued its mission and vision.

The following graphic depicts the college's current understanding of the relationship between its vision, values and related questions about how to support students to become better learners. A challenge identified for 2001 is trying to resolve the meaning and the implications of a 'Thinking Curriculum' so that it can be fully implemented at Glen Waverley Secondary College. This is referred to in the college strategic plan for 2001 **2001 Strategic Focus** which appears in Attachment C.



The process that all staff were engaged in to determine the values that would drive the college, and that would underpin the work and actions of every member of its learning community, was demanding and difficult. It was an interactive process involving the whole college. It resulted in the following map that was endorsed by 98% of the teaching staff. It indicates the way in which the school intends to live its educational mission and to enrich the lives of every member of its community.



The three pillars upon which the school's learning community is constructed, learning to live together, embracing lifelong learning and valuing diversity, are enabled through a range of strategies that will ultimately result in a sense of self worth and personal growth for all members of the college community. Building the self-esteem and sense of self worth of all learners, both students and teachers, is seen as fundamental to ensuring that all students learn and make progress.

Parents take great pride in the recent accomplishments of the college and strongly endorse its approach to teaching. This is reflected in the table below.

**Parent Opinion of Curriculum Delivery**[\[11\]](#)

	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>Teaching Quality</b>	4.42	5.10	5.03	4.92
<b>Academic Rigour</b>	4.93	5.46	5.52	5.53

As the table indicates, parent opinion about academic rigour has shown marked improvement over the last few years. It has grown from 4.93 in 1997 to 5.52 in 1999 and in 2000 it was 5.53. Parents who were interviewed felt that their children were in a caring environment and that their children enjoyed the approach to learning pursued by the college. The approach to learning at the college is described in its Teaching and Learning Charter. It states that teaching and learning should:

- Be active, constructivist and experiential
- Assist students to integrate many ways of knowing
- Support students to demonstrate their knowledge in a variety of ways
- Encourage students to reflect on their learning and give consideration to how it can improve
- Integrate skill development with concept development

- Enable students to take responsibility for their own learning.

One of the greatest pressures the college currently faces is the number of parents seeking access to the school for their children. Enrolment demand increasingly outstrips available places.

## 2. The Past

According to the college's strategic plan for 2000, *Strategic Focus 2000*, the college has over the last six years initiated and implemented a process designed to change the way in which teachers and students engage in the learning process. The innovation at GWSC is very much considered to be **a process** and not an event. One staff member described a key aspect of the process as 'developing a frame of mind' on the part of staff. The frame of mind sought is one open to continuous reflection and a preparedness to learn from the experience of doing. There is a strong commitment to this process by many at GWSC, most especially the Principal, Assistant Principals and the senior management team. The Assistant Principal described her position as follows:

*I believe in starting to change things by beginning with experimentation, reviewing what happens and from there building up good practices. That is pretty much how we have been operating with our effort to make autonomous learning a reality here.*

The Principal commented that

*The further we got into this (the process of the innovation) the more we realised that it could affect every single child in the college.*

The concern about changing approaches to learning at GWSC came from the leadership group in the mid nineteen nineties. The group included the then Principal, his Assistant Principal (the present Principal) and Head of Curriculum, now the Assistant Principal.

There has been a deliberate plan to seek opportunities to explore and challenge current practices and to create an environment that fostered experimentation. The introduction of learning centres<sup>[12]</sup> within classrooms and at various points around the college was in fact a deliberate attempt to challenge existing views about teacher centred learning and the notion of all students working independently on the same tasks. There was a need for levers to increase the collective understanding of staff about the nature of effective learning.

Staff members have been provided with opportunities to visit other schools either within Australia or internationally and to attend international conferences. Eleven teachers have recently attended Breakthroughs 2001 – the 9<sup>th</sup> International Conference on Thinking in Auckland, New Zealand. Other staff members have attended international conferences in Edmonton and Atlanta to learn from the work of others. The work of Howard Gardner, Rueben Feuerstein, Renata and Geoffrey Caine, Edward DeBono, Peter Senge and many others have been used to challenge staff.

The perspectives and challenges of external consultants have also been regularly sought, with consultants facilitating forums that help the college in determining future directions.

### 2.1 Changes to Teaching and Learning

The intention to have the college focus on improving teaching and learning came from within the school. At the time of the amalgamation in 1993 there were distinct cultures amongst the amalgamating schools. Several pressures suggested that a new, improved approach to teaching and learning should be pursued. First, the success of the amalgamation required it. As the Principal suggested:

*We had to show good faith through the amalgamation process. Everything was up for grabs. We had to build trust and commitment to the building of a new school. This involved reviewing teaching and learning, developing new management structures, utilising expertise from all of the schools and so on.*

Second, there was a small group of leaders committed to reform including the leadership team and the curriculum coordinators. Several staff had worked with Dr Atkin. One of them, now the Assistant Principal, recalled that

*I had been on a professional development program run by Dr Julia Atkin. I was very impressed with what she had to say. I remember coming back and saying to Darrell (the now Principal) we have to get her here. What she is saying is exactly what we need to do .*

Importantly, the ideas about effective teaching and learning advocated by Dr Atkin were also consistent with many of those advocated by a science reformist group, the McClintoch Collective, active in Victoria in the late 1980s and early 1990s and with which the Assistant Principal had worked. The experience significantly shaped her thinking about autonomous learning. Her thinking about autonomous learning was confirmed by the work undertaken with Dr Julia Atkin and provided a sound theoretical framework upon which the college could build.

Third, the leadership had a strongly held belief that the school could be innovative and provide high quality approaches to teaching and learning appropriate for emerging needs and trends in education.

However, the review of effective teaching and learning and the changes it required were not instantly welcomed by staff at GWSC. One staff member commented that

*Initially there were plenty of people opposed to changing their teaching. There still are some although they have been mostly marginalised by now. People would say show me why I need to change. I am getting very good results now. Some were just plain fearful.*

Students also had well formed views on what constituted effective teaching and learning.

*Initially when we started to change the way we taught there were some students who questioned our approaches. They were used to the old way and some were confused by the changes.*

Whilst much of the impetus for the change came from the principal group of staff, the task of securing the support of the staff and students was assumed by

the school's curriculum committee and curriculum program coordinators. In 1996-97, under strong leadership from the Principal and Assistant Principal, the curriculum committee developed a *teaching and learning charter*. A copy of the current charter appears in Appendix C. It describes the learning that was to be achieved by all students. It also described how teachers were to enable such learning. Importantly, it sets expectations in three main areas for what was to occur in all classrooms. These were:

- Classroom relationships
- The type of learning environment
- How the learning process will occur.

The teaching and learning charter became a document that informed all practices within the college. A teacher, for example, would develop appraisal goals and a professional development plan out of their quest to implement the charter in all classes. Subsequently, the administration would direct resources, both fiscal and human, to those needs identified by teachers for the successful implementation of the charter.

## 2.2 Technology and Change

The introduction of substantial technology to the school came in 1995 with the school being made a Navigator School. Whilst the issue of technology had been addressed before 1995 with the involvement of Hedley Beare in the college's professional development program, it became a reality with Navigator School status. Prior to 1995, the school had been exploring uses for technology in keeping with its Science and Technology role but there was no widespread commitment to its use.

Staff located in the new Science and Technology Centre led developments in the college because they had access to excellent resources, including facilities and human resource support, strong leadership and an interest in designing, trialling and reviewing different approaches to teaching and learning.

Navigator School status seemed a natural step in the eyes of head office personnel and the Minister of Education as a way of building on the Science and Technology base that had been established at GWSC. The college had been exploring the potential of learning technologies and the impact it could have on enhancing student learning. As one staff member described the course of events:

*The innovation here is about changing ways of learning. We have been focussed on that all along. Over the years there have been a number of events that have occurred here, like being made a Navigator School, that the administration has used to keep the school focussed on learning. The thinking skills program is another example of the sort of event I'm thinking about. The Science and Technology centre was another.*

With the advent of Navigator School status substantial resources were gradually allocated to ICT with the intention that it played a role of improving teaching and learning throughout the whole school.



The responsibility for guiding the integration of learning technologies in the school has largely been the task of the Learning Technologies Working Group, the Professional Development Working Group and Curriculum Program Coordinators. These groups worked together and constantly guided and monitored developments with the more widespread use of ICT. These groups were required to report to all the other significant decision making bodies in the college upon which the principal group is strategically placed.

The Navigator Schools Project Officer<sup>[13]</sup>, a special appointment funded by the Department of Education, Employment and Training, has also played a prominent role in having ICT widely implemented, as have the Technology Development Manager, the Internet/Intranet Manager and the Network Manager. The Navigator School Project Officer's role was to develop with curriculum program coordinators innovative learning technologies plans for all key learning areas and to manage the support teachers required for the implementation of these plans. Some teachers were appointed as coaches with the specific role of being able to work in classes with teachers as they became familiar with designing and managing technology tasks that would enhance learning. The Technology Development Manager was responsible for ensuring that there was a strong educational focus linking technical developments and equipment purchases. The Internet/Intranet Manager developed and managed the college Intranet and public presence on the Internet. The Network Manager, a full-time non-teaching position, was responsible for effective operation, maintenance and general administration of the college's computer network, as well as recommending innovative educational solutions regarding network developments. The Network Manager, along with his network support team, would ensure that the technology was reliable and therefore not a barrier to classroom implementation. They all had very strong leadership support.

Initially, some teachers volunteered to pioneer the use of learning technologies. Those that did so were not particularly skilled at using learning technologies. They were predominantly teachers of Technology, Science, English and Studies of Society and the Environment (SOSE). They were described by colleagues as people who reflected about their teaching and people who enjoyed a challenge.

At first, the major obstacles that had to be overcome were the initial low level of skill on the part of teachers and the reluctance of some to engage the technology. Virtually none of the staff were especially capable users of learning technologies. However, the College Council funded the provision of laptop computers for every staff member in 1996. Council was committed to putting the technology tools directly in the hands of teachers. Soon, learning technologies were ubiquitous at GWSC. This meant that its use had to be addressed by the whole school.

The management group quickly became relatively adept users of technology, modeling the change for all. Some of the group taught itself technology skills. Others learned from colleagues. In turn, capable users who were effectively integrating the technology in their now changed classroom environments were recruited as coaches. They worked across disciplines with groups of teachers to raise the skill level with learning technologies at the college. Gradually, performance with learning technologies was tied to individual annual performance appraisal.

In 1994 in Victoria, the then State Government implemented its policy of Schools of the Future<sup>[14]</sup>. As part of this arrangement schools were required to develop staff appraisal schemes that came to be known as Professional Recognition Programs (PRP). The leadership at GWSC was quick to develop this idea into a form of peer review directed at improving teaching and learning and using learning technologies to do so. Staff members were required to develop annual personal professional development plans specifying exactly what they were going to do over the year by way of bringing their classrooms into line with the description of classroom practice in the Teaching and Learning Charter. A support process involving mentoring, coaching and mid term

review of progress, all attuned sensitively to the concerns of each staff member, was used in conjunction with the staff development plans.

Whilst there was some initial resistance to the idea it soon became accepted. Staff members both enjoyed the process itself and the sense of professional growth it produced. One recounted:

*I think the one most significant move made here (at GWSC) that has made things change was the performance appraisal system. I think many people didn't like it at first. I don't think too many are worried about it now though. Being accountable makes you more professional.*

Also, since 1995, GWSC has been substantially involved in a formal in-school professional development program that is built into the weekly school calendar. This program has changed substantially over the last six years. Initially there was a strong focus on technology skill development with some mandated sessions. However the focus of the program has progressed and is now based around how technology can be used to promote cognitive development and improved classroom practice.

It is strongly recommended that teachers undertake at least thirty hours of professional development each year to assist them meet to the goals about improving learning that they establish for their appraisal process. In 1999, each staff member at GWSC completed an average of 65 hours of in-house and externally provided professional learning focussed on the school's strategic priorities for the year.

The operational environment of the college has been transformed through the use of technology. The networking of all classrooms, administration areas and staffrooms has enabled students, teachers, parents and administrators to communicate, collaborate and cooperate in a way that was not previously possible. A good example of how the operational environment changed is the ongoing evolution of the college Intranet.

A Virtual Private Network (VPN) at GWSC is currently revolutionising student and staff access to each other and to curriculum materials and other resources. It is a state of the art technology that is the object of great interest to the many visitors to the school. It is, for many of them, a key reason for their visit.

The VPN was a joint venture between the school and Impaq Educational Services. It provides access to the college Intranet which contains resources related to all courses for all levels, links to selected Internet sites screened for suitability and other up to date information for parents and students. It also provides access to a range of network services and applications such as TriCad, Music Master, Adobe Photoshop, Director Crocodile Clips, Inspiration and MS Office. It gives access to the computerised catalogue in the library and to students' personal e-mail accounts. It also allows all students to work remotely on their files. As one student put it in an interview:

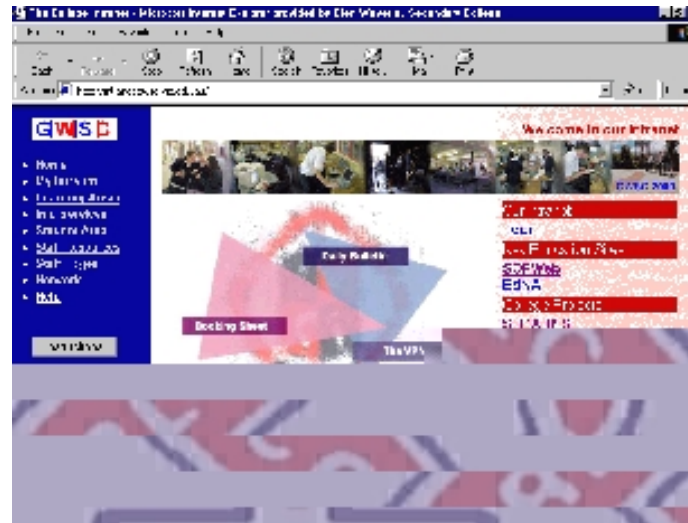
*The VPN has changed how I study. Because I have access to everything from home I can keep up to date. I even find myself preparing for lessons before they actually occur.*

In sum, this solution delivers to students, parents and teachers online access to networked home drives, college software, email, the Internet and the college Intranet.

Initially devised as a response by staff to share resources across the network, the Intranet has now been developed as an integral and routine tool, used by all members of the college community for a wide range of purposes and suiting a range of learning styles. Uses include modeling and sharing teaching strategies and resources, administrative and classroom efficiencies, personalised delivery of resources and information and a mediated online learning environment. The Intranet has changed dramatically the nature of resources and patterns of access that are available to students and teachers. Collaborative learning has been fostered through tools available on the Intranet. The college has pioneered the development of home-school links through the use of a thin

client solution for a Virtual Private Network (VPN).

The Intranet solution designed by Glen Waverley Secondary College has very wide appeal. Its conceptual framework and functionality have been used to develop a marketable solution for the educational sector in general. The relationship that GWSC has formed with IMPAQ Educational Services has secured an income stream and other resources to underwrite the further development of this unique framework. The solution has now been sold into over fifty state and private schools in Australia.



The entry point into the college Intranet

### 3. The Present

### 3.1 A Conceptual Framework

One way of describing the innovation at GWSC is to classify it as having both substantive and enablement components. The substantive components are the things that are the objects of change. These are the teaching and learning practices and the use of technology especially in regard to improving teaching and learning. The enablement components are those things that have direct bearing on the substantive aspects of the innovation. They include the approaches to professional development, the use of research by the school, the leadership and management practices of the school, and school organisation arrangements that are in keeping with the promotion of autonomous learning. This conceptual framework is used in this section to describe the school in its present state and to offer an explanation about how it has accomplished the changes it has made.

## 3.2 Organisation of Evidence

### 3.2.1 Learning and Teaching Effectiveness

A staff member, who has been at GWSC from the early nineteen nineties, described the predominant approach to teaching at the time the innovation was started in the following way:

*It was very teacher directed. You know, they would come in, set work from a text book, ask questions to see if the students understood what the text book was saying, told those who were not paying attention to do so...it was very directed. And they were very comfortable with that. The school was getting very good (VCE) results...there appeared no great reason to change things.*

By the end of 2000 there were very different classroom practices at GWSC. As part of this investigation over twenty five percent of the classrooms at GWSC have been systematically observed to identify the extent to which they contain practices consistent with autonomous learning. The results of the observations are mapped on the figure below. It indicates that the school has been transformed from the traditional teacher centred learning environment described above into one where challenging, student centred, collaborative learning is routinely occurring.

Characteristics of the Teaching and Learning Environment at GWSC

Item	Description	% <sup>[15]</sup>
Cooperative activities	Students regularly work in groups where they sometimes have different roles, share knowledge and ideas, and support each others learning.	PPP
Teacher planning	In planning learning activities, the teacher takes into account student feedback from previous activities and conversations; the teacher listens to the students and takes their opinions into account.	PPP
Student decision making	While the teacher plans the overall shape of learning activities, at appropriate times students make decisions about their own learning.	PPP
Teacher student feedback	The teacher has planned student outcomes and provides regular feedback on student achievement of these; students are actively encouraged to take this feedback into account.	PPP
Teacher interaction with individuals	The teacher has an awareness of the needs of all students and regularly interacts positively with individuals and/or small groups.	PPP

Development of ideas and information	Students willingly participate in discussions, both small group and large, and listen to what others have to say.	PPP
Authenticity of tasks	The major learning tasks are decided taking into account student interests and the relationship of the tasks to real life situations accessible to the students.	PP
Thinking	Through discussions and planned activities, the teacher encourages the conscious development of thinking skills in relation to the selection and use of information; students are encouraged to reflect upon their actions, words and products.	PP
Challenging learning	Students are presented with tasks and activities which extend them and take into account different intelligences and learning styles of students.	PPP
Caring for others	Teacher and students treat each other with respect and provide support for those who are in need.	PPP
Reflection/Meta-cognition	The teacher encourages the children to think about the process through which they have learned things during the lesson.	PP
Co-learning	Teacher is prepared to be a learner in the classroom; students respect this attitude.	P
Student products	Students are expected to make products which are attractive, accurate, creative and designed to appeal to an audience.	PPP

Moreover, on a survey about other learning outcomes being achieved by their students, staff members reported the development in their students of another set outcomes in keeping with autonomous learning. They are mapped on the following figure. The figure indicates that the teachers considered that certain outcomes were strongly present in their classrooms and that learning technologies made a strong, medium or weak contribution to their development. The outcomes have also been roughly ordered according to the strength of the teachers' responses, so that the strongest connection between the uses of learning technologies and student learning with respect to the outcomes lies with presenting information, the weakest with study skills. Moreover, the classroom observations that were conducted as part of this investigation revealed a similar pattern of outcomes being pursued by teachers.

Strong	Medium	Weak
Presenting information	Awareness of global issues	Understanding environmental issues
Searching for information	Making connections between school and the real world	Drawing conclusions
Researching	Sharing skills and ideas	Evaluating
Investigating	Organising work	Cultural understanding
Keyboarding skills	Using information to support a point of view	Learning how to learn
Being creative	Selecting relevant information	Making predictions
Working cooperatively	Interpreting information	Valuing different points of view

Organising information	Solving problems	Thinking critically
Learning autonomously	Analysing information	Using time effectively
Visualising ideas	Planning work	Making inferences
Designing	Working systematically	Making decisions
Learning independently	Synthesising information	Study skills

Several of the outcomes most strongly developed are specifically mentioned in the school Teaching and Learning Charter. They are:

- Presenting information
- Searching for information
- Researching
- Investigating
- Being creative
- Working cooperatively
- Organising information
- Learning autonomously

However, one should not infer from the table that the teachers do not focus on the skills listed in the third column. Rather, they do not currently perceive that ICT contributes much to the achievement of them. This perception is already changing as the college's learning to learn program takes greater effect and teachers' use of learning technologies increases in sophistication.

### Students sharing their learning developed through the construction of a multimedia presentation

The prominence of learning autonomously and learning independently in the previous list suggests that the effort at changing teachers' and students' views about learning have been enormously successful over the last six years. Much of this has come about because of the way the Teaching and Learning Charter has been used to drive the innovation. The Principal observed that

*We are consciously and continuously using the charter to focus teaching and learning on constructivism. The process requires the teachers to continuously review their teaching and make it fit the goals of the charter. We now have virtually everyone agreeing with the principles of learning that are embedded in*

*the (teaching and learning) charter.*

## An Assistant Principal ventured the following comment during an interview:

*I would argue that other improvements in learning outcomes have flowed from our changed understanding of good teaching and learning, especially our emphasis on autonomous learning. We have worked hard at getting both staff and students to accept the idea of the autonomous learner. There have been very substantial improvements in our learning outcomes. I would argue these are in many ways an outcome of our emphasis on effective teaching and learning practices and the development of autonomous learners .*

The following table reports GWSC's Curriculum Standards Framework (CSF)<sup>[16]</sup> student performance for Years 7 to 10 for English. It shows how the performances of GWSC children are increasingly better than the state mean performances.

**GWSC performance in English Speaking and Listening, Reading and Writing (7-10)**

for 1997 1999.

Strand	Year level	1997			1998			1999		
		GWSC	State	Difference	GWSC	State	Difference	GWSC	State	Difference
<b>Speaking and Listening</b>	7	4.87	4.47	<b>.4</b>	4.94	4.49	<b>.5</b>	4.97	4.50	<b>.47</b>
	8	5.18	4.72	<b>.46</b>	5.36	4.75	<b>.61</b>	5.21	4.76	<b>1.45</b>
	9	5.59	5.39	<b>.5</b>	5.64	5.40	<b>.2</b>	5.74	5.42	<b>.32</b>
	10	6.12	5.73	<b>.39</b>	6.20	5.70	<b>.5</b>	6.44	5.71	<b>.73</b>
<b>Reading</b>	7	4.83	4.46	<b>.37</b>	4.86	4.46	<b>.4</b>	4.95	4.48	<b>.47</b>
	8	5.11	4.71	<b>.4</b>	5.27	4.72	<b>.55</b>	5.18	4.75	<b>.43</b>
	9	5.54	5.38	<b>.16</b>	5.59	5.38	<b>.21</b>	5.72	5.41	<b>.31</b>
	10	6.06	5.72	<b>.34</b>	6.22	5.69	<b>.53</b>	6.36	5.71	<b>.63</b>
<b>Writing</b>	7	4.80	4.45	<b>.35</b>	4.87	4.44	<b>.43</b>	4.93	4.46	<b>.57</b>
	8	5.14	4.68	<b>.46</b>	5.27	4.71	<b>.56</b>	5.17	4.74	<b>.43</b>
	9	5.53	5.38	<b>.15</b>	5.62	5.37	<b>.25</b>	5.71	5.40	<b>.31</b>
	10	6.05	5.71	<b>.34</b>	6.23	5.68	<b>.55</b>	6.42	5.70	<b>.70</b>

Similar patterns of improvement exist on other statewide data. However, some staff members are circumspect about measuring improvement in this way.

The Assistant Principal pointed out that:

*The CSF measures are not very reliable indicators of performance. Certainly our performances on them have been gradually getting better and better. It is still very difficult to show exactly why this is the case though. We need some more reliable indicators about learning improvement.*

However, many staff report increased interest on the part of the students in what they are learning. They attribute much of this to learning technologies and how it is used in the classrooms. They also suggest that such developments help to explain the pattern of improved performance at GWSC.

Similarly, GWSC performance in the final two years of secondary schooling has also been improving each year. This is illustrated on the following table. The data compares the performance of GWSC students with that of the State and also with Like School means. The Like School group is a very strong group containing the state's elite schools. An analysis of the data, together with other relevant data, is provided below.

#### Comparison of GWSC, State mean and like school performances on all VCE studies 1997–1999 (Maximum Score 50)

		GWSC mean	Like Schools Group 3		State mean	
			Mean	Difference	Mean	Difference
1997	Highest School Group Mean Lowest School	32.9	34.9 34.2	-1.3	28.8	4.1
1998	Highest School Group Mean Lowest School	33.6	34.1 31.7	1.9	28.8	4.8
1999	Highest School Group Mean Lowest School	34.8	34.8 33.2 30.3	1.6	28.76	6.04

Analysis of the data indicates the strong performance of GWSC students. GWSC mean scores have generally increased over the past three years and in each year have been significantly higher than the State means. In 1999, 23% of the study scores obtained by Glen Waverley Secondary College students were greater than 40, which identified it as one of the very highest performing state school.

Finally, the following table summarises data for selected studies for GWSC, its Like School group and the state wide performance data.

#### Comparison of Selected Studies (maximum score 50) - data for GWSC-, state wide- and like schools performance, 1997–1999

		GWSC mean	Like Schools Group 3		State mean	
			Mean	Difference	Mean	Difference
1997	English	34.5	35.1	-0.6	28.4	6.1
	Maths Methods	34.4	34.2	0.2	28.8	5.6
	Further Maths	35.3	33.7	1.6	28.9	6.4



<b>1998</b>	<b>English</b>	34.0	31.7	2.3	28.4	5.6
	<b>Maths Methods</b>	35.3* <sup>[17]</sup>	32.8	2.5	28.9	6.4
	<b>Further Maths</b>	34.8*	31.5	3.3	28.8	6.0
<b>1999</b>	<b>English</b>	35.6*	34.0	1.6	28.4	7.2
	<b>Maths Methods</b>	37.5*	33.5	4.0	28.8	8.7
	<b>Further Maths</b>	37.1*	32.8	4.3	29.0	8.1

This data again shows the very strong performance of GWSC students over the past three years. In these three studies the GWSC mean score is consistently above the State mean score each year. Even more impressive, the GWSC mean scores are consistently above the Like School mean scores.

In short, many staff members feel that student learning outcomes have significantly improved at GWSC over the past six years. Moreover, they believe that students have become more engaged, capable and self-directed learners. They also feel that their teaching has become more constructivist and focused on assisting students to develop the skills and attributes of effective learners. The data convincingly supports their views.

### 3.2.2 ICT Skills and Abilities

In the words of the current Navigator Schools Project Officer, who was the coordinator of Studies of Society and the Environment in 1993, teachers' skills with learning technologies in the early nineties were limited:

*At the outset we had to run very basic professional development for staff, things like saving a word document, managing files and the like. There were very few with skills beyond this.*

By 2000, teachers' skill levels with learning technologies have increased dramatically. GWSC has regularly surveyed staff in relation to uses of learning technologies and the skills of teachers in that regard. They are used to inform the professional development needs of teachers and to shape annual professional development plans. The surveys are conducted towards the end of the year and provide a comprehensive map of teachers' use of learning technologies and their skills and abilities with it.

The following information comes mainly from the 1997, 1998 and 1999 annual learning technologies surveys. The table shows teacher use of computers at GWSC has increased substantially over the years since 1996.

#### The number of times teachers at GWSC use a computer during the week (%)

Rate of Use	End of 1996	End of 1997	End of 1998	End of 1999
Never	4	0	1	0
Once a week	14	5	7	5.7
Several times/week	42	39	29	25.2
Routine part of work	40	56	63	69.1

Another table shows a very high proportion of teachers is confident in the use of computers for their own work and that their confidence about using learning technologies in their classrooms has grown dramatically over the period of the innovation.

### Teacher confidence in the use of computers at GWSC (%)

	Response	1997	1998	1999
I feel confident about using computers in my own work	Agree/Strongly Agree	93	93	89
I feel confident about using learning technologies in the classroom	Agree/Strongly Agree	34	67	80

The level of confidence teachers have with using technology was confirmed during the classroom observations that were conducted as part of the investigation. Teachers were regularly seen using ICT in ways designed to encourage higher order thinking, concept development, processing information and sharing information.

The next table documents teacher use of computers in the school, but outside the classroom, in 1997, 1998 and 1999. This demonstrates a substantial growth in use of the college's Intranet and the Internet. It also demonstrates the importance of the Intranet as a method of communicating administrative information. The college Intranet is well developed and is widely used for internal teacher and administration communication.

### Non-classroom use of computers by GWSC teachers (%)

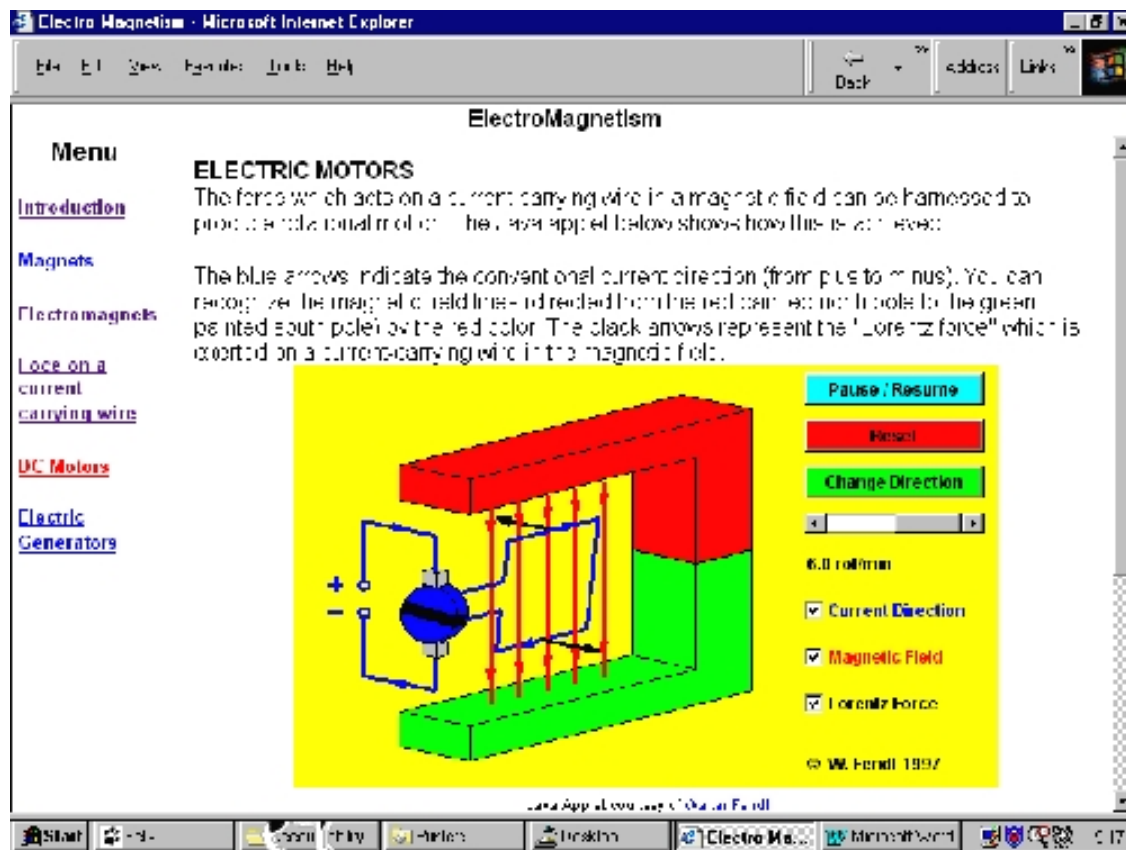
Uses of ICT	1997	1998	1999
Developing classroom materials	88	98	91.9
Documenting curriculum and placing it on the Intranet	31	52	48.0
Putting student materials on the Intranet	21	60	76.4
Monitoring student progress	50	39	39.0
Communication with colleagues inside the school	63	79	87
Communication with colleagues outside the school	36	50	65
Using Intranet for finding curriculum materials	30	71	77.2
Using Intranet for accessing administration information	-	84	91.1
Using Internet for finding curriculum materials	66	78	83.7
Personal use	73	85	85.4

Reports	-	95	99.2
Other	-	6	13.8

There has been very positive growth in the use learning technologies by teachers in classrooms at GWSC over a period of 3 years to the end of 1999. For example, with respect to software with across curriculum applications:

- Well over 90% of teachers have used word processing
- Around 70% have used spreadsheets, multimedia presentation tools and concept mapping tools
- Over 80% have used web browsers
- Over 60% have used web page construction tools.

The Technology Development Manager considers the teachers' skills and their pattern of usage of complex technology to be ever increasing.



*ICT is being used more and more, and in increasingly sophisticated ways. This is a direct result of college policy and the structures we have put in place to encourage its use for autonomous learning.*

**Year 12 Physics student assessment task integrating metacognitive processes with the use of 3D simulation**

Teachers also consider the use of technology to have specific benefits in their classrooms. This is reflected in the following table that summarises the responses of teachers to a series of statements about the value of using learning technologies in classrooms.

**The value of using Learning Technologies in classrooms (percentage of respondents who replied Agree or Strongly Agree)**

<b>Item</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
<b>1. Using learning technologies in the classroom enhances student learning</b>	<b>79</b>	<b>75</b>	<b>79</b>
<b>2. Using learning technologies in the classroom encourages better group work among students</b>	<b>58</b>	<b>55</b>	<b>55</b>
<b>3. Using learning technologies in the classroom provides a more stimulating learning environment for students</b>	<b>86</b>	<b>87</b>	<b>77</b>
<b>4. Using learning technologies improves the quality of</b> materials produced by teachers and students	<b>86</b>	<b>88</b>	<b>88</b>
<b>5. Using learning technologies makes classroom management an easier task</b>	<b>40</b>	<b>43</b>	<b>37</b>
<b>6. Using learning technologies can improve the quality of teaching and learning</b>	<b>72</b>	<b>78</b>	<b>74</b>
<b>7. Using learning technologies allows the teacher to cater for a wider range of learning styles</b>	<b>78</b>	<b>76</b>	<b>69</b>
<b>8. Using learning technologies increases the engagement of students in their learning</b>	<b>77</b>	<b>79</b>	<b>71</b>

In a survey of teachers at GWSC in 1998 there was strong affirmation of the teaching/learning value of learning technologies:

- Over 75% of teachers agreed or strongly agreed that learning technologies can improve teaching and learning

- About 75% of teachers agreed or strongly agreed that learning technologies increase the engagement of students and cater for a wider range of learning styles
- Over 75% of teachers agreed or strongly agreed that using learning technologies provides a more stimulating learning environment
- Nearly 90% of teachers agreed or strongly agreed that using learning technologies improves the quality of materials produced by teachers and students.

As teachers have continued to explore the value of technology in their classrooms, it is clear that they continue to identify even more sophisticated and complex ways of utilising the technology. Teachers have moved from using the technology simply as an additional tool, to a stage where they are exploring how technology can help reconceptualise learning. The Navigator School Project Officer described how this occurred during Year 7 Integrated Technology: *Students are required to design, produce and evaluate a soft toy that satisfies a design brief that the toy should contain an electric circuit that emits light and sound. Students participate in a series of classroom activities that encourage them to actively construct and test their understanding of circuits through the use of a simulation software package, Crocodile Clips. The teacher mediates this learning process. The entire course takes place within an electronic learning environment whereby all resources and collaboration can occur across the college Intranet. This has required extensive re-skilling of teachers who began as entry level technology users. As the skills of the teachers became more sophisticated so did the curriculum design and the learning scenarios students were placed in. It was an action learning cycle that saw the course develop into an outstanding example of a constructivist, electronic learning environment. Such a reconceptualisation of the curriculum has become a model for teachers both within Australia and internationally. It has acted as a benchmark for the curriculum development process within schools.*

In general, GWSC students and staff have progressed from novice to consummate users of technology over the last six or seven years. Initially, the skills of teachers were minimal. Now virtually all teachers routinely integrate technology into their teaching and have substantially changed the way that they use the technology, so that a variety of applications are used in a wide range of settings. Much of this is attributable to the professional development program made available to staff. For instance, over the last two years over 40 teachers have undertaken a 16 hour professional development program designed by the school, entitled Multimedia as a Cognitive Tool. This program explores the value of multimedia as a means of enabling learning and actively engages teachers in developing a deeper understanding of the potential of multimedia for that purpose.

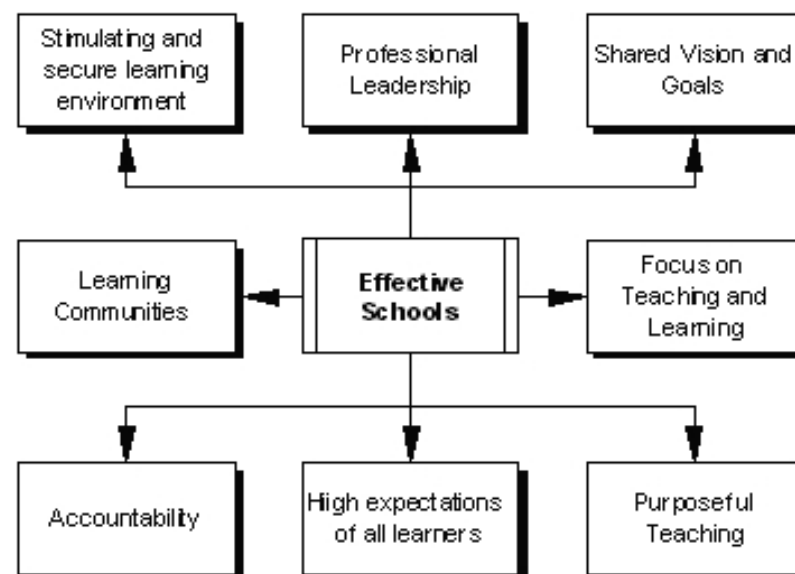
## 3.4 Explanation of Accomplishments

GWSC has managed since 1993 to transform the way it views and enables learning. It has accomplished:

- Substantial learning improvements
- Enormous advances in the ways technology is employed in the school especially regarding teaching and learning
- Staff commitment to continually reviewing and constructing their understanding of effective teaching and learning.

*Year 7 Integrated Technology students with their products.*

All of these accomplishments have been part of the college's goal to become a learning organisation. The college leaders firmly believe that the closer the college resembles a learning organisation the more effective it will be. It defines school effectiveness based on Sammon, Hillman and Mortimore's (1994) model which is depicted below.



The school's *Strategic Focus 2000* describes the vision for school effectiveness as follows:

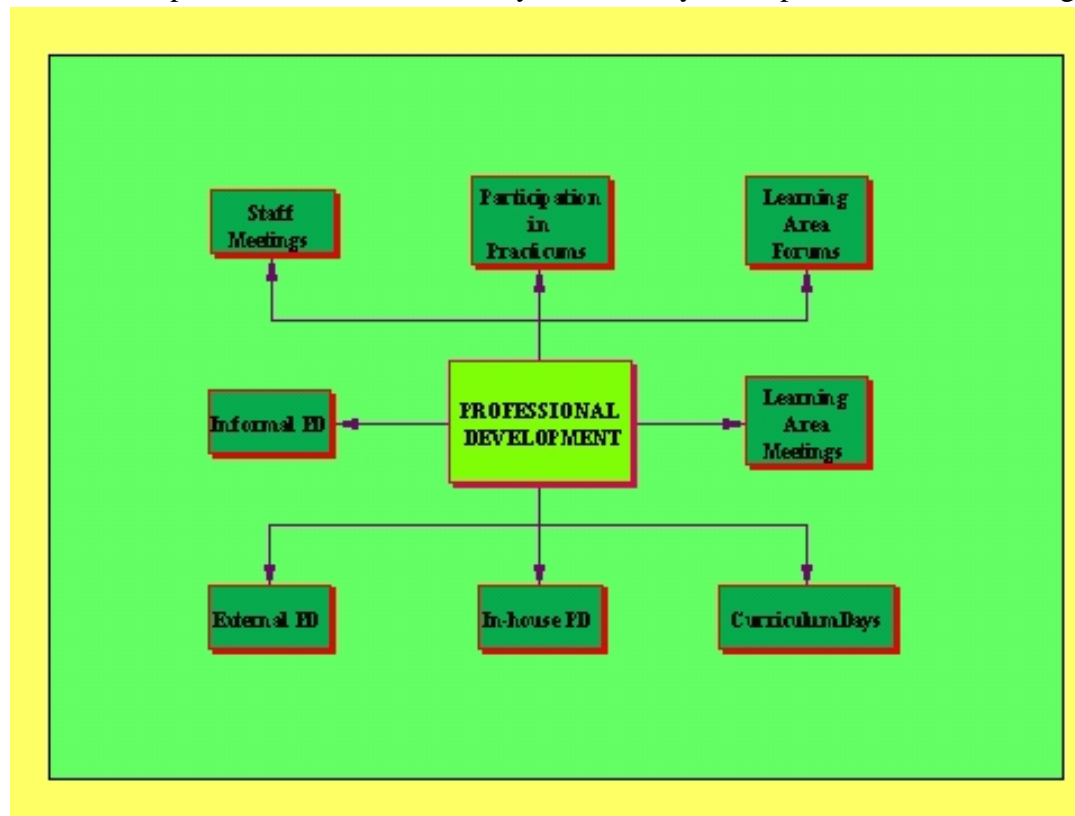
*We are working on all aspects of this (above) model and our capacity to deal with each of these elements continues to improve as the knowledge and skills of all staff gain breadth and depth. It could be argued that we are an effective school but the challenge remains to create a true Learning Community – one*

*in which every member of staff and every student views themselves as learners. One definition of a school as a learning organisation is one that learns continuously and transforms itself. Learning takes place in individuals, teams, the organisation, and even the communities with which the organisation interacts. Learning is a strategically used process, integrated with and running parallel to work. The learning organisation has embedded systems to capture and share learning.*

Arguably, the enabling components of GWSC's whole school change mentioned above are the embedded systems that capture and share learning, thus producing the environment of an effective school as pictured above. That is, enabling components of the change process, like professional development, management practices, research, leadership and others, have a combined effect in producing an environment characterised by stimulated learning, professional leadership, shared vision, processes of a learning organisation, a focus on teaching and learning, accountability, high expectations and purposeful teaching. One way this occurs can be illustrated through the effects of the school's professional development program.

### 3.4.1 Professional Development

Professional development at GWSC takes many forms. They are depicted on the following graphic.



Part of this program in 2000 was the commitment by the senior management group (23 staff who have responsibilities that include supporting the work of

other teachers) to undertake a 16 hour series of seminars. These seminars were built around the work of Peter Senge in his book *The Fifth Discipline: The Art and Practice of the Learning Organisation*. The aim was to involve managers in the exploration of Senge's ideas to assist them to build an understanding of a learning organisation, to construct a model of a school as a learning community, and to consider any implications of the five disciplines for their own work and the work of their staff. All participants rated the sessions highly and many spoke about how it had contributed to their capacity to contribute to GWSC as a learning organisation.

Curriculum days<sup>[18]</sup> for the past six years have involved two sequential days for the entire college staff. The focus of these two days has always been on developing a consistent, school wide, understanding of the principles of effective teaching and learning. The origins of this two day concerted focus on learning lies in the initial visit of Dr Julia Atkin. She has continued to work with college staff each year. Such a consistent focus has enabled ongoing reflection and monitoring of individual teachers'- and college wide- understandings of developments and innovations in teaching and learning.

The in-house professional development program, which occurs weekly, supports teachers in the professional learning that they have identified as a need as well as providing targeted programs to meet college priorities. Within these programs there are streams operating each week. Usually one stream one will relate to the effective implementation of technology within a classroom context and the other relate to effective teaching and learning strategies. Teachers from within the college lead most of these programs. Some of this professional development has been accredited with a local university.

The following table summarises the number of hours of professional development which have been delivered to staff from 1997 to 1999.

	1997		1998		1999	
	Total teacher hours	Av hours/ staff member	Total teacher hours	Av hours/ staff member	Total teacher hours	Av hours/ staff member
<b>In-house Monday night PD program</b>	2158	17.64	2010	16.8	2746*	22.3
<b>Forums</b>	596	4.77	615	5.1	638	5.2
<b>Curriculum Days</b>	1920	15.36	1860	15.5	2706	22.0
<b>Staff Meetings</b>	Not recorded		900	7.5	500	4.1
<b>External PD</b>	1008	8.06	1043	8.7	1305^	10.6
<b>TOTAL</b>	<b>5682</b>	<b>45.46</b>	<b>6428</b>	<b>53.6</b>	<b>7895</b>	<b>64.2</b>

\* - this includes specific PD activities delivered at learning area meetings

^ - this includes attendance at International Conferences

Consistent with the aim of becoming a learning organisation, the college has made a conscious effort to turn meeting times into professional learning experiences where staff can share some of the strategies they have been implementing. This includes whole staff meetings and key learning area meetings.

Again in keeping with the idea of a learning organisation, ongoing informal professional development is very conspicuous around the college on a day-to-day basis as colleagues are seen assisting each other. Teaching and learning coaches are available to provide planning assistance to teachers upon request or even to assist them in the delivery of their classes.



Professional development also contributes to the way the school is professionally led. In 1999, for example, the 21 senior managers undertook three evening seminars on the topic Towards a Preferred Future. These were intended to enable the managers to reflect on accomplishments and strategically plan to build upon them. The quality of their leadership is very important to the success of the innovation, most especially in the way they make the staff feel emotionally supported. The concept of emotional support was raised by several staff during interviews. The Principal captured the essence of it well:

*You have to have a sense of humour to reform a school. It is a delicate process involving all manner of people. They all have individual needs and wants. You have to make them feel they are being treated as individuals and being supported on those terms.*

Forums are held for each key learning area annually, where staff meet for an extended period of time to focus on the professional development needs they have identified as a team.

An underlying belief of the college is that there is always a need to gain external perspectives and benchmarks. This has included hiring specialist consultants to address staff, enabling staff to attend international and national conferences, site visits to renowned international schools, and seeking out best practice and latest research. There is a strong expectation that the learnings from attendance at such forums will be shared with colleagues and inform future practice and developments both at the college and in the education system. The impact that this has on developments at the college is significant.

GWSC also offers a comprehensive calendar of professional development to teachers and leaders from other schools and systems, which in 2000 included over 1700 participants. This in itself is a professional development experience for the staff at Glen Waverley Secondary College, as they are called upon to explain their practice. The transparency of the classrooms and the exposure of the staff to the procession of visitors and professional development participants make staff members very accountable. It also produces high expectations for all learners. Being a showcase has an effect on the students. They are conscious of the scrutiny. They realise the visitors have come to see high quality teaching and learning.

Also, the professional development program produces purposeful teaching. As one teacher said during a class visit:

*Since there have been so many visitors to the school I have never been so well prepared. You feel you have to be so that you do not let the school down.*

Finally, staff members at the college are also involved in presenting at a wide range of outside forums and conferences, including international conferences. For example, the Principal and the Assistant Principal ran a workshop entitled **Learning to Learn and Learning to Think** at the Teaching for Intelligence Conference held in Orlando, Florida in March 2000.

### **3.4.2 Research**

The way the school uses research also contributes to the school functioning as a learning organisation. Much of the research has a collaborative action research orientation.

The use of external researchers to gather evidence and to provide an independent evaluation of college initiatives provides credibility and informs development and decision making processes. The school is committed to continually using research to inform decision making. It actively participated in an external evaluation of the Navigator Schools Project. It commissioned an external evaluation of the Thinking Skills Program and its recent Junior School Curriculum Trial. It is involved in several other research exercises, including the MYRAD project and this OECD study. The results of the research are systematically fed into the school decision making processes. The organisational structure and management practices make this a routine, ongoing procedure.

### 3.4.3 Organisational Structures and Management Practices

The amalgamation produced a proliferation of middle management. There were seven in the principal class, several curriculum coordinators, many heads of faculty and others. It was a very hierarchical structure with a focus on the management of separate disciplines. A key element of the college restructure has been the provision of a dynamic management structure that delivers management expertise and resources to the strategic initiatives and priorities of the college at any particular time.

At present, there are three Principals: the school Principal and two Assistant Principals. However, the college is entitled to 5.5 principal class positions. There has been a deliberate policy to redistribute funds available to employ principal class teachers to other levels within the school as principal class retirements have occurred. The salary saving has allowed the employment of non-teaching staff such as a Network Manager and a Facilities Manager. It also helps fund the professional development of staff. It has also contributed to the way the college is focussed on teaching and learning, to professional, insightful leadership and the development of a secure learning environment.

The college is organised into three sub-schools: Junior (Years 7 and 8), Middle (Years 9 and 10) and Senior (Years 11 and 12), each managed by a Head of School and five coordinators. Each learning area is managed by a Curriculum Program Coordinator. Curriculum management is led by the Head of Curriculum, who relates to the appropriate Assistant Principal. Thus, management is firmly geared to the promotion of learning.

There are a number of key committees, the format and function of which are continually evolving, that take responsibility for determining curriculum policy and managing the implementation of policy. The way they are organised contributes to the college's effectiveness. The key committees are:

" *The Curriculum Committee*, with the responsibility for advising the Principal on curriculum policies

" *The Curriculum Program Coordinators*, which manages the implementation of curriculum policy

- *The Professional Development Working Group*, which has the responsibility for monitoring and designing the college professional development program
- *The Learning Technologies Working Group*, which has responsibility for the development, implementation and monitoring of the college's Learning Technologies Plan, determining future directions for learning technologies, including future resource requirements, and responding to staff concerns, ensuring there are no technical barriers to the implementation of computer based learning technologies. In 2000, the Learning Technologies Working Group successfully trialed virtual meetings. Only two physical meetings were held for the year and all other issues were resolved in an interactive electronic forum hosted on the school network. These virtual meetings were efficient and effective and demonstrated how efficiencies can be delivered to the work of teachers through innovative use of technology.

The overriding focus of the college is to provide a systems approach to the management of the complex issues and groups that have a stake in the implementation of the vision and innovation. This encourages dialogue across key learning areas and year levels and management staff working across all areas of the college.

Organisational and management practices have contributed to the school becoming effective in Sammon, Hillman and Mortimer's terms. The flat structure is purposely designed to support teaching and learning. As commented by the Principal during an orientation walk around the school:

*So you see we put the resources where the teaching is. Here is the senior school. The Head of Senior School has complete autonomy. She even has a personal assistant. That's putting the resources where the teaching is.*

In Sammon et al's terms, this is a practice of focussing on teaching and learning.

#### 3.4.4 Leadership.

The college has sophisticated views on leadership and continues to devote resources to developing visionary leadership throughout the college. The leadership team at the college is continuing, throughout 2001, to investigate the ideas of Senge on leadership and learning, the impact that this can have on the organisation, and using it to inform future developments. The Senior Management Team will work in three ***Learning Syndicates*** to build upon the work and strategies identified throughout 2000 in an effort to further reform and refine the college into a learning organisation.

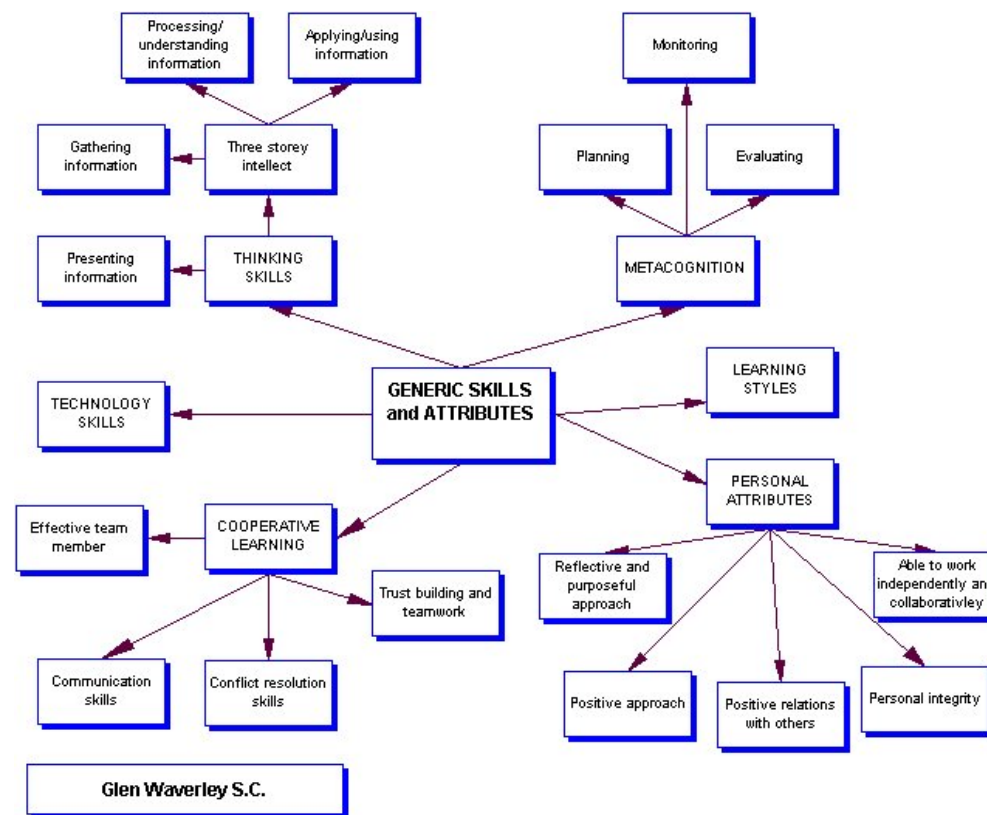
Distributed leadership is part of the common lexicon at GWSC and it is consciously practised. This, too, has the effect of focussing practice on learning, promoting accountability, modelling autonomy and engendering professional leadership. For example, the Heads of School are autonomous, manage their own budgets and are accountable to the Principal. All leadership positions are focussed on student or curriculum issues.

Common to the curriculum management groups are the College Principal, the Assistant Principal (Curriculum), the Head of Curriculum, the Navigator School Project Officer and the Technology Development Manager. These senior managers are strategically located to provide leadership in curriculum planning and policy-making, and to monitor implementation. The election of staff to the Curriculum Committee allows input from interested members into broad policy decision-making. The presence of Heads of School on this committee allows input from experienced teacher-managers who have daily contact with students and teachers in a variety of practical contexts. The presence of non-teaching staff responsible for taking minutes means that minutes and agendas can be published for all staff on the Intranet immediately after meetings conclude. Staff is able to place items on agendas. This structure is in keeping with the college's attempt to maintain a pattern of distributed leadership and to encourage teamwork.

### 3.4.5 Teaching and Learning Charter

The conceptual framework for the college is the *Teaching and Learning Charter*. It has been the centre-piece of the agenda for change at GWSC. The document was developed with extensive staff input in 1996 for implementation in 1997. The central idea of this charter is that of students being autonomous learners whose preferred learning styles are facilitated and extended by teachers who have a wide range of teaching strategies to draw on. The specified broad outcomes for all students are closely related to the Key Competencies<sup>[19]</sup>, and include developing creativity and cultural understanding.

This Charter has paved the way for the college to further explore its vision for effective teaching and learning. It led to the development in 1997 of the Thinking Skills Program, now called the Learning to Learn Program, which in 2000 is imbedded into teacher practice across the college. The charter also spawned the Junior School Curriculum trial in 1999. As part of the trial, staff identified a need to map a set of generic skills and attributes for all students that teachers, working as a team, would take responsibility for developing. This work culminated in the matrix reproduced below:



The charter has also had the effect of crystallising discussion amongst staff about learning. During the year 2000, the college made significant progress with teachers developing a consensus on the vision and values that should form the basis of the work undertaken in the college. This has led to the college currently undertaking debate and discussion on two key questions:

***'What is powerful learning?' and***

***'What is it powerful to learn?'***

The discussions revolving around these questions will lead to a reworking of professional development programs and assessment practices undertaken within the college in 2001. All of this activity can be traced back to the influence of the charter.

#### **4. ICT and Innovation Connections**

Learning technologies is one of the many powerful tools available that GWSC teachers have focussed upon in their vision to develop autonomous learners. The introduction of learning technologies in 1995 to the whole college with the expectation that everyone would integrate it into their teaching, immediately raised the issue about the relationship between learning technologies and effective learning. The exploration of that issue was made a practical exercise involving:

- Every aspect of school management and administration
- All staff

- A process of modelling and mentoring
- Teachers planning and working in teams
- Personal appraisal goals and development plans being developed around the idea of effective teaching and learning and the integration of learning technologies
- Continuous scrutiny from both within the college and by outsiders.

At GWSC ICT has come to enable autonomous learning in numerous ways:

- The school day has been restructured to enable greater use of the facilities available.
- Work practices have changed extensively through the delivery of administrative efficiencies and the ability of staff to share and work collaboratively
- The role of the teacher is gradually changing to become one of mediating rich learning experiences.

The level of student engagement is one of the most commented upon features of the college. The students, at times, work independently of their classroom teacher as they utilise technology resources located around the college. The networked technology has enabled access to a wide variety of resources for students to utilise and interact with, not just computers. It has enabled learning and communication to take place outside the walls of the classroom through electronic discussion and collaboration.

Development of the college Intranet and the Virtual Private Network initiative have removed the classroom walls and provided students, teachers and parents with the availability of constant access to college facilities from anywhere. A seamless connection between home and school is developing. Parent/school connections have begun to dramatically alter the transparency of the school and the nature of communication.

## **5. Outcomes**

### *5.1 Infrastructure*

The college infrastructure now includes:

- 450 Pentium class networked PC s, 200 of which have full multimedia capabilities. 180 of these computers are PIII class and 112 have high capacity removable storage attached
- 30 rooms with 5 computers in each
- 20 rooms with 2 or more computers available
- 8 withdrawal rooms with between 5 and 10 computers in each
- 5 Computer labs each containing 27 computers (some with specific purposes e.g. design labs)
- 20 computers in the Library
- 10Mb Fiber Optic connection to Internet Service Provider (ISP)
- 100Mb connection to all 616 network points
- Each student with 210Mb network storage.
- Students receiving an initial printing and Internet credit which is then managed on a user pays basis
- Email addresses for all students

- Each student with Intranet web space
- Every family in the school community connected to the VPN, which provides students access to their home drive, applications, and the Intranet (this occurred as part of a six month free trial of the VPN in 2000 sponsored by IMPAQ)
- Servers with a minimum configuration of 512Mb Ram, RAID 5, Dual Processor, 54Gb of storage
- Servers comprised of 7 NT servers, 6 of which are Windows 2000 and 1 UNIX server
- Every computer with access to a range of 300 software applications
- Peripherals available including: video capture, digital cameras, scanners, colour laser printing, colour plotting, data logging, CD-ROM, portable data projectors
- Most rooms equipped with large screen televisions with the capacity to be used as a computer monitor for demonstration purposes
- 6 video projectors
- 180 Seat Lecture Theatre with networked computer, electronic lectern, data projection, visualiser and video facilities
- Two networked Conference/Meeting Rooms with data projection facilities
- All teachers with their own notebook computer (initially provided by college, but now being provided by the Department of Education, Employment and Training)
- All teachers in the Science and Technology Centre with access to a network data point at their desk. There is widespread access to data points for teachers in other areas of the school

The pattern of use is as follows:

- Average 40,000 logins per month
- 80% of all networked computers are used by the third school day of the month
- 80% of user accounts are logged in by the fifth school day of the month.

This suggests that there is extensive and constant access to the network by students, teachers and parents. The infrastructure has transformed the operational environment in which all members of the college community operate. The use of all network resources is electronically monitored on a daily basis to track usage patterns and predict user needs.

## 5.2 *Effectiveness*

The effectiveness of the innovation and the impact of the use of learning technologies within it can be demonstrated in numerous ways:

- **Motivating Learning with learning technologies**

Many teachers at GWSC speak about how the introduction of learning technologies has increased the motivation of the students.

- **Learning Effects**

Learning technologies in combination with effective, constructivist teaching practice has produced a range of generic skills in students as well as producing relative superior performance on standard state wide performance measures. It has played a role in having the skills of autonomous learning and independent learning especially well developed in the young people at GWSC.

- **Teaching Motivation**

Teachers have been challenged by the introduction of learning technologies and many attribute their reinvigoration to their having to master it.

- **Teacher Professionalism**

Teachers say that they feel more professional by being given a laptop computer and by learning to use it to increase teaching efficiency and effectiveness.

- **Teacher Articulateness**

Explaining to visitors new practices about approaches to teaching and learning and ways of working and developing materials in teams in a technology rich environment has enabled teachers to develop a common discourse about their practice. This is especially the case with the discourse about autonomous learning at GWSC.

- **Work ethic**

Having to master learning technologies has required extra time. Seeing the positive effects it has had on the students and on their own professional growth has encouraged staff to work harder and longer at mastering it.

- **Authentic learning**

Learning technologies allows students to interrogate the world for information relevant to real world tasks that they are working upon. In so doing it produces a situation in which the students thinking is challenged. It provides a natural support structure for students to use to develop their inquiry based learning.

## 5.3 *Academic Rigour*

Academic rigour is a given at GWSC. It is located in a community where it competes for students with several high profile independent, non government schools. It records its comparative performance on the VCE with such schools. The following is the comparison for 1999.

School	Study scores of 40 or more(%)	Range of Adjusted Achievement Index relative to GAT	Range of Tertiary Preparation Index relative to GAT
Glen Waverley Secondary College	23	107-111	109-114
Caulfield Grammar School (Wheeler's Hill Campus)	17	105-110	106-112
Wesley College (Glen Waverley Campus)	19	105-109	105-111

Students have immediate access to high quality curriculum materials on the Virtual Private Network (VPN) that have been developed by the staff. They also have access to a range of commercial materials like XSIQ. Through the VPN the students have continuous, ongoing access to the class lessons and materials that staff have developed for use by classes. Many students regularly e-mail staff from home to clarify issues that arise from work in the classroom, and participate in class specific discussion boards. Staff members are regular presenters at international and national conferences organised by the school. This adds to the culture of academic rigour at the college, as does the constant need to explain practice to the stream of visitors to the school. Academic results are analysed annually and the results of the analysis, comparing student performances with state-wide- and like school- student performances, are fed back routinely to staff. This too heightens the culture of academic rigour at GWSC.

### 1. *Equity.*

Every student at GWSC has routine access to learning technologies both at home and at the college. Every student and staff member is able to connect to the college Virtual Private Network for a cost that compares favourably with the cost of most Internet connections. The college facilities are readily made available to students and the community outside normal school operating hours.

### 5.5 *Benefits*

## The following present themselves as major benefits:

- Improved student results
- Increased sense of professionalism by staff
- Staff participating in research (such as this study)
- Visibility of the college internationally
- Respect for staff by colleagues outside the college

## 6. Conclusion to the Hypotheses

*6.1a Technology is a strong catalyst for educational innovation especially when WWW is involved, or*



*6.1b Where true school wide improvement is found technology served as only an additional resource and not as a catalyst. The forces that drove the improvements also drove the application of technology to specific educational problems*

The focus of the innovation at GWSC has always been improved teaching and learning. At GWSC the serious use of learning technologies came after the college embarked on its effort to reform conceptions and practices about teaching and learning. Learning technologies has been incorporated into the change process and used to challenge teachers and students about their views of teaching and learning. According to the Principal:

*Technology is a catalyst but must be accompanied by changes to approaches to teaching and learning. Whole school restructure is absolutely essential. It is a complex and interrelated change process. New technologies can help to transform schools but only if they are used to support new models of teaching and learning. If technology is simply used to automate traditional models of teaching and learning then it will have very little impact on school.*

*6.2a Diffusion follows the pattern of stages (know, persuade, decide implement and integrate). There are early adopters through to resistors. There are mass media channels and personal channels for communication. The innovation must have advantages, must be consistent with prevailing values, not too difficult to understand, be able to be experimented with, see the results, or*

*6.2b Different diffusion patterns exist for ICT.*

The former hypothesis is supported by the evidence from this case. GWSC was approached to become a Navigator School. . The college had been investigating the potential of technology and its impact on learning, however staff skill levels and awareness of the role technology could play were minimal. Initial diffusion proceeded through a set of coaches. Staff moved through stages similar to the Rogers model for diffusion. Diffusion was assisted by mentoring processes. As people gained confidence and skill they adapted the learning technologies and made it a tool for enabling a review of teaching and learning and whole school change.

*6.3a Successful implementation of ICT depends mostly on staff competence on the integration of ICT into instruction and learning. This hypothesis assumes teachers mediate ICT applications when they are successful, and that ICT's academic value relates positively to teacher competence, or*

*6.3b Technological infrastructure and student competence rather than teacher competence determine ICT implementation outcomes*

A combination of both hypotheses is supported by this case. The technology and infrastructure must be reliable, powerful and efficient. Successful implementation of learning technologies at GWSC results from having learning technologies supporting good teaching and learning. GWSC is an environment where teachers are expected to implement learning technologies. Their attempts to do so are monitored. They are encouraged to implement learning technologies by having its use tied to the performance appraisal. Student competence is a focus and is developed, although there is still further work to be done in this area.

*6.4a Gaps in academic performance between high and low poverty students do not increase when equal access to ICT is available to all, or*

*6.4b More advantaged students leap ahead in ICT rich environments*

According to the Principal:

*Access is the crucial issue here. Even though all students can have access from home, if they subscribe, the college also opens for extended hours to facilitate access to facilities. Staff at GWSC generally consider that all students are advantaged by ICT. They are able to take greater initiative in using it for autonomous learning.*

*6.5a Successful implementation of ICT leads to higher standards in spite of low quality ICT materials. Academic standards are a function of teacher and school expectations and not of the standards of textbooks or ICT materials, or*

*6.5b Academic standards will be lowered because young people are not able to use the technology to their advantage*

Teachers have taken the initiative to use and develop their own resources for students. The focus is on teachers and students as developers and creators, on the use of software to create materials rather than the use of content already developed. There is a range of high quality software available for teachers and students.

Staff members critically evaluate technology resources as they would other resources. There is access to content materials such as encyclopedias and the Internet to aid research. Students are taught information literacy skills to support their personal evaluation of technology resources as one of the necessary skills for becoming independent learners.

There is a pervasive use of learning technologies in the college and academic standards have improved since the beginning of the work on teaching and learning and the integration of technology. Retention rates have also improved. The case study shows that academic standards are a function of a number of inter-related factors such as the pervasive learning culture, staff morale, a sense of being on show to the world, demands of the tasks set for students, high expectations placed on staff and students, and a sense of competition with other schools.

## **7. Projections to the Future**

### **7.1 Sustainability**

The innovations have involved a process of change over the last six years. If anything the ownership and momentum of change has gained wider support as it has progressed. Structures, processes and practices are now embedded and not dependent upon individuals.

There have been a number of changes in key personnel (including the appointment of a new Principal in July 1999, two new Assistant Principals in 2000, and a new Network Manager in 1997), teaching- and support staff throughout the college reform process. The momentum of the innovation has continued. There is enormous commonality about the vision for the innovation. Structures are in place to enable it to proceed especially management and accountability structures. In 2000, 22 teachers were inducted to the college. Numbers of inductees will increase as a significant proportion of teaching staff reach retirement age within the next 5 years.

### **7.2 Scalability**

Schools of the Future has been a crucial and enabling feature of the whole school change which has taken place at GWSC. It has provided financial flexibility and freedom to determine a vision and to be able to put in place the components to realise this vision. And at the same time it has provided an accountability framework.

The initial grant to the college and its designation as a Science and Technology Centre and a Navigator School are sometimes held up by other schools as

reasons for them not being able to undertake what has been accomplished at GWSC. Certainly, setup costs were substantial and have fast tracked developments at the college. However, the college receives funding on the same basis as all other government schools. It is constantly providing advice on the process of reallocation and redistribution of funds within this finite budget.

The case study suggests that:

- Strong and visionary leadership is essential. Management structures that currently exist in many schools may not meet the needs of schools in the 21st century. Leadership and team building are essential
- A staged action plan, which is constantly reviewed, must be developed. Schools must learn from what they implement
- Professional development on teaching and learning and technology as a priority for all staff is absolutely essential, and must be catered for within a review of the school budget
- All innovations must be accompanied by research, which then feeds into further development and refinements to changes. It must be seen as a process rather than an event.

## 8. References

Clarkson, P. Dunbar, A and Toomey, R (2000) *Whole School Reform and ICT Report of the Evaluation of the Navigator Schools Project*. Melbourne: DEET.

Rogers, E (1962) *The Diffusion of Innovation*.

## 9. Appendix A: Methodology

GWSC self-selected for involvement in the study. It did so to enable it to benchmark itself with strong international performers in the whole school change area including the role of ICT in the whole school reform process.

The data for the case study was collected over a twelve month period. During 1999, GWSC was involved in the Victorian Government's evaluation of its Navigator Schools Project. As part of that evaluation, for which the author was principal investigator, a large number of interviews of staff, administrators and students were conducted. Also a great number of classrooms were observed. In 2000, there were further interviews of staff conducted. Parents and students were interviewed. Additional classes were observed.

## 10. Appendix B: ICT Practices Survey for Teachers

*Total number of participants.*  
**Total number of participants who have completed this survey.**

Glen Waverley Secondary College: **87**

*How comfortable are you with using a computer to do each of the following?.*

	<b>Very comfortable</b>	<b>Comfortable</b>	<b>Somewhat comfortable</b>	<b>Not at all comfortable</b>	<b>Not answered</b>
Write a paper	63	15	9	0	0
Search for information on the World Wide Web (WWW)	56	20	9	1	1
Create and maintain web pages	21	18	14	34	0

## Use a database

18  
23  
27  
19  
0

## Develop a database

13  
18  
23  
32  
1

## Send and receive e-mail

63  
18  
3  
2  
1

## Write a program

10  
6  
13  
50  
8

## Draw a picture or diagram

28  
21  
21  
15  
2

Present information  
(eg. Use Powerpoint)

29  
25  
17  
14  
2

*How important is each of the following computer-related skills for your teaching?.*

	Very important	Important	So-so	Not at all	Not answered
Write a paper with a word processor	52	19	12	4	0
Search for information on the WWW	42	27	16	2	0
Create web pages	16	21	35	11	4
Use a database	11	14	38	22	2
Develop a database	6	5			

	44
	26
	6
Send a receive e-mail	
	40
	19
	19
	9
	0
Write a program	
	6
	2
	21
	52
	6
Draw a picture or diagram with a graphing/drawing application.	
	24
	24
	24
	13
	2
Present information (eg. Use Powerpoint)	
	28
	25
	20
	12
	2
<i>During the past school year, how often did your students on average do the following for the work you assigned?.</i>	
	Several times each week
	Several times each month
	A few times
	Never
	Not answered

## Use the internet

22  
37  
27  
1  
0

## Create web pages

4  
6  
41  
35  
1

## Send or receive e-mail

13  
24  
35  
14  
1

## Use a word processing program

40  
32  
13  
1  
1

## Use a computer to play games

0  
2  
16  
64  
5

## Use a spreadsheet

6  
8  
32  
37  
4



Use a graphics program

14  
12  
27  
32  
2

Join in an on-line forum  
or chat room

1  
5  
17  
56  
8

Use a presentation  
program (eg. Powerpoint)

4  
13  
42  
22  
6

Use an instructional  
program (including simulations)

5  
11  
32  
32  
7

Other computer users (specify)  
[Click here to view the answers to question 29.](#)

**How would you reate your ability to use a computer?.**  
**Poor:** 1  
**Fair:** 33  
**Good:** 43  
**Not Answered:** 10

*Answer the below questions based on experiences or policies from the last school year?.*

Was student computer use ever evaluated for grading?

**Yes:** 54 **No:** 33

**Not answered:** 0

If you assigned Internet searching, how much freedom did you allow students in locating sites to visit?

**No Restrictions:** 17

**Some Restrictions:** 59

**Designated Sites Only:** 9

**Not Answered:** 2

Did you modify a Website with any of the classes that you taught?

**Yes:** 24 **No:** 61

**Not answered:** 2

What portion of the computer use in your classes was directly related to the course content?

**Very Little:** 8

**Some:** 32

**Most:** 17

**All:** 30

**Not Answered:** 0

What portion of the computer use that you assigned was done by students individually?

**Very Little:** 3

**Some:** 32

**Most:** 47

**All:** 5

**Not Answered:** 0

If you have a computer at home, how often did you use it for preparing for teaching?

**No Computer:** 1

**Never:** 0

**A Few Times:** 9

**Several Times a Month:** 30

**Several Times a Week:** 46

**Not Answered:** 1

Did you participate as a student or instructor in a virtual course through the Internet?

**Yes: 16 No: 71**  
**Not answered: 0**

Did you involve your students in collaborative learning over the Internet with students from other classes?

**Yes: 17 No: 69**  
**Not answered: 1**

**Are you currently using technology to collaborate with other teachers(eg. Chat / Forums)?**

**Yes: 31 No: 55**  
**Not answered: 1**

**How many e-mail messages do you send each week on average?**

**None: 2**  
**1 To 5: 38**  
**6 To 11: 22**  
**More than 12: 22**  
**Not answered: 3**

*How many of the following have you ever done?.*

Made changes to a computer's hardware

**Yes: 26 No: 61**  
**Not answered: 0**

Updated an application program (eg. Word Processor)

**Yes: 47 No: 40**  
**Not answered: 0**

Recovered a damaged file?

**Yes: 40 No: 46**  
**Not answered: 1**

Created a website?

**Yes: 47 No: 39**  
**Not answered: 1**

Developed a database?

**Yes: 42 No: 45**  
**Not answered: 0**

## 11. Appendix C: Documentation

- Strategic Focus Glen Waverley Secondary College 2001
  - Appraisal Senior Management Team 2001
  - Teacher Appraisal 2001
- 
- **Strategic Focus Glen Waverley Secondary College 2001**



# 2001

# Strategic Focus

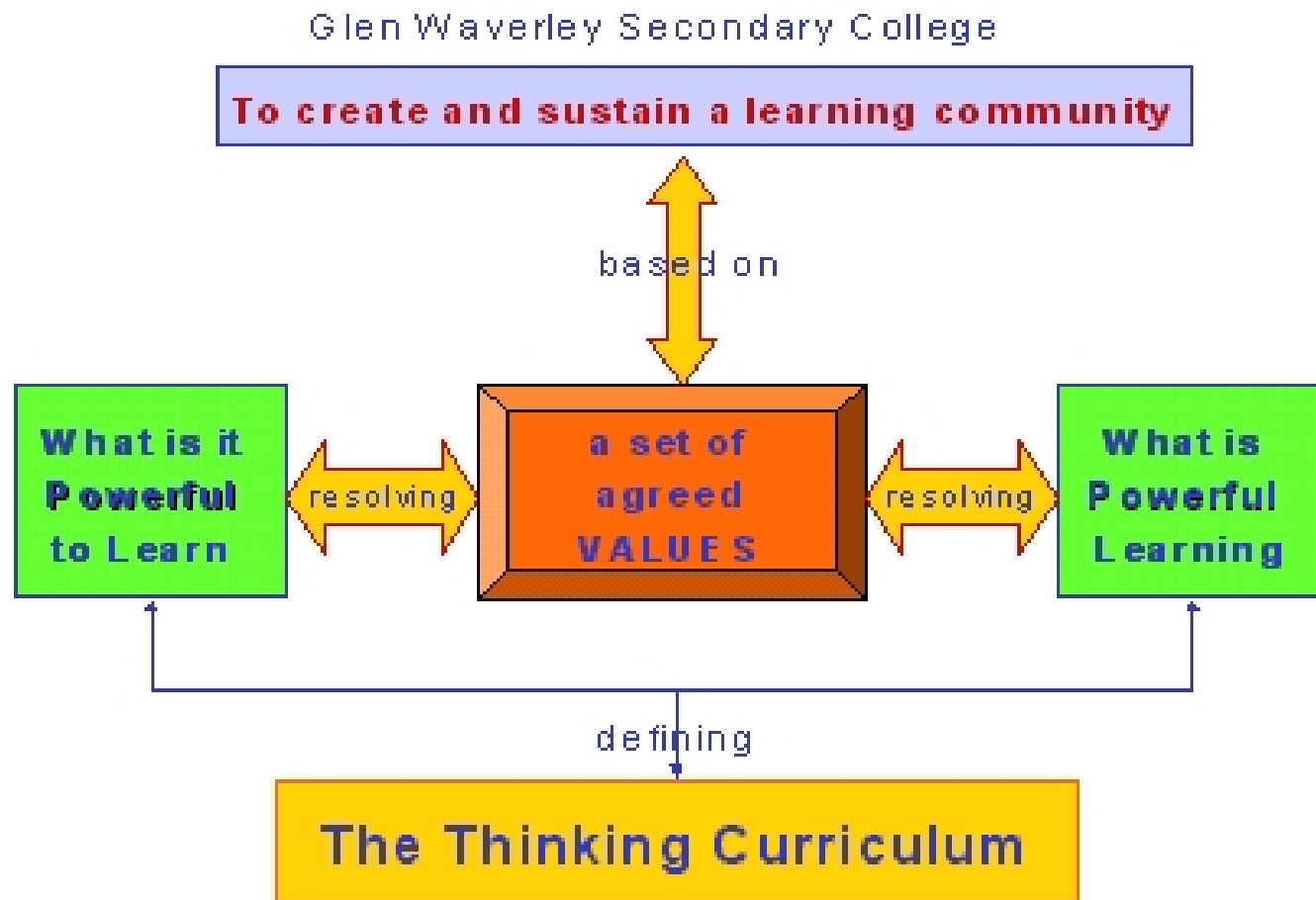
# Glen Waverley Secondary College

I cannot teach anybody anything, I can only make them think.  
Socrates

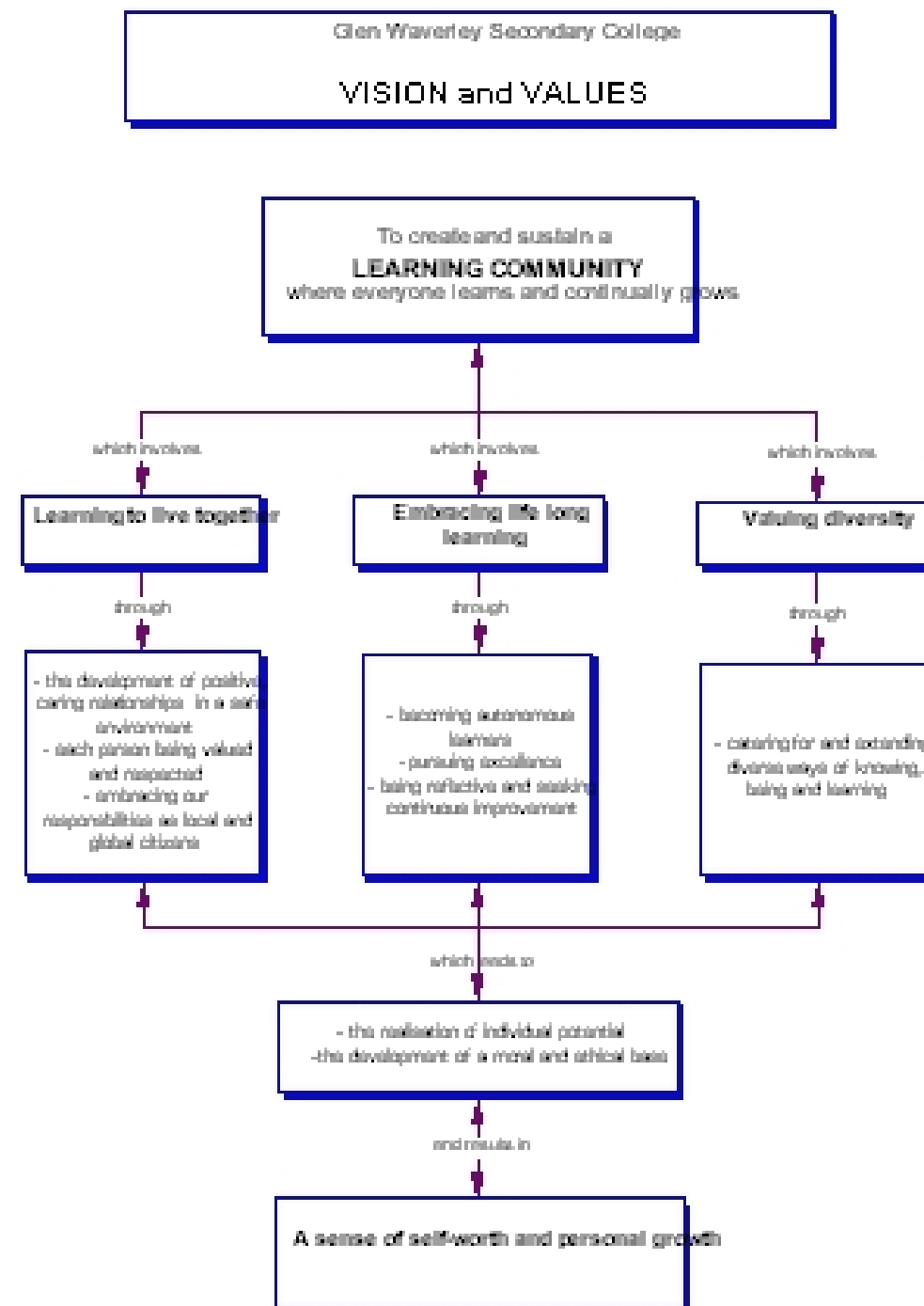
## INTRODUCTION

2001 provides Glen Waverley Secondary College with an opportunity to build on the very exciting and innovative work undertaken by staff during the year 2000. The teaching and learning agenda we have set is a challenging one as it expands and heightens the demands the workplace has of each teacher. Despite this, there is an increased sense of common purpose as our collective understanding of how to assist students to become more powerful learners grows. As importantly, there is an increasing recognition that we have the capacity to realise this for every student in the college.

In the annual staff survey conducted in October 2000, 91% of the 124 staff surveyed agreed or strongly agreed with the statement that **the school has a clearly stated set of objectives and goals**. Throughout 2000 staff were involved in a range of activities and processes designed to clarify the educative purpose and the vision and values of Glen Waverley Secondary College. Our mission or purpose or *our reason for being* was to assist all students to become more powerful and more effective lifelong learners. Our vision or the picture of the future we are seeking to create was captured in the phrase *to create and sustain a learning community* and we ultimately agreed on the set of values that should underpin the school as we pursue our mission and vision. The graphic below captures our current understanding of the relationship between our vision, values and the questions that emerge as a result of our examination of how to support students to become better learners. Part of the challenge and the excitement of 2001 will be trying to resolve the meaning and the implications of a Thinking Curriculum so that it can be fully implemented at Glen Waverley Secondary College.



The process all staff engaged in to determine the values that would drive our school and underpin the work and actions of every member of our learning community was a demanding and difficult one. It was an interactive process that resulted in the following map that was endorsed by 98% of the teaching staff. It is more than words. It maps out the way in which we intend to live our educational mission and to enrich the lives of every member of our community.





The three pillars upon which our learning community is constructed, learning to live together, embracing lifelong learning and valuing diversity are enabled through a range of strategies that will ultimately result in a sense of self worth and personal growth for all members of our community. Building the self-esteem and sense of self worth of all learners, both students and teachers, is fundamental to ensuring that all students learn and make progress. This can only happen if we provide a physically safe and an emotionally secure learning environment that

all learners identify with and feel they are a part of. All learners must be encouraged to be optimistic about their future and have a sense of efficacy in that they can help create and shape their own future.

*If you refuse to accept anything but the very best in life, you very often get it.  
Somerset Maugham.*

Glen Waverley Secondary College community has realised the majority of the strategic priorities set during the year 2000. A number of independent action research projects, completed during the year, have examined the college's work in detail and have concluded that ours is a learning community that endeavours to support each learner to realise their potential. If we examine three of these briefly, they offer encouragement to pursue our goals further during 2001.

- Navigator School Evaluation completed in March 2000
- *The overwhelming impression gained by this researcher is that this is a school where students want to learn. In classrooms students are engaged and enjoy a challenge; in return they challenge teachers to provide a learning environment that leads to higher learning. Information and communication technologies are one (complex) aspect of the dynamic learning environment of Glen Waverley Secondary College.*

The acknowledged success of the Navigator School project has secured funding for 2001 from the Department of Education Employment and Training, with a brief that requires us to further explore best practice in the use of computer based learning technologies within a constructivist pedagogical framework. In addition, the College is required to share this knowledge with other schools and teachers throughout the state.

- Middle Years Research and Development (MYRAD) Thinking Curriculum Project and Junior School Curriculum Trial

2000 marked the second year of the Junior School Curriculum Trial and the first year of our involvement in the MYRAD<sup>[20]</sup> project. Both projects have been rigorously examined and research questions have been framed and followed through with both interview and survey protocols. The MYRAD project provided the College with a \$50,000 government grant to investigate the Thinking Curriculum, which complemented and reflected much of the work being undertaken in the Junior School Curriculum Trial. The evaluation completed in December 2000 is an excellent contribution to the thinking about where the college must head now. What are the challenges, what have been the successes in the work undertaken in relation to assisting students to become more effective learners? The following examples help to illustrate some of the positive outcomes of this work:

- During the September interviews 75% of Year 7 students interviewed indicated that they felt a sense of belonging and were happy at school. 83% said they were experiencing a feeling of success. In one of the survey questions put to all Year 7 students *I have a chance to do one thing at school I am very good at* the response in the March survey was 4.32 and in October was 4.16 on a scale of 1,2,3,4,5 with 5 being strongly agree. Teachers interviewed as part of the evaluation indicated that they viewed the JSCT as a success as it challenged their beliefs and understandings on effective pedagogy and it ultimately led them to change their practice. The teachers also believed that student attitudes to school and the outcomes they achieved had also shown improvement. This and many other indicators reveal that we are making progress, but the data also contains some challenges that we will need to address in 2001. The

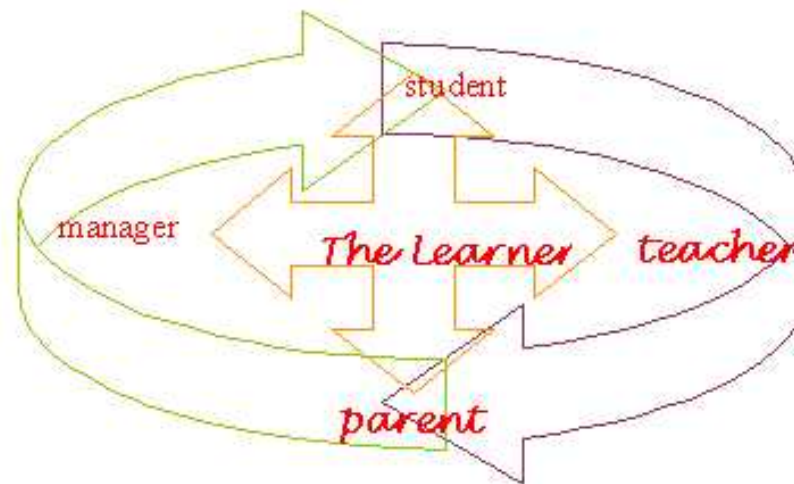
major point of this research is to assist staff in gaining a clearer understanding of the issues that students view as important and what they perceive to be the barriers to their learning and engagement. These insights will enable us to devise strategies to address any issues identified.

- OECD ICT and the Quality of Learning, A Case Study of ICT and School Improvement at Glen Waverley Secondary College
- Glen Waverley Secondary College is one of two Australian schools to be included in this major study of ICT and school improvement. The other schools are in Europe and the United Kingdom. The research commissioned by Glen Waverley Secondary College and conducted by Professor Ron Toomey from the Catholic University has established that the penetration of ICT within a well thought out teaching and learning framework places the college at the forefront of innovation in this field. The work at Glen Waverley Secondary College is substantially advanced compared to what is occurring in the other schools in this study.

The challenges we face remind us that the education of adolescents will never be straightforward or formulaic. It is the very richness and diversity of the individual that creates the unlimited possibilities for human growth in the Glen Waverley Secondary College learning community.

### **FOCUS AREA 1 THE LEARNER**

This focus area concentrates on achieving aspects of the Curriculum and Environment goal in the College Charter.



The interdependent relationship of each learner in Glen Waverley Secondary College is the critical understanding that the school has acknowledged. It is only through developing a shared understanding of how to support each learner to improve and make progress with their own understanding of who they are and how they relate to their workplace and their aspirations for life that a learning community can emerge.

Although a great deal of work has been done to increase the collective understanding of how to support each learner there still remains significant challenges to imbue a sense of responsibility in all learners for their own learning and to communicate explicitly the value of each individual within our learning community. As well, all members of the learning community need to consider what contribution they can make to improving the likelihood that our educational vision will be realised for everyone.

*Learning is fundamentally social; thus it is an act of membership and failure to learn is a common result of exclusion from participation.*[\[21\]](#)

Our challenge is to ensure that everyone has an opportunity to participate and therefore an opportunity to learn. Those who we see as excluded need to be provided with pathways back in, with the appropriate support and encouragement that communicates that all people have value. The programs we offer need to provide rich and challenging learning experiences for all students. All teachers and parents need to gain a sense of the value they bring to the school and the importance of the role they play helping to secure a good outcome for each child at Glen Waverley Secondary College.

The following are the targets identified to assist in achieving Focus Area 1.

### **TARGETS:**

1. The Student
2. Junior School
3. To provide all students with access to a rich and challenging schooling experience that acknowledges the differences and strengths of each learner and respects and nourishes their dignity and sense of self. This will manifest in a range of curricular and co-curricular opportunities for all students that are recognised and celebrated. Part of this will also involve monitoring the extent of the involvement of all students to see how many are taking advantage of the programs the school has put in place.
4. To implement an enhanced House system designed to increase each student's sense of connectedness to the school and to increase the likelihood that each individual's learning needs are known. The structure emerged from the research conducted in the Junior School in 1999 and 2000 and it builds on the successful outcomes achieved. During 2001 the success of the new structure will be evaluated and modifications made to improve it for the following year. Research questions will be developed and monitoring will occur throughout the year. In particular, the Junior School Team will:
5. Undertake an analysis of all results, interventions and programs of each student to identify trends and issues that will inform the process used to support students to make progress and become fully functional autonomous learners.
6. Design a process that will ensure data collected on students will become part of an on-going electronic record accessible by all teachers.

7. To continue to explore and evaluate the interventions for students in an *at risk situation* that were implemented in 2000. This will include the following.

- To employ a full-time literacy teacher
- To administer the PAT Literacy and Numeracy test to all incoming Year 7 students to establish a baseline to inform support program design and the quantitative evaluation of the interventions.
- To implement the Corrective Reading Program
- To use the numeracy data to design programs to support students with numeracy problems.

#### 1. Middle School

2. To provide all students with access to a rich and challenging schooling experience that acknowledges the differences and strengths of each learner and respects and nourishes their dignity and sense of self. This will manifest in a range of curricular and co-curricular opportunities for all students that are recognised and celebrated. Part of this will also involve monitoring the extent of the involvement of all students to see how many are taking advantage of the programs the school has put in place.
3. To implement an enhanced House system designed to increase each student's sense of connectedness to the school and to increase the likelihood that each individual's learning needs are known. The structure emerged from the research conducted in the Junior School in 2000 and it builds on the successful outcomes achieved. During 2001 the success of the new structure will be evaluated and modifications made to improve it for the following year. Research questions will be developed and monitoring will occur throughout the year.
4. To provide literacy support to students in the Middle School through Study Hall.
5. To undertake an analysis, based on the model developed in the Junior School in
6. 2000, of all results, interventions and programs of each student to identify trends and issues that will inform the process used to support students to make progress and become fully functional autonomous learners.

#### 1. Senior School

2. To provide all students with access to a rich and challenging schooling experience that acknowledges the differences and strengths of each learner and respects and nourishes their dignity and sense of self. This will manifest in a range of curricular and co-curricular opportunities for all that are recognised and celebrated. Part of this will also involve monitoring the extent of the involvement of all students to see how many are taking advantage of the programs the school has put in place.
3. To conduct a Year 12 Orientation Camp and a Year 11 Orientation program that exposes all senior students to a range of strategies and thinking tools that will assist them to be more effective in their study.
4. To participate in the BOS VCE Data project to provide information on student performance in individual classes.
5. To build on the Term 3 Vacation Revision Program to assist all students with their preparation for the final exams. In addition, to expand the formal trial exams to provide all students with appropriate experience in the exam situation.
6. To use each member of the Senior Management Team as a mentor for two high performing Year 12 students to provide them with advice, guidance and support through out the year.

7. To explore means of extending the House system into the Senior School in 2002.

1. The Teacher

2. To design and implement an appraisal process that will provide authentic feedback to and the appropriate support for all teachers to enable them to contribute to the achievement of the schools goals and priorities. The appraisal process should not only communicate the importance of the work that teachers do, but also its value to the learning community. The appraisal model will build on the model used for the past six years and it will also reflect the intention of Agreement 2001.
3. To devise a model of Professional Learning Teams and to place each teacher in a Professional Learning Team as part of the appraisal process. The Professional Learning Teams will provide collegial support and an opportunity to build active reflection on practice in as a fundamental component of the work teachers do in the school.
4. To provide a professional development program that allows all teachers to enhance their skills as a teacher and that also exposes them to stimulating material that encourages reflection on teaching practice.
5. To provide all staff with an opportunity to apply for the three \$3000 scholarships available under the Staff Scholarship Scheme that would fund a national or an international learning opportunity that adds value to the entire college. This will be in addition to the 11 staff funded to attend the Ninth International Conference on Thinking Breakthroughs 2001 in Auckland 14<sup>th</sup> 19<sup>th</sup> January, 2001.
6. To provide all new staff into the college with access to a comprehensive induction program and to assign a professional mentor to each new staff member for the year 2001. This new program will build on the work undertaken in 2000 and will reflect the feedback obtained from the participants. Aspects of the program will diversify in recognition of the significant number of new leaders to be inducted into the Senior Management Team. This will be a critical new component of the program as there are extensive expectations of these managers in terms of realising the targets in the Strategic Focus. The four first year out teachers will be provided with a day off in term 1 to work-shadow more experienced teachers. This new program will be evaluated at the end of the year.

1. The Manager

2. To involve the Senior Management Team in a series of eight seminars over the course of the year that address the professional learning needs they identified during the eight Senge forums in 2000:
3. Implementation of the Senge Strategies.
4. Conflict resolution strategies and giving and receiving feedback.
5. Team building and team dynamics.
6. Extended time for an in-depth pursuit of the ideas and processes used in the forums during 2000.
7. Classroom dynamics consistent with the espoused vision and values statement.
8. Alternative views on leadership and management.
9. Adolescent learning and dealing with student underachievement.

The Senior Management Team will form three Learning Syndicates that will manage the professional learning needs of the team during 2001.

1. To provide all members of the Senior Management Team, as part of their Learning Syndicate, with the opportunity to lead a staff seminar on an issue they identify as important for the whole school to address and that is consistent with the seminar objectives. Each of the Learning Syndicates would be allocated one staff meeting, with one seminar taking place each term.
2. To expand the responsibility of the Senior Managers in their role as facilitators of the appraisal process to consider the question of staff morale and to actively work to improve the morale of the teachers they work with.

1. Heads of School and House Leaders

2. To plan and conduct house meetings that meet the needs of the teams in each house.
3. To evaluate the effectiveness of the strategies used to monitor student achievement at the end of each semester.
4. To design strategies that will allow teachers to monitor students enhanced connectedness to school.

1. The Parent

2. To provide all parents and guardians with a range of options to become more closely involved in the work of the school and to create forums in which parents can gain a greater sense of the importance of their role in securing a good outcome for their children.
3. To involve parent groups in the assessment and reporting review.
4. To involve parents in a process designed to embed a series of behaviours that can be reinforced by teachers and parents and that lead to an enhanced capacity of students to act intelligently.
5. To seek parent feedback on how to improve the Parent Teacher Interview Process.
6. To promote the role of the Parents Association within the school community.

## **FOCUS AREA 2 TEACHING & LEARNING**

This focus area concentrates on achieving aspects of the Curriculum Goal and Priority 1 in the College Charter.

The focus on teaching and learning has been a constant over the last six years and it must remain central to the endeavours of all who work at Glen Waverley Secondary College. The 2000 school review identifies the on-going improvement in the quality of teaching and learning as a priority for the new triennium. Arguably, the staff has participated in an increasingly sophisticated and complex debate about what constitutes quality teaching and learning and the skill set the learner needs to become an effective life-long learner. There has been a dramatic improvement in the collective understanding of the staff about what the school needs to do to improve the thinking and learning skills of all

students.

***Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.  
Chinese Proverb.***

The OECD Research at Glen Waverley Secondary College into ICT and the Quality of Learning noted that *the overwhelming impression one forms after being in the school is that it is a place that values learning.* We are attempting *to teach the man to fish.* The MYRAD research and the research conducted to evaluate the Junior School Curriculum Trial has identified a series of challenges that the school will need to address if it is serious about realising the vision and values endorsed by the staff and the College Council. During 2001 the College will build on the success of 2000 and attempt to address some of the issues identified through the research. As well, two important questions remain largely unanswered What is Powerful Learning? and What is it Powerful to Learn? . These questions will be a major focus of our work in 2001.

Judi Hirsch ran a workshop on mediated learning and dynamic assessment at the 9<sup>th</sup> International Conference on Thinking in Auckland New Zealand.<sup>[22]</sup> She made the point that it is the role of the teacher to make the student feel brilliant, to coach them to take the next step in their learning and to never give up on any child as all students have the capacity to learn. Howard Gardner wrote *The Disciplined Mind* to articulate clearly the kind of education he favours. *The most important, irreducible purpose of school is to help students better understand the major disciplinary ways of thinking. This means establishing ways of thinking in students that they haven't experienced yet; teaching them what it means to think scientifically, historically, artistically, ethically, mathematically.* Glen Waverley Secondary College can learn from the work others are doing and should be guided by successful practice and initiatives that are making a difference.

What will the debate at Glen Waverley Secondary College ultimately generate? 2001 will be the year we discover more about our educative purpose and a year in which the school's capacity to realise this purpose is enhanced even further.

***Education is a social process... Education is growth... Education is, not a preparation for life; education is life itself.  
John Dewey***



The following are the targets identified to assist in achieving Focus Area 2.

## **TARGETS:**

1. Defining and Developing a Thinking Curriculum
  2. To develop a collective understanding of the term the Thinking Curriculum that represents the view of staff and reflects the work undertaken internationally in this field.
  3. To continue the work begun in 2000 and achieve consensus on the attributes that define powerful learning. To define each attribute and to explore what it would look like in practice in each learning area. These findings will be placed on the intranet.
  4. To develop and trial additional challenging units which are based on fertile questions and which provide students with the opportunity to have input into the curriculum context.
  5. To continue to explore the role of Feuerstein's mediated learning as a conceptual tool to assist with the implementation of a Thinking Curriculum.
  6. To review and refine the list of generic skills and attributes in Term 1 to make the concept more user friendly and to incorporate other areas of focus.
  7. To complete the process of embedding the explicit teaching of the Learning to Learn program into the Year 7 program by making a team of teachers responsible for its delivery to each class.
  8. To continue the process of ensuring that the generic skills and attributes are explicitly developed in all curriculum programs in all learning areas.
  9. To continue to explore and document the essential learnings that all students must develop within each learning area.
- 
1. Assessment
  2. To produce a developmental framework for assessing student development of the generic skills and attributes in collaboration with our MYRAD primary schools. Outside expertise will be used to inform the development of the framework. This may involve selecting one area of skill at a time and developing a matrix for assessing at which level the students are operating. The plan is to produce the framework over the next two years – one area per semester.
  3. To develop a means of reporting on the acquisition of these skills and attributes in the reporting process.
  4. To develop and trial means of assessing these skills and attributes within selected units in each learning area.
  5. To explore means of embedding feedback and reflection frameworks into the curriculum program to assist all students to take shared responsibility for continual improvement in their learning.
  6. To design tasks in all learning areas and at all year levels that cater to the full range of abilities and that allow for assessment that shows a progression in understanding.
  7. To participate in the trial of AIM, the Victorian Government's Achievement Assessment Monitor, that all Year 7 and Year 9 students will sit for in the year 2002.

1. Research and Evaluation
  2. To consider the findings of the 2000 Evaluation Report of the MYRAD Thinking Curriculum project and the Junior School Curriculum Trial and to identify issues that need to be addressed. To use these findings to inform and add value to the 7-10 restructure.
  3. To undertake an evaluation of the effectiveness of the 7-10 restructure in terms of its ability to enhance student and teacher learning.
  4. To employ Dr. Filocha Haslam to oversee and conduct the research during 2001.
- 
1. Professional Learning
  2. To provide all teachers, as part of the appraisal process, with the opportunity to belong to a professional action learning team that will identify an area to explore related to the implementation of a Thinking Curriculum. Findings of their research will be tabled with the Curriculum Committee before the end of Term 3 to inform program developments for 2002 and to satisfy appraisal goals.
  3. To provide appropriate in-house professional development to support teachers to achieve the targets listed above.

### **FOCUS AREA 3 - LEARNING TECHNOLOGIES**

This focus area concentrates on achieving aspects of the Curriculum and Resources Goals and Priority 2 in the College Charter.

All users in the college are proficient in a range of tools that add value to the work they do and increase their efficiency and effectiveness in what is *an electronic learning environment*. The OECD research report on ICT and the Quality of Learning noted that *the operational environment of the college has been transformed through the use of technology*. This is the opinion of an independent researcher who acknowledged that Glen Waverley Secondary College is a lighthouse school in terms of the pervasive use of technology in all aspects of school operation. Most of the users see the value of the technology, the issue now is to expand and further explore new and innovative uses of the technology to fully exploit its potential to provide rich and challenging learning experiences.

*Nothing else in the world ... not all the armies...is so powerful as an idea whose time has come.*  
*Victor Hugo The Future of Man.*

Glen Waverley Secondary College does not have a technology driven curriculum but rather one in which technology is accessed if it value-adds to a task and if it enhances understanding and provides access to a greater range of resources. If it simplifies the work of the user. The challenge is to take advantage of the power of this technology and to encourage all users to place increasing demands on the current infrastructure and the tools provided so that it better meets their learning needs. Technology to help us learn more effectively and technology that will simplify and improve our life is the technology we seek.

The following are the targets identified to assist in achieving Focus Area 3.

## TARGETS:

1. The User
  2. The Teacher
  3. To incorporate a goal related to computer based learning technologies into the appraisal of all teachers.
  4. To incorporate a range of professional development activities related to computer based learning technologies into the in-house professional development program that support teachers to expand and explore their skill levels and how they relate to their practice and classroom program.
  5. To involve all staff in posting resources on the Intranet to support the delivery of all aspects of the College program. During the course of the year a process for editing, refreshing and checking the relevance of resources posted will be developed to ensure that the resource remains useful and user friendly. The priority is to continually improve the range and quality of the resources available to staff, students and parents.
  6. The Student
  7. To develop a student technology competency list that all students should acquire by the end of Year 10.
  8. To explore opportunities for students to use the network environment to host communities of interest and showcase and share their work. For example, the Junior School Gazette and Web Park could be used as models to generate interest in similar projects.
  9. To run extended skill development workshops for students in Study Hall.
  10. To promote the use of XSIQ CD ROMS to Year 12 students to explore the potential of such material to assist students in their study.
  11. The Community /Parents
  12. To develop the capacity of the network environment as a communication tool to allow parents access to up to date information about the school and the progress of their child.
  13. To develop a series of programs for parents and the community to provide them with an opportunity to upskill with technology.
- 
1. Parents and the Community
  2. To exploit the potential of the system to communicate more effectively with the community and our parents.
  3. To set up an email database including the addresses of students, staff and parents.
- 
1. The Development Team
  2. To support the work of the Network Manager, The Technology Development Manager and The Intranet/Internet Manager to allow them the opportunity to further increase the rate of innovation in the range of network services and applications that are available to staff, students and parents.
  3. To support the work of the Learning Technology Working Group (LTWG) in overseeing the expansion of network services and the exploration of innovative uses of technology both inside and outside the classroom.

4. To continue to explore the potential of virtual meetings to reduce the demands of an overcrowded meeting schedule. The LTWG virtual meetings were a successful innovation in 2000 and they will be continued in 2001.
5. To continue to support and enhance the relationship Glen Waverley Secondary College has established with Impaq Educational Services to ensure that all aspects of our contractual obligations are honoured and exceeded where possible.
6. To fully develop Intranet Third Generation and the intention of Groupwisdom to dramatically expand the functionality of the Intranet and the VPN. . The redevelopment of the Intranet into one that pushes information to the user, that is intuitive and is responsive to the individual is a high priority in 2001.
7. To implement Markbook and to provide support to all staff in its full use.
8. To expand the capacity of the student database within the Intranet to include all data collected on students while they are at school. This will include information on absences, extra-curricular involvement, achievement, special interventions, literacy and numeracy testing and any other information that will help teachers gain an insight into the achievements and the needs of the students they teach.

#### 1. The Infrastructure

2. To expand the capacity of the existing network infrastructure during 2001 to include 110 new Pentium 5 desktops, increased server capacity, increased storage for student work including The Pit an 80Gb unprotected space in which students can run large tasks. In addition, to migrate to Office 2000, Visual Basic 6, publisher 2000 and Windows 98SE.
3. To introduce data charging and to expand print charging to reduce costs and wastage.
4. To explore the potential of Palm Pilots to improve the efficiency of data collection and access to information by students and staff.
5. To investigate the potential of a screen based communication system for the entire college.

#### 1. The Systemic Responsibilities

2. To support the appointment of the Navigator School Project Officer for a further twelve months and the range of obligations Glen Waverley Secondary College now has to the system in relation to sharing in-house expertise on technology and teaching and learning.
3. To develop a program for and host the Navigator School Conference, NAVCON2K1, on the 9<sup>th</sup> and 10<sup>th</sup> of July 2001 in conjunction with the other three Navigator Schools. Bendigo Senior Secondary College, Apollo Parkways Primary School and Essendon North Primary School.

## **FOCUS AREA 4 THE LEARNING COMMUNITY**

This focus area concentrates on achieving aspects of the Management and Resources goals in the College Charter.

During the year 2000 the twenty-four members of the Senior Management Team participated in a series of eight two-hour seminars that were structured around a group reading of Peter Senge's The Fifth Discipline, The Art & Practice of The Learning Organisation. Teams of four delivered each seminar considering various aspects of Senge's work and the implications for Glen Waverley Secondary College. Senge identifies five key disciplines in organisational learning that need to be developed in and practised by all members of the learning community. The five learning disciplines are:

- Personal Mastery
- Shared Vision
- Mental Models
- Team Learning
- Systems Thinking.

The work was complex and it did not provide any simple solutions to the challenges Glen Waverley Secondary College faces as it strives to build a learning community. It did, however, provide us with a language to describe what transpires in schools and some strategies that can lead to a deeper understanding of how we could move the school towards the learning community.

To create a school that learns, account must be taken of three nested systems at play – the classroom, the school and the community. All three are deeply embedded in daily life, all are interdependent and all have interwoven patterns of influence. These three systems interact in ways that are sometimes difficult to see but they shape the priorities and needs of people at all levels. In any effort to foster schools that learn, changes will make a difference only if they take place at all three levels.[\[23\]](#)

Throughout 2001 Glen Waverley Secondary College will continue to explore the concepts of a *learning community* and a *school that learns*.

The following are the targets identified to assist in achieving Focus Area 4.

#### TARGETS:

1. To build a deeper understanding amongst teachers, students and parents of what a learning community is and how Glen Waverley Secondary College will evolve into one:
2. Each of the facilitators will use their work from the Fifth Discipline in 2000, to explore the concepts and tools involved in personal mastery, shared vision, team learning, mental models and systems thinking with the staff they work with during 2001, and how they relate to the work of the individual and the school.
3. To provide parents, students and teachers with an opportunity to participate in a whole school discussion about how to imbed one strategy to increase the development of students' intelligence. For example, Art Costa's work on habits of mind could be a starting point that all members of the school community focus on. The implementation and then the observation of the benefits of consistent application and practice of one of the intelligent behaviours could provide the community with an insight into the importance of consistency when working with children.[\[24\]](#)

1. To work with staff to improve the nature and quality of the communication between different groups within the school to surface assumptions each make about the work of the other. Improved opportunities for dialogue and quality interactions will be provided through a range of forums including:
  2. The Consultative Committee which has to, as part of its brief, consider all decisions that impact on the quality of the work life of teachers.
  3. Staff meetings that break into groups more frequently to discuss and process issues related to the work of the school.
  4. Staff lunches with the Principal Class Team
  5. Individual conversations, between each staff member and the Principal. Conversations which centre on the ways the school supports them professionally and the constraints or limits which operate as well as suggestions about how the school can develop and support an improved professional working environment.
  6. College Council involvement in forums with staff that will facilitate an exchange of ideas that assists in building a shared understanding of purpose.
- 
1. To continue the work started as part of the MYRAD project with the primary schools on the development and implementation of the Thinking Curriculum and effective transition.
- 
1. To build the capacity of the Senior Management Team to model the behaviours and to use strategies that will support the emergence of a learning community and encourage all members of that community to take on leadership roles.
- 
1. To involve all teachers in an action research project on effective teaching and learning as part of a small professional learning team.
- 
1. To provide an in-house professional development program that specifically supports the professional learning needs of all teachers in the College.
- 
1. To use the upwards assessment process trialled by the Principal Class team to:
  2. Establish upwards assessment as part of the learning culture at Glen Waverley Secondary College. Each of the appraisal facilitators will undertake upwards assessment with their staff to provide all staff with an opportunity to comment on the strengths and weaknesses of the support they receive from their managers.
  3. Utilise the feedback received through the upwards assessment process of the Principal Class Team to refine and improve their capacity to manage and lead Glen Waverley Secondary College. A range of issues was identified and will be incorporated into the new weekly Principal Class Monday Reflection.
- 
1. To involve the school community in the development of the new College Charter for the triennium 2001 until 2003.

## FOCUS AREA 5 - THE FUTURE

This focus area concentrates on achieving the Resources Goal in the College Charter.

The future of Glen Waverley Secondary College is assured. The demand for places in the college and the interest in the work staff are undertaking guarantees that the school will flourish into the future. The question is will Glen Waverley Secondary College realise the potential it is currently exhibiting? The teachers are immersed in complex and challenging questions about how to further improve the learning environment of all students. Students are responding positively to the emerging learning culture. What do we need to do to support teachers and students to take this further to encourage them to continue to challenge and to question what they are doing? The teaching staff at Glen Waverley Secondary College are the key to successfully transforming the learning environment of students. Therefore to improve the quality of their professional life, their professional learning, their working conditions and their morale must be a fundamental goal of our learning community. The student body must also be supported to effectively participate in the learning and take responsibility for their learning.

To secure the preferred future of the College will require an additional income source. According to the Triennial Review verification report, the new charter should contain the following resources goal *The College will generate funds sufficient to meet community expectations for the provision and maintenance of high quality infrastructure and to secure the financial future of the College.* [\[25\]](#)

The following are the targets identified to assist in achieving Focus Area 5.

### TARGETS:

1. To explore and develop strategies to improve the working conditions of the teaching staff by creatively looking at the way in which existing resources are currently used and by seeking the support of the government to deliver the resources required to implement Agreement 2001.
1. To service and actively support the agreement between Glen Waverley Secondary College and Impaq Educational Services to ensure the income stream and other benefits that flow from the agreement continue for the life of the agreement.
1. To create opportunities to showcase the work of the staff and students at the College to raise the profile of the school in the educational community. This will include but not be limited to:
  2. Using the \$35,000 grant obtained from The Department of State and Regional Development to promote and support the work of the Super Nova, Spiders in Space project.
  3. Encouraging staff to run workshops at a range of national and international conferences on learning.
  4. To host a range of conferences in the Science and Technology Centre including:

5. The Navigator Schools Conference NAVCON2K1
6. The annual Thinking Schools Conference.

1. To leverage off the support gained from the Eastern Metropolitan Region that has prompted the Department of Employment Education and Training central facilities personnel to acknowledge the facilities issues at the college. The Eastern Region has placed Glen Waverley Secondary College at the top of their facilities priorities list and the College Council will pursue this throughout the year to increase the likelihood of securing the funds that will provide new facilities.
1. To continue to pursue the Community Precinct concept during 2001 as part of the plan to improve the quantity and quality of the spaces available to staff, students and the community.
2. To hold Community Precinct committee meetings at least once per term.
3. To work with Taylor Oppenheim architects and Taylor Cullity urban landscape consultants to develop the community precinct concept to a point where it can be incorporated into a solid working proposal for the consideration of :
  4. The City of Monash Council
  5. The Community Support Fund
  6. The Department of Youth Affairs
  7. The Department of State and Regional Development
  8. The Department of Employment Education and Training
1. To continue to support the Principal s involvement in the Innovation and Excellence Thinktank a coalition of Principals from both State and Private schools and the Head of the Centre of Applied Educational Research at Melbourne University, Professor Peter Cuttance. The coalition s mission is to explore the value of the work each school is involved in to the international educational market and hence export and market innovations that have the potential to promote the work of the Victorian educational community.
1. To service the agreement reached with Bendigo Senior Secondary College to maximise the opportunity that each school learns from and builds on the work of the other to the benefit of both students and staff in each school.
1. To develop strategies and processes that will facilitate the sharing and/or exchange of:

**Classroom teachers**

Network management and technical support staff  
Principal class personnel  
Senior School students



The purpose of these exchanges is to promote a better understanding of each organisation by the other and to enhance the opportunities for skill and knowledge transfer between the two schools. Both students and staff should be provided with the chance to experience a different setting and to learn in a different environment.

## **GLEN WAVERELY SECONDARY COLLEGE APPRAISAL SENIOR MANAGEMENT TEAM 2001**

The Appraisal of the Senior Management Team will provide an opportunity for the team to explore its capacity to lead and to manage the college in its pursuit of the strategic priorities detailed in the 2001 Strategic Focus. The appraisal process is designed to support and recognise the important work undertaken by each member of the leadership team and to build a greater sense of shared purpose for the team as a whole. We will welcome four new managers into the Senior Management Team this year, the Head of LOTE Gerard Bate, Head of Information Services Sally Ann Venables, Head of Mathematics Margaret Davies, Head of Visual Arts Michael Fitzgerald. The new managers will need support as they did not participate in the Senge seminars last year - however a copy of the Fifth Discipline is on order for them!!!

The introduction and the timeline contained in the document entitled 2001 TEACHER APPRAISAL is relevant to the process to be used with the Senior Management Team. The proforma to be used is attached to this document and all of this material can be accessed electronically on the Intranet under Staff Resources/Senior Managers Appraisal. The three goals for 2001 are:

- **GOAL 1**

Goal 1 must relate to the primary focus of your management role. If you work primarily within curriculum leadership you should develop a goal for improving teaching and learning within the learning area you manage (Focus Area 2). If you are in student management then you should develop a goal that focuses on individual learning needs and programs that support them (Focus Area 1).

- **GOAL 2**

All members of the Senior Management Team will share the following goal:

To participate in a series of eight forums managed by the Senior Management Team and that predominantly focus on the issues and needs identified by the Team during the forums conducted in 2000. The work previously undertaken using The Fifth Discipline to provide a frame of reference and possible pathways through the challenges faced by Glen Waverley Secondary College will be built on. During 2001, every opportunity will be taken to build the capacity of the team in the use of the five disciplines to assist in the further development of our learning community. During 2001, three Learning Syndicates will manage the professional learning of the Senior Management Team and each syndicate will be provided with the opportunity to run sessions on what they identify as important and also to bring in other viewpoints or expertise.

The objectives of the 2001 Seminar Series are:

1. To build a deeper understanding of Senge's five disciplines and to enhance the capacity of the Senior Management Team to use these disciplines to augment their leadership and management practices and further contribute to the realisation of the college's strategic goals and priorities.
2. To develop skills in the Core Learning Competencies by participating in forums facilitated by the three Learning Syndicates.
3. To explore alternative views on organisational management and leadership in order to expand the collective understanding of the Senior Management Team about how to more effectively harness the energy of the staff to realise our vision.
4. To build a greater sense of common purpose and collegiality amongst the members of the Senior Management Team.
5. To provide opportunities for the Senior Management Team to address issues they identified as important in the 2000 Seminar Series evaluations.

Evidence points should include the following:

- Evidence that you have participated in the seminars and that you have been an active member of your Learning Syndicate.
- Evidence that you have a professional learning plan and that you have realised all aspects of that plan during 2001 and that you have completed a minimum of 60 hours of professional learning.
- Evidence that you have used the strategies discussed during the work undertaken in the seminars in relevant contexts.
- Evidence of contribution made to the facilitation of a broader staff involvement in the definition and development of a Thinking Curriculum.
- Evidence that all teachers you facilitate have completed their professional development plan and their professional learning has involved at least 30 hours professional development.
- **GOAL 3**

Action Research Project on Effective Teaching and Learning.

Each member of the Senior Management Team will be required to join a small professional learning team and to complete an action research project. The team does not have to contain other Senior Managers.

Where possible, teams should share a year level, and preferably have a class in common. If you have already been assigned to a Year 7 or a Year 8 team you will work with them. If not you will need to form a team of 2 to 4 teachers from the same House and where appropriate focus the action research project on Years 9 or 10. If you have not been assigned to a House you should form a small team with other Senior School teachers and the action research project should focus on Year 11 or Year 12.

Your team will be asked to identify a project that they would like to work on. Some examples of projects you might like to consider include:

- The explicit teaching of the generic skills and attributes (Learning to Learn Program) and consideration of the effectiveness of these skills and attributes in contributing to the development of autonomous learners.

- Identifying a component of the draft map of What is powerful learning? to explore and research.
  1. For example, the team may decide to explore the impact of using a constructivist teaching methodology on student learning outcomes, or
  2. the team may explore means of embedding feedback and reflection frameworks into the curriculum program to assist all students to assume responsibility for the continual improvement in their learning, or
  3. the team may decide to explore the appropriateness and effectiveness of Feuerstein's mediated learning approaches in the classroom.
- The development of a challenging cross-curriculum unit which is based on a fertile question and which seeks to explicitly develop student's higher order thinking skills.
- The development, trialing and evaluation of methods of assessing the generic skills and attributes.

Professional development will be provided on action research methodology and support will be provided through the in-house PD program. Teams are requested to have completed an outline of their project on the attached proforma and to have provided a copy to their facilitator by the end of week 7. A brief report of team findings should be prepared for Curriculum Committee by the beginning of Term 4.

This goal seeks to acknowledge the work teachers have already done in this area while encouraging you to continue to update your professional knowledge and to explore means by which you can further improve your classroom practice.

You should also reference the Glen Waverley Secondary College adaptation of the ACOT phases of change model, the Teaching and Learning section, and place yourself at the entry, adoption, adaptation, appropriation or invention level. You should aim to move to the next level during the course of the year.

As part of the appraisal cycle you should assemble an evidence portfolio over the course of the year which reflects the process used to achieve the agreed goals. The evidence portfolio should be tabled at the mid-cycle interview as a work in progress and should give a clear indication of your progress towards achieving your goals. The evidence you compile should clearly and unambiguously demonstrate that the goals set have been met. The process is meant to be a challenging one but also a rewarding one.

#### MEMBERS OF THE SENIOR MANAGEMENT TEAM 2001

Darrell Fraser	College Principal	
Gerry Schiller	Assistant Principal	
Dianne Peck	Assistant Principal	
John Roodenburg	Head of Senior School	
Bob Bramble	Head of Middle School	
Judy Petch	Head of Junior School	
Julie Hughes	Head of Curriculum	

Annette Gilbert	Head of Science	
Margaret Davies	Head of Mathematics	
Robert Bryson	Head of English	
Judith Jesser	Head of SOSE	
Larry Donnellan	Head of Health and PE	
Colin Symons	Head of Technology	
Michael Fitzgerald	Head of Arts	
Bruce Turner	Head of Music	
Gerard Bate	Head of LOTE	
Julie Shelton	Head of ESL	
Sally-Ann Venables	Head of Information Services	
Frank Aloisio	Technology Development Manager	
Ben Cushing	Network Manager	
Ron Schlosser	Intranet/Internet Manager	
Colin Warner	Navigator School Project Officer	
Michelle Culling	Manager of Special Projects	

## Senior Management Team Forums

### Glen Waverley Secondary College 2001

The Senior Management Team identified in the evaluations of the Seminar Series 2000 a number of areas they would like to focus their professional learning on in 2001. These included:

- Implementation of the Senge Strategies.
- Conflict resolution strategies and giving and receiving feedback.
- Team building and team dynamics.
- Extended time for an in-depth pursuit of the ideas and processes used in the forums during 2000.
- Classroom dynamics consistent with the espoused vision and values statement.
- Alternative views on leadership and management.
- Adolescent learning and dealing with student underachievement.

The Senior Management Team will participate in a series of seven after school forums and one Saturday forum during 2001. Each of the seven after school forums will start at 3.30 pm and run for two hours finishing at 5.30 pm. Refreshments will be available in A10 at 3.15pm with the work commencing in A9 at 3.30. The Saturday forum will commence at 10.00am and conclude at 4.30 pm.

**Structure of the Eight Forums**

Forum 1	Setting the SCENE  Darrell Dianne Gerry	<ul style="list-style-type: none"> <li>● An Introductory Activity</li> </ul> Industrial-age assumptions about learning. Industrial-age assumptions about school. An Alternative to the Machine Model of Schools. <ul style="list-style-type: none"> <li>● Setting priorities for the year and designing a professional learning plan for each Learning Syndicate.</li> </ul>	Term1
Forum 2		Leadership and Management for the New Millenium An Interactive Seminar conducted by Michael Norman.	Term 1
Forum 3		Saturday Seminar Giving and Receiving Feedback Facilitated by Muffy Hand.	Term 2
Forum 4		Learning Syndicate 3 A Seminar for the Senior Management Team.	Term 2
Forum 5		Learning Syndicate 2 A Seminar for the Senior Management Team.	Term 3
Forum 6		Learning Syndicate 1 A Seminar for the Senior Management Team.	Term 3
Forum 7		Learning Syndicate Time	Term 4
Forum 8		Evaluation and Setting the Strategic Priorities for 2002	Term 4

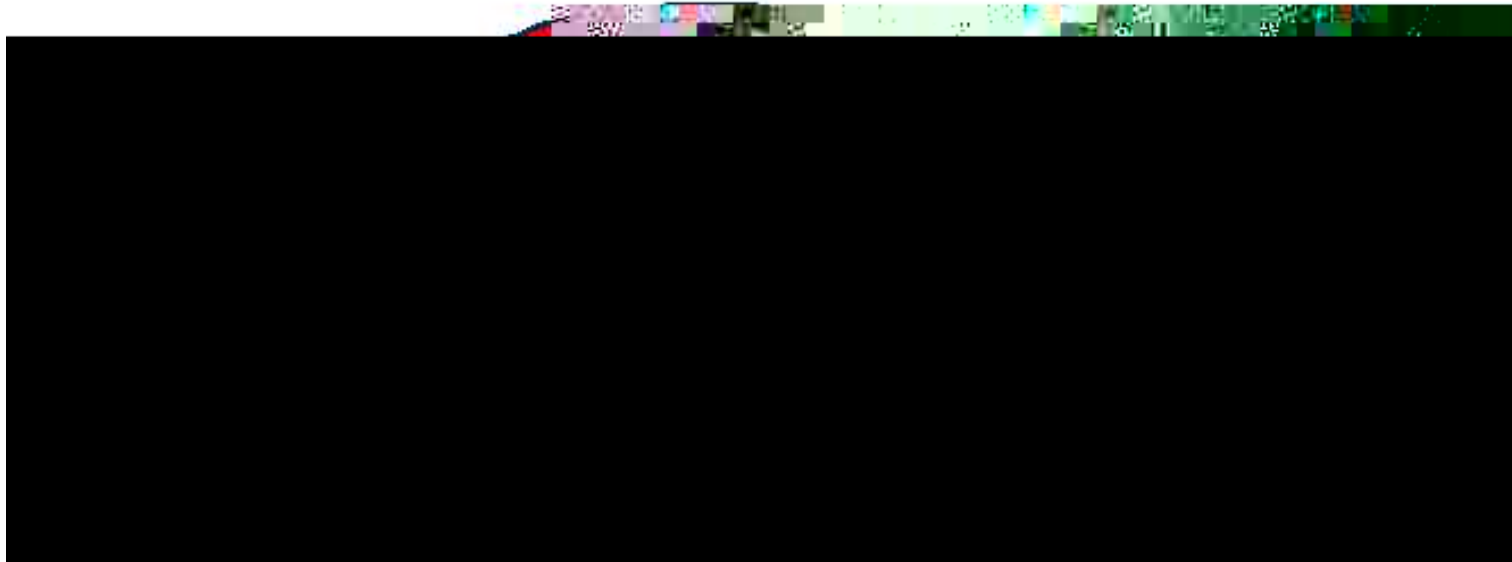
**Learning Syndicates 2001**

Each member of the Senior Management Team will join a Learning Syndicate, the members of which will work together for the entire year. The purpose of the Learning Syndicate is to form a smaller supportive professional unit that can focus on the needs of the individuals within

that team while still addressing the broader more systemic issues the entire Senior Management Team will consider during 2001.

Each Learning Syndicate will determine the way in which they will operate during the eight Senior Management Forums, recognising that each syndicate will have responsibilities that involve the whole group during the seminars. There will be an overarching framework for the work of each Learning Syndicate that will provide coherence to the larger group's work and that will build on the program undertaken in 2000. The framework involves Senge's Fifth Discipline and uses a three legged stool as a metaphor for organisational health.

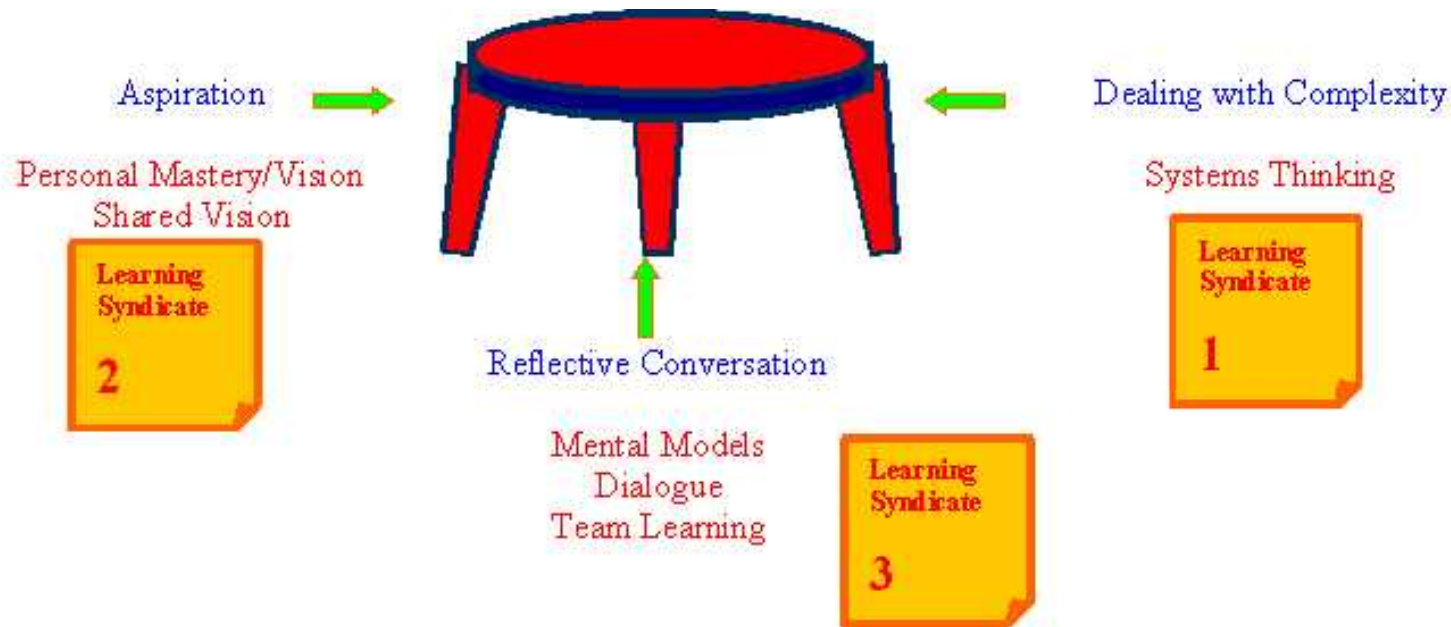
## Core Learning Competencies



It can be argued that each of the three Core Learning Competencies must be addressed if cultural change is to be achieved. To ignore one will shorten a leg and topple the stool. Each of the core competencies has a set of thinking tools that provides an alternative way of looking at problems and generates a new way of thinking about the dilemmas confronted in a workplace. The Senior Management Team had an opportunity in 2000 to examine Senge's work and to consider some of the strategies and tools that different organisations had used to build a shared vision or to surface the assumptions individuals bring to every situation. 2001 will provide the opportunity for the team to build skills in the use of these thinking tools. We need to unlearn old habits and old paradigms and learn new habits with new tools to assist us to

think in new and different ways about the challenges we face in building a learning community.

Therefore the Senior Management Team will work within the Core Learning Competencies framework to build our capacity to use these thinking tools in all aspects of our work. Each Learning Syndicate will *take a leg* and focus on building the team's skill in using the tools to build that competency.



There are a number of resources available to assist each syndicate including:

- The Fifth Discipline: The Art and Practice of the Learning Organisation, Peter Senge 1990
- The Fifth Discipline Fieldbook: Strategies and Tools for a Learning Organisation, Peter Senge 1994

- Schools That Learn: A Fifth Discipline Fieldbook for Educators, Parents and Everyone Who Cares About Education, Peter Senge 2000
- The Society of Organisational Learning Homepage <http://www.solonline.org/>

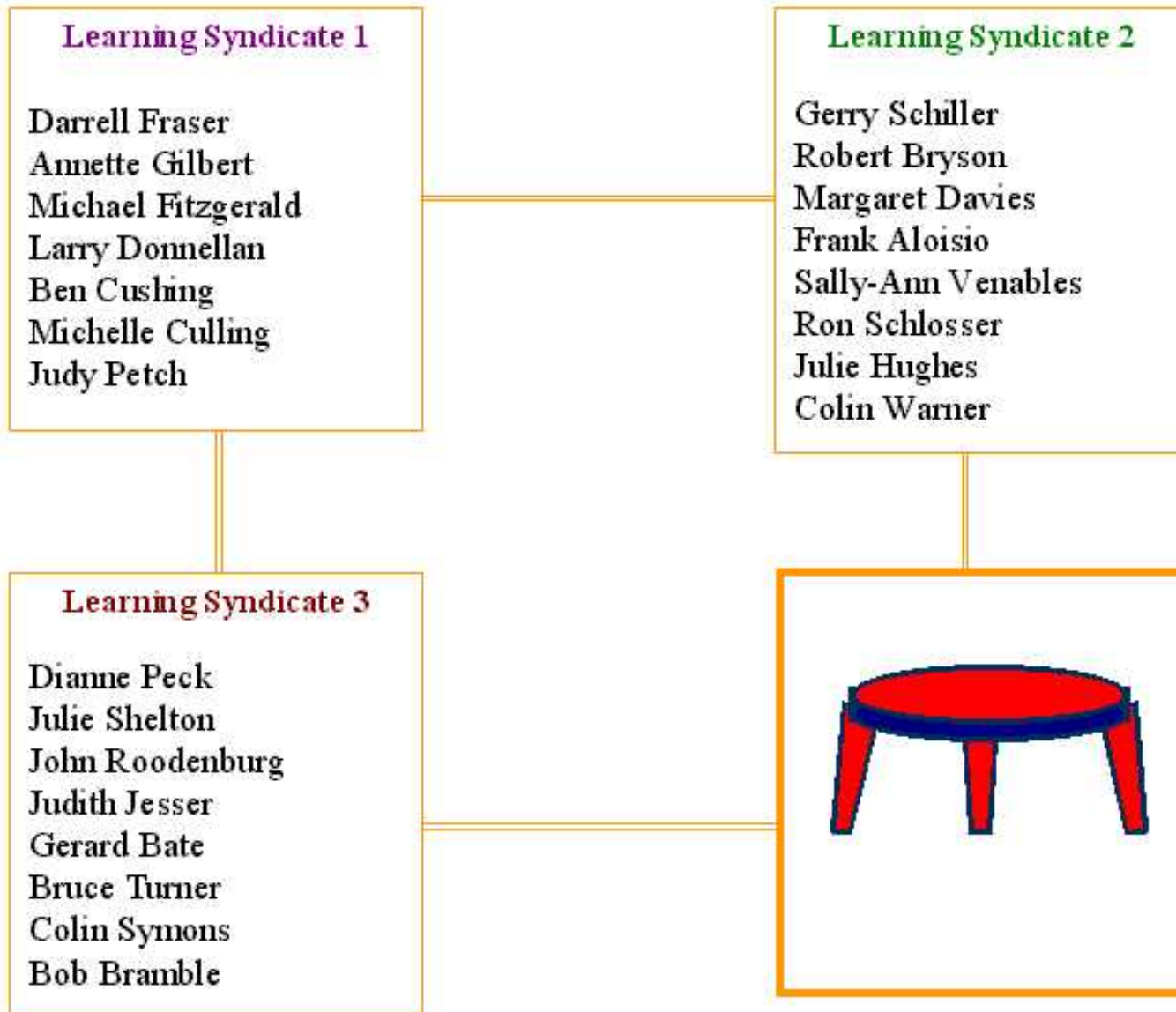
The first seminar will establish the operational framework for the year, however certain parameters will need to be incorporated into any plan a Learning Syndicate designs for its professional learning during 2001:

- During Forum 1 each Learning Syndicate will generate a professional learning plan for the group and will decide on the framework under which the team will operate. It is anticipated that the skills learnt in 2000 from the Senge Forums will be embedded into all of the interactions between team members.
- Each Learning Syndicate will run one of the eight, two-hour forums for the Senior Management Team on one of the professional learning needs identified in the 2000 forum evaluations but also focusing on building the Core Learning Competency the syndicate has been assigned.
- Each Learning Syndicate will be responsible for running one staff meeting as an interactive small group forum focussing on an issue that is relevant to the work the school is currently involved in. For example:
- Restructuring the Parent Teacher Interview Process. Staff could be provided with an article to read before the staff meeting Reframing The Parent Teacher Conference , discussion groups could consider a range of options and draft a series of recommendations for the entire staff to consider. OR
- An article on learning could be distributed for general discussion at a staff meeting. OR
- Staff could be introduced to one of the organisational thinking tools.
- All of the Senior Management Team will take part in a full day seminar in term 2 that will be facilitated by an external consultant. Giving and receiving feedback was identified as an area of required professional learning in the 2000 seminar evaluations. Muffy Hand will be booked to run this session for us. The full day seminar will take the place of one of the after school forums and it will be conducted on a weekend.
- Each Syndicate will be provided with a budget of \$1500 for the year that must fund any external provider the team brings in, any external activity they attend and the two afternoon teas which the group must cater for.

Learning Syndicates may choose to combine for certain activities or to share the cost of an external presenter.



# Learning Syndicates 2001



## Glen Waverley Secondary College

# 2001 TEACHER APPRAISAL & REVIEW

### Victorian Government Schools Agreement 2001

The *Victorian Government Schools Agreement 2001* contains commitments to high standards of teaching and learning linked to improving student learning. It builds on systems and criteria already operating in schools and enables recognition of the work of teachers while also enabling identification and management of areas of improvement in a positive and supportive environment.

The objective of the annual review for classroom teachers is to:

- Improve learning outcomes for students by improving the quality of teaching
- Integrate policies, practices, standards and procedures that link the goals and objectives of the school and staff
- Set agreed performance expectations and the processes for measuring performance against those expectations
- Focus on the professional development of every teacher
- Link incremental progression to an annual assessment against statewide standards.

### Context at Glen Waverley Secondary College

**The context for the 2001 Appraisal & Review process will be the 2001 Strategic Focus and the 2001-3 College Charter, which is yet to be finalised. However the focus areas selected in the Strategic Focus reflect the priorities determined in the 2000 Verification Report for the next Charter. The 2001 Strategic Focus contains five focus areas together with targets that will assist the College to achieve its goals and priorities. The focus areas for 2001 are similar to 2000, however the targets have changed to reflect our Vision and Values and its primary goal of creating and sustaining a learning community.**

The focus areas are:

- The Learner
- Teaching and Learning

- Learning Technologies
- The Learning Community
- The Future

All staff in the College participate in some form of appraisal – teaching staff, the Principal class and the teaching support staff. All staff shares the responsibility for creating and sustaining a learning community that results in a sense of self-worth and personal growth for all learners. A major outcome of this should be improved educational outcomes for all students.

A number of very innovative programs have been initiated in recent years and each of these programs is an attempt to explore alternative approaches to program provision that could enhance the work already done by teachers in their classrooms. The programs are structured around the findings of educational researchers and the practice and ideas of teachers both from within this school and from any other school where good practice is found. All staff will be actively encouraged, through the appraisal process and in particular the action learning teams, to contribute to these programs and to share the work they are doing with others so that the body of knowledge the College owns continues to grow and advantage all students and teachers.

The purposes of our appraisal system are:

To provide all staff with an opportunity to discuss the nature and purpose of their work for the year and to set goals which are consistent with the goals of the College. It also provides an opportunity to give and provide feedback on the work undertaken and to provide the teacher with support if it is required.

To channel the energy of all staff into achieving the Charter goals and priorities and to ensure that all staff have the knowledge and skills they require to make an effective contribution to the College.

To ensure that all staff continue to participate in professional development which enhances their professional growth.

To provide a vehicle to achieve the goals of the Department's annual review framework.

If we are to create a learning organisation (refer Focus Area 4 in the Strategic Focus) it is essential that all members of our community view themselves as learners and participate in activities designed to continually increase their learning. While continuing to provide access to external professional development activities, the College has been at the forefront in recent years in offering a high quality in-house professional development program which seeks to support staff in their professional growth and in the achievement of their appraisal goals.

The *Victorian Government Schools Agreement 2001* also includes the requirement of *teachers undertaking professional development to upgrade their skills to deliver the higher quality educational outcomes expected by the community*. With this in mind, all teachers will again be asked to complete a personal professional development plan that outlines the professional learning they will undertake in 2001. This can occur through participation in:

- a professional action learning team
- the in-house professional development program
- learning area meetings that have a specific professional development focus
- learning area forums
- external professional development activities

- **House meetings that have a professional development focus.**

**The professional learning should incorporate activities that specifically relate to the implementation of the College s Vision and Values including implementation of powerful learning approaches, the Learning to Learn program and the effective classroom use of computer based learning technologies. The importance of maintaining discipline knowledge and the consequent implementation of the revised VCE and CSF should also be a priority.**

**Each teacher will negotiate a professional development plan with their facilitator (a proforma for this is attached) and undertake to keep a professional development journal. The Professional Development Coordinator will assume responsibility for keeping an accurate record of the number of hours of professional learning completed by each staff member. It is suggested that each staff member should aim to complete approximately 30 hours of professional development during the year.**

A copy of the all relevant documents has been placed on the Intranet under **Staff Resources / Appraisal** . These documents should enable you to prepare a draft of your goals for your initial meeting with your facilitator.

## ***APPRAISAL & REVIEW TIMELINE 2001***

<b>TERM 1</b>	
<b>Week 1</b>	Draft documentation (2001 Strategic Focus and 2001 Appraisal and Review) distributed to facilitators for feedback and finalisation.
<b>Week 2</b>	<b>Finalised documentation distributed to all staff after a briefing by Darrell Fraser at a staff meeting.</b>
<b>Week 3</b>	An overview of action research and additional detail on requirements for Goal 1 to be provided at the staff meeting.
<b>Week 4</b>	All staff to complete a draft of their appraisal goals and professional development plan by the end of week 4. A copy of the goals should be handed to your facilitator prior to your initial interview.
<b>Week 6</b>	Facilitators to have completed the initial interviews and to have confirmed the goals of all staff they appraise by the end of Week 6. A detailed outline of Goal 1 will not be required at this stage however the meeting should involve a discussion of the appraisee s thinking about goal 1.
<b>Week 7</b>	Teachers to submit a completed outline of their action research project to their facilitator.

Week 8	<p>Facilitators to forward the following to Alison Oliver.</p> <ul style="list-style-type: none"> <li>● Summary of the professional development requirements identified through the interviews. The Professional Development Working Group will use this information to develop the Term 2-4 Professional Development Program.</li> <li>● Copies of the outlines of the action research project to be completed by teachers they are appraising.</li> </ul>
<b>TERM 3</b> <b>Week 1-Week 3</b>	<p>Mid-cycle review meetings to be completed for all staff by the end of Week 3 Term 3. Facilitators are reminded that issues that emerge from these meetings that might indicate a member of staff is unlikely to achieve their goals by the end of the year and/or are unlikely to receive a satisfactory annual review should be communicated to Darrell Fraser immediately.</p>
<b>TERM 4</b> <b>Week 6-Week 8</b>	<p>Final evaluation meetings should be completed by the end of Week 8 and the completed proforma should be handed to Alison Oliver for Darrell Fraser's consideration.</p>

## APPRAISAL & REVIEW

Each teacher undergoing appraisal and review should develop two goals. The two goals to be shared by all staff undergoing appraisal are listed below. Staff should use the appraisal proforma and particularise each goal to the studies and classes they teach.

### GOAL 1 Action Research Project on Effective Teaching and Learning.

**Every teacher will be required to form a small professional learning team and to complete an action research project on effective teaching and learning.**

Where possible teams should share a year level, and preferably a class in common. Teachers who have already been assigned to a Year 7 or 8 team will work with that team. Other teachers will be required to form a small team of 2-4 people preferably with other teachers in the same House.

**The team will be required to identify a project that they wish to work on. Possible projects include:**

- Explicit teaching of the generic skills and attributes (Learning to Learn program) and consideration of their effectiveness in the development of autonomous learners. This would be particularly appropriate for Year 7 teams.
  - Selection of an area from the draft 'What is powerful learning?' document to explore and research eg - the team may decide to explore the impact of using a constructivist teaching methodology on student learning outcomes.
- the team may explore means of embedding feedback and reflection frameworks into the curriculum program to assist all students to take shared responsibility for continual improvement in their learning.
- the team may decide to explore the appropriateness and effectiveness of Feuerstein's mediated learning approaches in the classroom.

- Development of a challenging cross-curriculum unit which is based on a fertile question and which seeks to explicitly develop students higher order thinking skills.
- Development, trialing and evaluation of methods of assessing the generic skills and attributes.

Professional development will be provided on action research methodology and support will be provided through the in-house PD program.

Teams are requested to have completed an outline of their project on the attached proforma and to provide a copy to their facilitator by the end of Week 7. A written reflection on the outcomes of the action research will be required to be provided to Curriculum Committee by the start of Term 4 so that implications for the 2001 program structure can be considered. In addition, a short presentation of your findings will be made, possibly at a learning area meeting details to be determined.

In addition, to complete appropriate professional development on teaching and learning during 2001 **much of this should be linked to the focus of your action research project.**

This goal could satisfy part of Professional Standards 1, 2, 3, 4, 7 & 8

Each teacher is to consider the GWSC adaptation of the ACOT phases of change model (Teaching and Learning section) and to place themselves as either at the entry, adoption, adaptation, appropriation or intervention level. During the course of the year each teacher should aim to consolidate at the existing level and/or move to the next level.

## GOAL 2 Learning Technologies

To explore, trial and evaluate means of extending my current classroom use of learning technologies to enhance student learning outcomes. This project could be done with a team.

Possible projects include:

- Exploration of the effective use of XSIQ materials with VCE classes
- Storyboarding of a multimedia project which will be developed in consultation with support staff
- Developing a process to enable students to negotiate and develop their own multimedia resources
- Use of discussion boards to promote student collaboration.
- Implementation of collaborative projects with students in other schools
- Extension of an existing resource or project
- Designing an innovative learning experience around resources that already exist.
- Development of resources that exemplify a constructivist approach

*(For further ideas and support see CWa or FAI)*

To develop and place relevant curriculum materials on the intranet as negotiated with the relevant learning area coordinator/s.

### **In addition, to complete appropriate professional development on effective classroom use of learning technologies during 2001.**

This goal also seeks to acknowledge the work individual teachers have already done in this area while encouraging them to continue to explore means by which they can continually improve the effective use of learning technologies with each class they teach. Teachers, in consultation with their facilitator, are required to identify particular learning outcomes they wish to enhance through the use of learning technologies, to complete relevant professional development and then to re/design, implement and evaluate activities which seek to enhance those outcomes.

Each teacher is to consider the GWSC adaptation of the ACOT phases of change model (Learning Technologies section) and to place themselves as either at the entry, adoption, adaptation, appropriation or invention level. During the course of the year each teacher should aim to consolidate at the existing level and/or move to the next level.

This goal could satisfy part of Professional Standards 1, 2, 4, 7 & 8

### **Meeting the Professional Standards**

**As in the past, all teachers are required to satisfactorily meet each of the Professional Standards to achieve a satisfactory annual review.**

A copy of the Professional Standards is attached together with details of evidence that would support satisfactory achievement. Teachers must provide evidence of how they have met each of these standards during the appraisal and review process.

## **FACILITATORS**

### **APPRAISAL & PERFORMANCE REVIEW 2001**

<b>D Fraser</b>	<b>D Fraser/D Peck</b>	<b>D Fraser/G Schiller</b>	<b>G Schiller</b>
D Peck G Schiller P. Daniel B Hemphill B Cushing	J Hughes C Warner	J Roodenberg B Bramble J Petch F Aloisio R Schlosser	L Haby T Barry M Duncan T Kiers R Moore
<b>D Peck/J Hughes</b>	<b>J Roodenberg</b>	<b>B Bramble</b>	<b>J Petch</b>

R Bryson M Davies A Gilbert J Jesser L Donnellan C Symons G Bate M Fitzgerald B Turner J Shelton S Venables M Culling	J Kanis L Bamford V Penso S Thomas J Ross	R Imam M Slifirski N Robinson E Tsalikis R McKinnon	C Bosna A Cohen D Washfold M Torok Geoff MacLeod J Clancy
<b>R Bryson</b>	<b>J Shelton</b>	<b>M Davies</b>	<b>A Gilbert</b>
C Blamey S Donat S Grammaticos R Hastings C McCarthy T McGettigan S Mascarenhas C Stephenson* T Tobin R Webster J Whitham	T Barkei L Evans T Terzopoulos S Young Y Yan	A Crosby J Curr P Fraser T Herft* (1yo) D Hughes K Lam B Laughton I Marshall Gael McLeod S Oh R Panayi* P Wheaton	J Bethune V Bainbridge F Buley P Francis P Gray P Haines W Kapust P Lee J Lintott M Millward C Need B Umbrasas
<b>L Donnellan</b>	<b>G Bate</b>	<b>C Symons</b>	<b>J Jesser</b>
B Crossett D Gow R Heighton J McRae* (1yo) E Natsis C Ryan R Smith S Swadesir M Toomey J Woodward	J Antonin C Bonafede L Chan V Isaac L King P Yang L Wang	A Dube C Dunwoody M Halstead-Lyons* J Hoppe Z Papalexiou A Payne B Pratt P Quodling S Swadesir N Young	F Charlton H Cook R Havea R Hoskin A Lapins G Moreland M Morrow R Pickersgill J Simmons C Slocombe
<b>M Fitzgerald</b>	<b>B Turner</b>	<b>S Venables</b>	<b>T Barry</b>



N Grant* (1yo) C O Keefe C Sanders N Schwartz* (1yo) N Treacey C Wiltshire	L Byass A Gangoiti M Barrow W Cohen E Gibson S Haggar S Hepworth	M Fraser M Kennedy K Milne M Roy	K Strachan
<b>P Daniel</b>	<b>B Cushing</b>		
<b>C Fegent</b> S Giblin M Gunstone H Guscott L Marchetti J Munday C Nelson A Oliver D Walsh M Stewart J Griffiths S Sinclair V Sinclair DACL s	C Lee C Planche		

**Part of the appraisal process for new and returning staff will involve working with a mentor. Each of the staff identified with an asterisk have been allocated a mentor who will work with the facilitator during the appraisal cycle as well as with the staff member during the induction process and at regular intervals during the year.**

**Teachers identified with (1yo) are to be reviewed against the Dimensions of Teaching instead of the Professional Standards facilitators and appraisees to see DPe or GSc for details.**

**Glen Waverley Secondary College**

# PROFESSIONAL STANDARDS

# A Guide For 2001

All teachers undergoing appraisal and review must also satisfy the requirements of the Annual Review Framework to achieve a satisfactory annual review.

Facilitators must complete the relevant proforma and therefore all staff should ensure they are fully aware of the professional standards and the examples provided below. Staff should then work with their facilitator to ensure that the professional standards have been met.

## PROFESSIONAL STANDARDS

1. **Demonstrate a high level of knowledge of relevant curriculum areas, student learning processes and resources, and can apply them in implementing programs that enhance student learning.**

Each teacher must produce evidence that reflects the following:

1. A clear understanding of the principles of effective teaching and learning (as outlined in the GWSC document Powerful Learning)
2. Use of effective classroom management and organisation strategies
3. Implementation of the Generic Skills and Attributes in all classes
4. Implementation of CSFII in Year 7 to Year 10
5. The appropriate use of computer based learning technologies
6. A sound understanding of the curriculum areas being taught.

1. **Demonstrate high-quality classroom teaching skills and successfully employ flexible and adaptive approaches and constructive strategies to allow students to reach their full potential.**
2. Evidence and examples of classroom activities that demonstrate an attempt to improve teaching practice in each of the areas outlined in the GWSC document Powerful Learning
3. Evidence of the explicit teaching and use of strategies to assist students to become autonomous learners (generic skills and attributes)

1. **Successfully apply assessment and reporting strategies that take account of relationships between teaching, learning and assessment.**

Evidence that:

1. Assessment and reporting strategies used complement and support the learning process
2. Accurate and comprehensive records of student progress and achievement are maintained
3. Meaningful reports on student s performance are provided to students and parents.

1. **Respond effectively to emerging educational initiatives and priorities.**

Evidence of:

1. Participation in PD activities related to effective Teaching and Learning and use of Learning Technologies
2. Implementation of thinking and learning strategies (as outlined in the Generic Skills and Attributes)
3. Having used a variety of appropriate Learning Technologies with every class
4. Having placed all 7-10 students on the appropriate CSFII Level.

1. **Demonstrate high-level communication skills and professional behaviour when interacting with parents or guardians, students and colleagues.**

All teachers are expected to take part in the following school functions and such participation will validate Professional Standard 5.

1. Parent Teacher Nights
2. Open Night
3. Learning Area Meetings and Forums
4. Team work with other House teachers
5. Presentation Night.

Teachers could also provide additional evidence in relation to this standard by providing evidence of involvement in:

1. Information Nights
2. Practicums
3. Other school functions.

1. **Successfully organise and manage aspects of the wider school program.**

Teachers who don't hold designated management roles could demonstrate achievement of this standard by, for example:

1. involvement in sport program
2. extra curricular program
3. lunchtime activities
4. coordination of a subject at a year level
5. participation in committees eg Curriculum Committee, Consultative Committee, School Council

1. **Demonstrate improved teaching and performance skills through critically evaluating professional practices.**

Evidence of, for example:

1. Use of action research to explore an aspect of effective teaching and learning.
2. Use of student surveys to evaluate units and/or classroom practice
3. Changed teaching practice in a particular unit

4. Keeping a professional journal (over a period of two weeks/during a particular unit)
5. Evaluation of a sequence of lessons taught which incorporate new teaching and learning strategies.

**1. Provide high-level professional assistance to other teachers in classroom related areas.**

Evidence of for example:

1. An individual contribution to the learning area Intranet site
2. Sharing successful teaching and learning strategies and/or curriculum materials with colleagues
3. Acting as a mentor to other teachers
4. Trialling team teaching
5. Participation in practicums.

2001 APPRAISAL	NAME	FACILITATOR
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**GOAL 1 ACTION RESEARCH PROJECT ON EFFECTIVE TEACHING AND LEARNING**

Team members:

Project Focus:

<b>Implementation Strategies</b>	<b>Timeline</b>
<b>Method of Evaluation</b>	<b>Timeline</b>
<b>Completion of Report</b>	<b>Timeline</b>

2001 APPRAISAL	NAME	FACILITATOR
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**GOAL 2 LEARNING TECHNOLOGIES**

Team members:

Areas of Focus:

Strategies to achieve goal

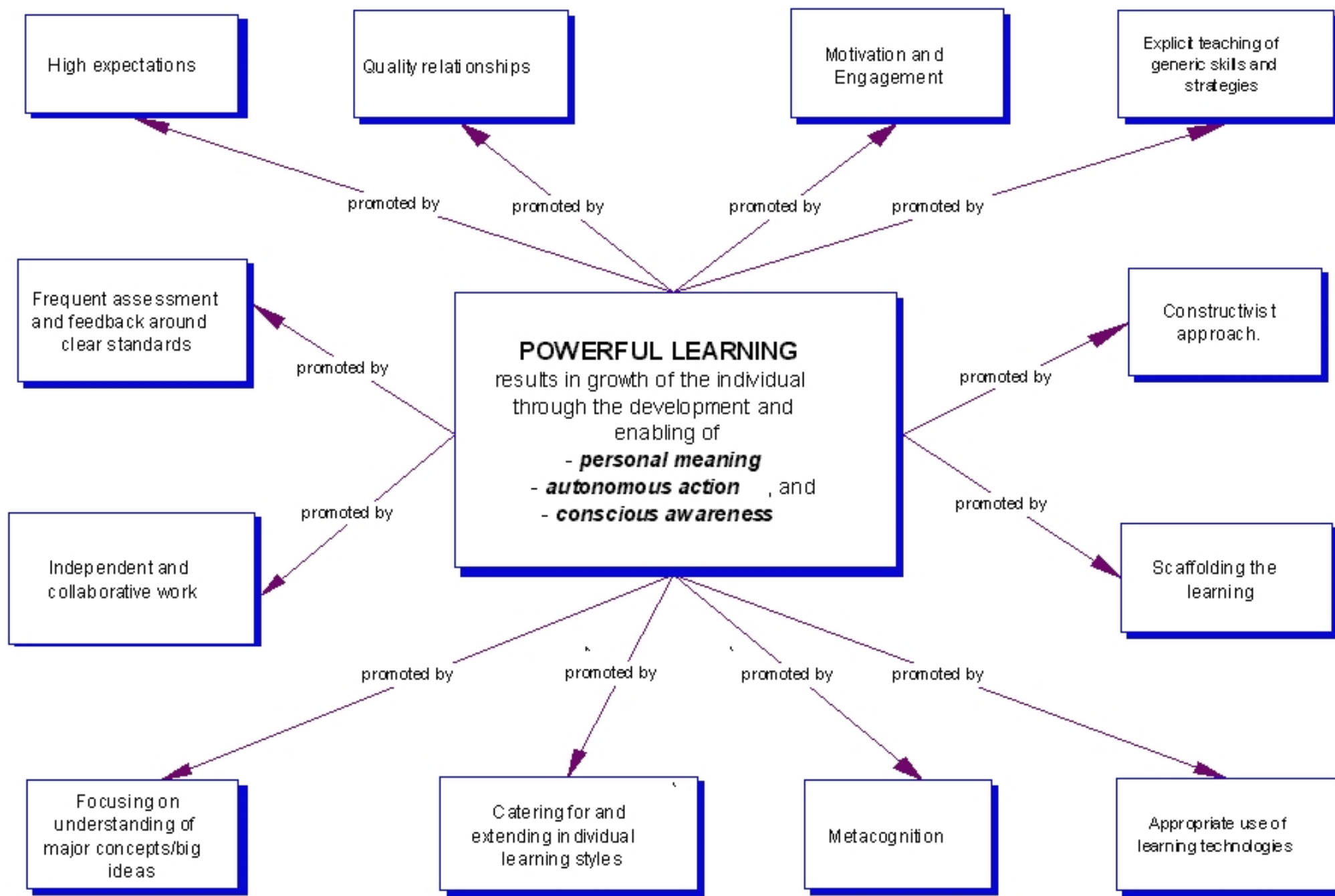
Timeline

Indicators

2001 PROFESSIONAL DEVELOPMENT PLAN		NAME		FACILITATOR	
GOALS		PROFESSIONAL DEVELOPMENT NEEDS - Activities and/or Resources		TIMELINE	EVIDENCE OF ACHIEVEMENT

TEACHING AND LEARNING GOAL (implementation of action research project)			
LEARNING TECHNOLOGIES GOAL			
OTHER to meet Professional Standards/Dimensions of Teaching			

Glen Waverley Secondary College **DRAFT Powerful Learning Statement**





Glen Waverley Secondary College

## PROFESSIONAL DEVELOPMENT NEEDS -2001

Facilitator:

Please list any Professional Development needs identified during the initial interview by the staff you are facilitating.

Professional Development Needed	No. of staff who require it
1.	
2.	
3.	
4.	
5.	
6.	
7.	

Glen Waverley Secondary College-

## Phases of Change when supporting implementation of Vision and Values/Powerful Learning

Phase	Expectation	Examples (Teaching and Learning)	Examples (Learning Technologies)
<b>Entry</b>	<ul style="list-style-type: none"> <li>● <i>Questioning self about the type of learner we should be supporting students to be.</i></li> <li>● <i>Beginning to play with notion of autonomous learners</i></li> <li>● <i>Beginning to reflect on current classroom practice.</i></li> </ul>	<ul style="list-style-type: none"> <li>● Teacher-centred classroom.</li> <li>● Students not supported or encouraged to be risk-takers.</li> <li>● Mainly individual work.</li> <li>● Only 1-2 learning styles catered for.</li> </ul>	<ul style="list-style-type: none"> <li>● Teacher has limited skills and lacks confidence to use LTs in classroom.</li> </ul>

<b>Adoption</b>	<i>Teacher is aware of Charter but a number of areas are not effectively implemented. Teacher is beginning to recognise some of these areas and to work on them. Tends to be in sporadic manner.</i>	<ul style="list-style-type: none"> <li>● Classroom tends to be mainly teacher-centred.</li> <li>● In most classes, maintenance of established instructional patterns and curriculum.</li> <li>● Some use of group work.</li> <li>● No explicit teaching of thinking skills or focus on supporting students to develop the skills and attributes of effective learners.</li> </ul>	<ul style="list-style-type: none"> <li>● Attempts to use LTs on limited basis maybe 2-3 times per year.</li> <li>● Uses LT activities that have been developed by others.</li> <li>● Focus on use of Word, Internet (for research), CD-ROMs.</li> </ul> <p>Tends to use technologies as power tools .</p>
<b>Adaptat-ion</b>	<i>Teacher is able to clearly recognise areas of Charter that they need to work on and adopt new approaches in an attempt to more fully implement it.</i>	<ul style="list-style-type: none"> <li>● Teacher is more flexible. See that a part of their role could be as facilitator of learning process.</li> <li>● More student-centred approach.</li> <li>● Attempting to implement and trial integral learning model into curriculum design for some units of work</li> <li>● Using a range of teaching and learning strategies to cater for and extend range of learning styles of students.</li> <li>● Explicitly introducing elements of Learning to Learn program into classes cooperative learning, higher-order thinking skills, metacognition.</li> </ul> <p>Working more closely in teams than in the past.</p>	<ul style="list-style-type: none"> <li>● Able to put materials on Intranet.</li> <li>● Confident in using a range of software applications.</li> <li>● Able to design own activities.</li> <li>● Uses LTs to provide experiences and learning that wouldn t have been offered in the past.</li> </ul>

<b>Appropriation</b>	<i>Teacher is routinely implementing all aspects of the T&amp;L Charter. Many students operating effectively as autonomous learners.</i>	<ul style="list-style-type: none"> <li>● Experimentation with wide range of different approaches to teaching and learning, classroom organisation.</li> <li>● Experiment with student groupings effective use of learning centre model.</li> <li>● Giving students more choice in, and responsibility for their learning.</li> <li>● Students aware of a range of skills and strategies they can use when approaching a task.</li> <li>● Works collaboratively with a team of teachers to deliver curriculum.</li> </ul>	<ul style="list-style-type: none"> <li>● Teachers aware of range of LTs and their appropriate application in all classes.</li> <li>● Much greater use of network and on-line delivery of curriculum.</li> <li>● Students routinely select and use a range of appropriate LTs to complete task.</li> <li>● Students start to take control of their use of software adapt it their needs.</li> </ul>
<b>Invention</b>	<i>Teacher is reflective and continually looking at ways to restructure learning and curriculum design to better meet student needs.</i>	<ul style="list-style-type: none"> <li>● Balanced and strategic use of direct teaching and project-based teaching.</li> <li>● Creative approaches to structuring of curriculum more integrated curriculum.</li> <li>● Teachers and students work creatively together.</li> </ul>	<ul style="list-style-type: none"> <li>● LTs used as an integral tool to restructure learning and curriculum design.</li> </ul>

[1] Victorian schools receive a formularised annual global budget from which they have to meet all salaries and recurrent costs.

[2] In Victoria schools are clustered into like school groups for the purposes of accountability, reporting and comparing school performances including a state wide testing program. Group 3 contains some of the state's leading schools.

[3] The Feuerstein Instrumental Enrichment program attempts to identify cognitive dysfunction a student may be experiencing and to put in place strategies to rectify such dysfunction.

[4] The Focused, Organised, Resourceful, Creative and Empowered (FORCE) Program was established to support students at risk of leaving school early. The objectives of the program were to assist students to re-engage with their learning and connect with adults and peers.

[5] In July 1999, the foundation principal of the amalgamated GWSC retired. The Assistant Principal, who had been at the school since before the amalgamation, successfully applied for the position of Principal. Principals of Victorian government schools at the time were appointed by a local selection panel which included representation from College Council, a principal class peer and merit and equity panel member.

[6] In the mid nineteen nineties the Australian Government in collaboration with the states and territories was attempting to establish a national curriculum framework and had developed a broad framework design known as the National Profiles.

[7] The Middle Years Research and Development Project (MYRAD) is funded by the Victorian Department of Education, Employment and Training and managed by the Centre for Applied Educational Research (ACER) at the University of Melbourne.

- [8] The Innovation and Best Practice Project (IBPP), led by Professor Peter Cuttance from the University of Sydney, involved studies and analysis of innovative projects in Australian schools.
- [9] The Equivalent National Tertiary Rank (ENTER) is a system whereby scores in all subjects are statistically moderated. Achieving a rank of 90 places one in the top 10% of final year students.
- [10] Schools in Victoria engage in a process of triennial review. As part of the process they produce a triennial report giving an account of how well they have achieved aspects of their strategic plan for the past three years.
- [11] The annual survey of parent opinion is conducted across Victoria and the outcomes are reported on a seven point scale.
- [12] The term Learning Centres is used to refer to the placement of computers within a classroom and in associated withdrawal spaces.
- [13] Learning Technologies Section within the Department of Education, Employment and Training, Victoria, funded the position of a full time Project Officer in each of the seven Navigator Schools from October 1995. The role of the project Officers was two fold: to provide support within their school for staff to effectively integrate learning technologies in all learning areas; and to provide statewide professional development support in the form of three day teacher practicums and one day leadership seminars. The Department subsidised the attendance of two teachers from every government school in the state to attend a teacher practicum over three years.
- [14] The Schools of the Future Program was Victorian Government policy introduced in 1994. It made provision for schools to manage their own Global Budgets and monitored performance through an accountability framework coordinated by an Office of Review with the Department of Education, Employment and Training.
- [15] Legend: PPP=greater than 80% of classrooms observed demonstrated this feature. PP=greater than 60% of classrooms. P=greater than 40% of classrooms.
- [16] The Curriculum Standards Framework (CSF) documents the learning outcomes in nine key learning areas for all students from inception to Year 10. Reporting against these learning outcomes is compulsory for all teachers in government schools. Individual school performances in English, Mathematics and Science are compared with a state average.
- [17] \* - highest school in group 3
- [18] Schools in Victoria are able to assign five pupil free days each year.
- [19] Education Ministers in Australia have worked towards developing a set of generic skills or key competencies that are considered necessary for lifelong learning. They include skills such as team work and problem solving.
- [20] MYRAD is the Middle Years Research and Development Project funded by DEET and managed by the Centre for Applied Educational Research at Melbourne University.
- [21] Schools That Learn Peter Senge p 146
- [22] Judi Hirsch worked with Feuerstein in Israel for 10 years and currently works in the Oakland School District, USA, producing remarkable results with students labelled uneducable .
- [23] Peter Senge, Schools That Learn, page 11
- [24] Art Costa and Bena Kallick, Habits of Mind: A Developmental Series.
- [25] June 2000 Verification Report Triennial School Review Page 53