

ED 353 247

SP 034 269

AUTHOR Navaratnam, K. K.
 TITLE Implementation of VCE: Nature of Change, Professional and Organisational Development.
 PUB DATE [92]
 NOTE 21p.
 PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS Change Agents; *Change Strategies; *Educational Change; *Faculty Development; Foreign Countries; Grade 11; Grade 12; High Schools; High School Students; *Organizational Climate; *Program Implementation; Role Perception; *Secondary School Curriculum

IDENTIFIERS Australia (Victoria); Reform Efforts; *Victorian Certificate of Education (Australia)

ABSTRACT

This paper describes the implementation of the Victorian Certificate of Education (VCE), a systemwide reform that calls for curriculum change at senior secondary levels in Victoria (Australia). The system is required to reorganize and develop new organizational structures with full knowledge and assessment of the status, organizational health, and climate of the school where it intends to have direct impact. VCE is a 2-year course covering secondary students in grades 11 and 12. It is examined from 3 perspectives: (1) nature of the change; (2) professional development; and (3) organizational development. Questions addressed in identifying the nature or characteristics of a selected change include: What school structures and processes are required? What resources are needed for implementation? What learning outcomes are being valued? What is the role of the teacher? What is the role of the students? What is the role of the principal and other school leaders? and What is the role of parents? The second section describes the professional development plan considering: approaches, underlying principles, role of outside consultants, extent and nature of teacher change required, teacher types, and improvements to the plan. The final section outlines the organizational changes required to implement the new curriculum. The document concludes with recommendations for a unified implementation of the VCE in Victorian senior secondary schools. (Contains 25 references.) (LL)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED353247

**IMPLEMENTATION OF VCE: NATURE OF CHANGE,
PROFESSIONAL AND ORGANISATIONAL DEVELOPMENT**

DR. K. K. NAVARATNAM

**Program Evaluation & Standards Review Branch
Department of Employment, Vocational and
Further Education and Training**

**PMB 3, South Brisbane, Qld 4101
Telephone: 07 239 3168**

U. S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

K. K. Navaratnam

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC) "

IMPLEMENTATION OF VCE: NATURE OF CHANGE, PROFESSIONAL AND ORGANISATIONAL DEVELOPMENT

School curriculum in Victoria needs modification and the concern about it is widespread among educators and community as a whole. If one had to identify a key element in questions being raised about the education in Victorian schools, curriculum would be among the top contenders. In this paper, curriculum means school education that is relevant and can make a contribution to student's life and work experiences now and beyond school. In fact, providers, learners, and other beneficiaries of school education are currently inquiring about the rationale and significance of curriculum content and methods for our changing life and world of work. In fact, a sampling of society's questions about school education highlights on senior secondary curriculum and its impact on higher education, labour market relevance, and personal development (Batten, 1989). Society's questions also begin to target very basic educational problems: planning and implementing a school curriculum that is relevant for the changing time in which we live and work.

Curriculum change must be perceived well by people before its implementation and the change must be accomplished at the time of its greatest need. Literature abounds with rationale - introduction - strategies - perspectives - principles - guides - and results of planned curriculum change and implementation. There are consultants - experts -subject matter specialists - resource persons - researchers - and evaluators to guide and direct the development and implementation of curriculum change. The combination of both the literature and the people with real life experiences from success, failures, and experience of the past and present curriculum changes which are of local and global origins, intended to provide different perspectives for planners and implementors of school curriculum. Also they reveal that all partners in curriculum change must work together to bring about curriculum implementation that is desired and would bring changes to schooling and education as a whole. As important as such efforts are, attempt first to raise some of the basic questions and concerns that may confront, personalise curriculum change, acquaint affective and cognitive side of the curriculum, and search and research for own strategies of implementation on or before the actual implementation. That is, a curriculum change must be gleaned by all partners beginning from the initiation of the proposed plan. Such a plan must show a vision, imagination, and recreation of what

should be an altogether familiar curriculum and educational setting for effective implementation process.

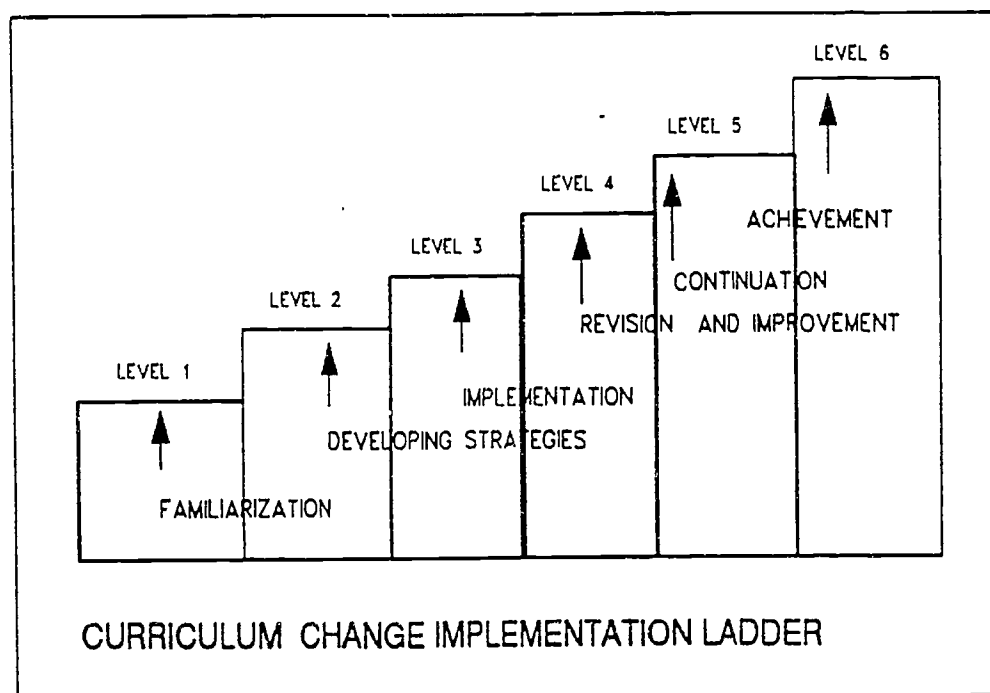
The curriculum and educational setting in this context is the Victorian Certificate of Education, popularly known as VCE, and Year 11 and 12 of all secondary schools in Victoria. The VCE was first introduced as a Year 12 certificate covering all the previous courses being conducted at that level. The enunciation and initiation of curriculum change in Victorian senior secondary schools began as a result of the recommendation of the Blackburn report in 1985 on postcompulsory education in Victoria. The VCE studies are being progressively implemented in school and all students completing senior secondary class from all schools will be awarded at the end of school year 1992. Ministry of Education is introducing the VCE to better prepare students for work, tertiary education, and adult life in general depending of their choice (Minister for Education, 1990). The VCE is a two year course covering Year 11 and 12 studies. The studies in the VCE are organised into units. Each units will take a half year or semester to complete. Students must complete 24 units during the two years of their VCE program to be awarded with it. The actual provision and choice of student program is determined at the school level within statewide guidelines. The VCE will be a common certificate awarded to all students satisfactorily completing their senior secondary education and will replace the existing three certificates, namely the Higher School Certificate (HSC), Tertiary Orientation Program (TOP), and Technical Year 12 (T12), with one single award or qualification. Table 1 summarises the basic changes incorporated in the senior secondary school education with the current Victorian Certificate of Education.

According to the Table 1, changes introduced in the senior secondary education is extensive, controversial, and significant. The changes are already taking place and expected to be fully implemented by 1992. By 1993, all Year 11 and 12 students will be studying the new VCE. The VCE has been pilot tested in about 70 schools, major refinement in curriculum and assessment has been made, and there is a considerable support from tertiary institutions, teachers unions, students, parents, community, and other groups. Thus, the pathway for implementation of the VCE has been cleared and it will take off from this point toward a full implementation and continuation. The purpose of this paper is to analyse the implementation of the Victorian Certificate of Education from the perspective of three elements, namely nature of the change, professional development, and organisational development. Implementation of curriculum is an actual conduct of planned activities to achieve the stated objectives of an idea or change. It involves several dimensions of interrelated levels in implementation. Figure 1 represents possible six basic levels in the implementation of the VCE at school level.

Table 1. Summary of Major Changes in the Senior Secondary Education with the Victorian Certificate of Education

Component	Old system	VCE
Studies and units	About 2100 overlapping academic and vocational units or subjects.	About 200 units are being planned. There are 44 separate studies in 13 field of study. Core studies are essential.
Accreditation	Controlled by 3 different agencies. Different rules and assessment methods.	VCAB is the sole agency. Unified assessment.
Teaching methods	Emphasis on content and academic approach.	Emphasis on balanced theory and practical work.
Learning	Narrow range of subjects. Teacher initiated learning.	Independent and activity based learning through research, investigation, and problem solving.
Assessment	Students complete five subjects. Externally assessed one written test at the end of Year 12. Only letter grades	Two years of study. Final year tested through CAT including essays, projects, and exams both internally and externally assessed. Students complete 24 units
Award/Certificate	Three different certificates.	A single common certificate recognising achievement in a variety of ways.
Equity and access	Equity and access to further study is limited.	Equal opportunities and chances. Combine guidance with choice.
Tertiary admission	Anderson score based on the students marks for HSC is mainly used for normal entry.	CAT will be used. Some institutions could weight the subject and tests to help with the selection.

Figure 1. Implementation levels of the Victorian Certificate of Education



NATURE OF THE CHANGE

The VCE is a systemwide reform that calls for curriculum change at senior secondary level in Victorian schools. This change is directing the changes in the associated assessment procedures. The changes culminated in the VCE must find their way into the successful implementation plan. Therefore, an understanding of the characteristics of the VCE is important. Fullan and Pomfret (1977) and Johnson (1989) have developed tools or frameworks to guide in analysing the nature of the change. The Fullan and Pomfrets' dimensions of the change include subject matter/materials, organisational structure, role behaviour, knowledge and understanding, and value internalisation. Johnson has identified some basic questions to be answered in identifying the nature or characteristics of a selected change. The questions include: What school structures and processes are required? What resources are needed for implementation? What learning outcomes are being valued? What is the role of the teacher? What is the role of the students? What is the role of the principal and other school leaders? and What is the role of the parents? In this paper questions identified by Johnson are adopted to describe the nature of the VCE.

What school structures and processes are required?

Introduction of the VCE is a major exercise in planning for implementation. The pre-VCE high school system was highly structured and its curriculum is streamed subjects. The extent of change required in the VCE is large: new curriculum structures, some new subjects, new syllabuses, different approaches to teaching and assessment, and a new system of record keeping, reporting, and administration. The changes demand particular decision making and communication structures or processes. The VCE curriculum content may need to be developed based on curriculum frameworks on various subjects. Wherever necessary, senior secondary schools need to reorganise their departments and subject or curriculum committees around the major subject areas identified in the frameworks. The school and the departments are expected to be structured to support the VCE curriculum units. One of the major tasks before schools is to increase the levels of awareness about the nature of the VCE. Developing units to be offered in schools, department or faculty restructure, and preparation of timetable or time slots for units are some of the major decision making processes in the implementation of the VCE at school level.

What resources are needed for implementation?

Implementation of the VCE is not simply an extension of planning and adoption processes. It is a phenomenon in its own right. The implementation phase is directly associated with availability and utilisation of resources of many kinds. Effective implementation of VCE curriculum change requires time, and other school based support such as technology, equipment, and facilities. Adequate personnel and material resources and their equity in availability are important factors in the implementation. Support for the implementation of the VCE comes from a number of places: Victorian Curriculum Assessment Board (VCAB), School Support Centres, Neighbourhood Schools in Clusters, and Subject Associations. Materials is one component of the resources. Existing facilities, including laboratories, libraries, and equipment may need improvement and development. To meet the timeline of the full scale implementation of the VCE, an equitable allocation and flow of resources are essential.

What learning outcomes are being valued?

The VCE is designed to provide an education of the highest quality for all students and to develop their interests and abilities to their potential. The VCE curriculum intends to take account of current and future social and economic needs and will provide an incentive for more students to complete 12 years of schooling. The VCE is designed to improve schooling first at senior levels (Years 11 and 12) and eventually at other levels of secondary and primary schooling through the frameworks. It helps students learn how to solve problems and think independently by offering study units that will meet their needs of working, training, studying, and living. The VCE ensures that some areas are studied in depth, but still allows students to sample studies to maximise their choices at school. The VCE ensures that all students meet the same requirements which include a combination of externally marked exams and other assessment tasks including individual assignments and assessment of classroom performance. For these reasons, schools must provide a comprehensive curriculum that has the capacity to cater for the differing needs and interests of students and to encourage them to complete their schooling to end of Year 12. Assessment and reporting procedures will provide detailed information on students' skills, knowledge, and levels of achievement, for the benefit of the students themselves, their parents, tertiary institutions and employers. Consistent effort from students will be encouraged by work requirements which they must complete.

What is the role of the teacher, principal, and other school leaders?

The VCE is designed to provide a systematic and coherent curriculum which will ensure that students have access to a broad, balanced program of studies with the availability of specialisation within a program. Taking into account the aims and objectives of curriculum, and assessment procedures, schools must develop student programs so that students can gain access to their chosen studies and career pathways. VCAB has undertaken to provide advice and guidelines for schools and providers to develop student programs. Teachers, principal, VCE coordinators, consultants, and other school leaders have the responsibility to organise their VCE offering to ensure equitable provision for all their students. They must develop program structures considering five broad areas of the Arts, Business, Humanities, Science, and Technology. Issues such as time tabling, course and unit development, encourage and counselling students, professional development, and communication and reporting must be the major areas of concern for teachers, principal, and other school leaders. They must work both individually and as a team for a successful implementation of the VCE. It is important that from an early stage careers teachers are involved. For students to gain maximum benefit from their VCE programs schools will need to maintain an up-to-date careers library covering all areas of post-VCE options including information on employment prerequisites, tertiary entry and tafe courses. Proposed programs structures and units should be communicated to all sections of the school community.

Teachers need to identify areas of professional development, trial new units of work, share experiences with peers, and keep up with new developments in the VCE. Since VCE units are to be offered on a half year semester basis and study designs specify that each unit should constitute 50-60 hours of class time, it is assumed that each unit must be offered for between 50-60 hours per semester regardless of the timetable model used. In making decisions regarding the number of periods per unit per cycle to be allocated in the school timetable, attention will need to be paid to the number of teaching hours per semester available under each option.

At the Year 12 level, teachers will have a major involvement in all aspects of assessment regarding student achievement. It is anticipated that both overall workloads and the nature of responsibilities will change significantly. For certain types of tasks they will be involved in detailed decision making regarding choice of topics or questions for individual students. Teachers will continue to be extensively involved in marking students work, but will be provided with grade description and other support materials such as assessed samples of students work to assist in the allocation of grades. CATs will involve groups and panel of teachers in activities such as grade determination and verification procedures. In addition, teachers must think of students as being potentially capable of desiring, needing, and exercising more autonomy. Teachers are required to use new pedagogical teaching strategies such as different class grouping, new authority relationship with students, and experiential learning.

What is the role of the students?

A large number of subjects available to senior secondary students, different forms of certificate, and the compression of important studies into a single year made it difficult for students to select and study a group of subjects that would give them the best options for further education, training, and employment. The VCE is designed to give a broad and balanced curriculum access and success that are less confusing than the pre-VCE senior secondary education. The VCE curriculum takes account of current and future social and economic needs and provide both opportunity and encouragement for students to complete 12 years of schooling. Students are required to complete a mixture of compulsory and elective studies that will ensure a broad-based education with room for specialisation. In addition, a consistent effort is expected from students throughout the senior secondary schooling. Most students will do 24 units over two years (Year

11 and 12), although it is possible to do more or fewer units, and to take more time to complete the certificate.

Students must complete their work requirements in time. All units of study include a number of work requirements. These activities and pieces of work that form part of the course students are studying and which must be completed. Examples of such work requirements are a folio of writing for English and a practical investigation in science. The study design of the VCAB sets out what students must do to satisfactorily complete the work requirements. For students whose work has been significantly affected by personal problems or illness during the school year, there are provisions to take account of this, as there at present. To be awarded the VCE, full-time students will have to satisfactorily complete 16 units, including 3 units of English, 3 pairs of units of 3 and 4 (6 units of Year 12 units) in studies other than English. Students will be expected to ask more questions of the teachers and each other than they are currently accustomed to doing as well as to learn to live with other than teacher-sanctioned answers to questions. Moreover, students must think of teachers more as guides than as directors of learning.

What is the role of parents?

The implementation of the VCE is a highly complex process involving relationships between teachers and learners, and among various partners, including parents, in school education. Conflicts of interests and expectations of the VCE is inevitable by both anticipated and unanticipated eventualities. The VCE expects and encourages input from parents. Parents have the responsibility to attend information sessions, receive advice from VCE teams, become familiar with study structures and design, and help their children with study. By becoming familiar with and understanding the VCE, parents are expected to support the implementation of the VCE. All parents should take advantage of the opportunities presented by the Ministry of Education to meet their needs and aspirations. At the same time, the VCE changes also provide an opportunity to further develop collaborative decision-making processes within school communities and increase the level of communication with parents on curriculum issues.

Many schools, both individually and in cooperation with others in their locality, will need to make decisions about the particular VCE units and programs that will be offered and how they will be timetabled. Schools will also have to make decisions about assessment and reporting methods, particularly for level 1 and 2 units, about matters related to out-of-school activities on the part of students, and about financial and other resources to be committed to VCE programs. On this occasion, parents must be both facilitators and critics. They can use school council as a forum to have their influence or say on the implementation processes of the VCE. The participation of parents is essential for the VCE. There must be exploration and negotiations based on the complementary knowledge and expertise of parents and other to reach agreed positions on policies and practices for the VCE curriculum and assessment. Beyond the school, the participation of parents with a close interest in the VCE is necessary for the VCE curriculum policies and guidelines within which all school operate are to be changed to ensure more equitable outcomes from the VCE especially for those from disadvantaged groups.

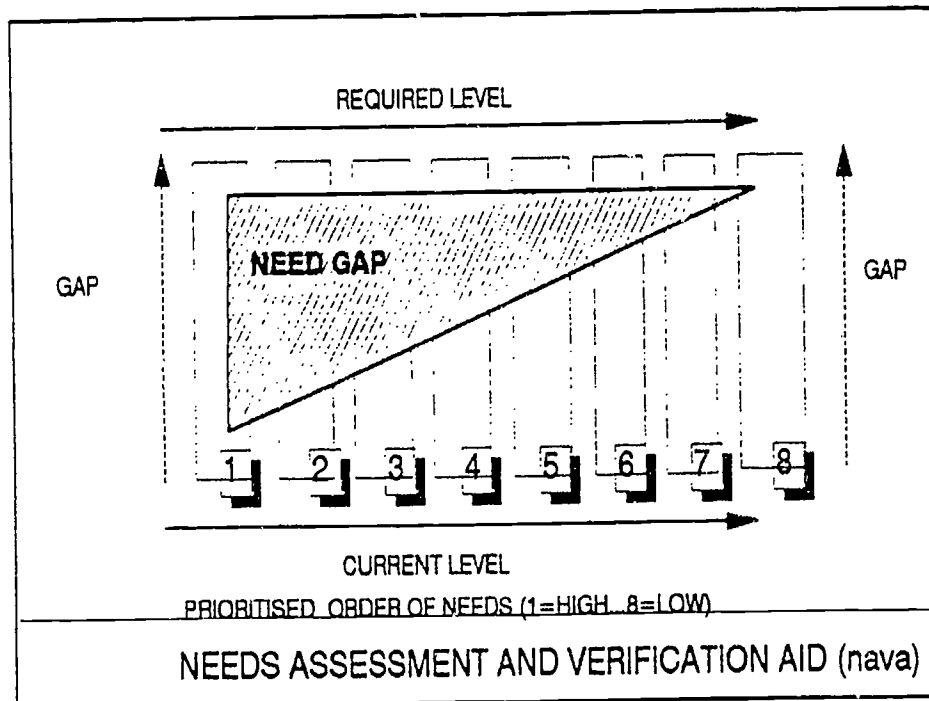
PROFESSIONAL DEVELOPMENT

Education for 16-18 year old is undergoing major change. The development of VCE policy and its implementation are altering the content and process of learning. District Provision policy and the beginning of school reorganisation are encouraging schools in districts to examine the most appropriate ways of providing access to a comprehensive curriculum, especially for the post-compulsory phase of schooling. These two policies have created a great demand for new knowledge, skills, and experience from personnel, including principal, teachers, consultants, and others related to

the school management and development. All of which leads to the need for a broad and frequent professional development for school personnel, teachers in particular. Professional development means acquisition of new experience and insights to improve competence and confidence as educators in changing school environment (Ministry of Education, 1989). Professional development must be a continuing process encompassing-the ways the initiative and leadership pass between internal and external participants, the ways successive rounds of activity modifying initial plans, the ways particular events fit into both short and longer-term processes of curriculum change and school improvement.

Teachers are the change agents at school level who deliver the curriculum to their clients, the students. If teachers are to be capable of coping with curriculum change professional development approach must be based on short and long-terms felt needs of teachers. It is essential to recognise the relationship between curriculum change and professional development needs (Fullan, 1982). It is in this recognition that the rationale for professional development policies can be justified, and a simultaneous effort can made for professional development and curriculum implementation and change. If implementation of VCE is to be successful teaching staff must be masters of the changes. It is at the teacher level that curriculum change acts and reacts. Teachers may have to change their practice in terms of content, curriculum, and pedagogical knowledge as a part of the VCE curriculum change and its implementation. This may require addition of substantial new knowledge to their existing expertise. Such new knowledge is both essential and required for them to adopt new teaching roles in the context of curriculum change. The additional knowledge needed by teachers must be identified and prioritised for professional development programs. Professional development can be approached on an individual, group, and on an organisational basis or combination of all (Spencer, 1988). In addition, professional development programs must be planned to meet the needs of a given context or situation of school organisation and curriculum (Owen, 1990). For this reason it is important to group teachers according to their interests and needs. Figure 2 summarises the relationship between the needs assessment and priority based professional development approach that could be used in a context of curriculum change and implementation.

Figure 2. Needs assessment and verification aid



According to the figure 2, a curriculum change may consist of various identifiable components. It is to be expected that individual teachers differ in their need for professional development in the various components. Thus it is not only important to prioritise the professional development needs in order to identify the 'need gap' between current and required level for professional development, but also to use grouping technique in the provision of professional development strategy for teachers. That is, some needs will be specific to the individual, though two or more individuals may have a similar need; others-usually those related to change-will concern groups of people or even the total organisation (Everard & Morris, 1985).

The purpose of this section is to analyse the VCE and describe the professional development plan considering: (1) the approaches to professional development, (2) the principles underlying the professional development program, (3) the role of outside consultants in supporting implementation, (4) the extent and nature of teacher change required, (5) teacher types, and (6) improvements to the plan.

The approaches to professional development

Aims of professional development is to broaden the individual teacher's base knowledge and understanding and awareness of relevant development in education from the perspective of the VCE. There are many approaches for effecting the professional development. In the *Implementing Curriculum Change: Project of National Significance*, Johnson (1989) has described three distinct approaches for professional development. They include: outside interventionist, inside collaborative, and partnership innovation-focussed. Accordingly, the outside expert interventionist involves an attempt to change teachers by telling them a better way to teach. The inside collaborative is based on the idea that the most effective avenue for teacher improvement and change is cooperative study by teachers themselves into problems and issues arising from their attempts to make their practice consistent with their educational values. The partnership innovation-focussed approach to teacher improvement which promotes change by offering for teacher consideration "exemplary practices" and a coordinated set of strategies including professional development. Each approach implies a particular source of educational knowledge, suggests a design for learning and has been found to have a certain impact on changing teacher practice.

The VCE professional development program is designed by the Regional VCE Information Network Statewide Steering Committee, consisting of Regional VCE Information Network (RVIN) Coordination, VCAB, and representatives of Catholic and independent schools and TAFE providers. The program includes all of the elements of professional development relating to the VCE implementation that will operate, either regionally or across the state. It will be a continuous professional development process through to 1992 when the VCE will be fully implemented. The program adopts an integrated approach so that each element of the program complements and supplements other elements. In designing the program the Statewide Steering Group attempts to accommodate the various needs and interests of the range of groups of participants. These include: whole school planning and implementation, course development by VCE teachers, teachers involved study related activities, and consultants support. Accordingly, the approaches to the VCE professional development consider a single or combination of the three methods identified above.

The principles underlying the professional development programs

There is an increasing demand for documented, successful professional development program. The principles for professional development should be derived from responsibilities, approach or methods, and standard of performance or expected outcomes from it. Firstly, it would be quite inappropriate to conduct professional development programs for VCE without considering the new responsibilities that are associated with its implementation. The responsibilities which

has its parameters predetermined by the administrators must be the basis on which professional development is operable. In fact the roles and responsibilities must incorporate both implicit and explicit goals, priorities, resources, standards, actions, and success for professional development. Secondly, the VCE is seen as an entirely new idea by all VCE teachers and it is reasonable therefore to adopt collective or group or organisation based method of delivering the professional development programs rather than individual contacts. Thirdly, in practice, at least there is a standard of performance or outcome is expected of the VCE teachers in implementing the VCE at classroom level where a direct contact between teachers and students takes place. In fact, there is no room for ad hoc staff development in the context of the implementation of the VCE, but rather it must be sequentially organise to facilitate the individual teacher's base knowledge, understanding, and awareness of on-going changes in the VCE and its implementation strategies.

The role of outside consultants in supporting implementation

The use of outside consultants in curriculum change and implementation has become an increasingly important practice in recent years. Consultants support to the VCE, professional development in particular, may consist of gathering and providing information, development of strategies and setting priorities, guidance and counselling, demonstration and discussions, and suggestions and recommendations. In common usage, the term "consultant" is often taken to mean a variety of individuals including School Support Centres (SSC) consultants, regional and state level consultants, VCAB personnel, teacher educators at higher education institutions, school teachers and principals, parents and community leaders, and other expertise from educational agencies and organisation in the community. Each School Support Centre has at least one permanently available consultant who has a particular responsibility for the VCE. They are available to provide continuous support and advice so that school can progress with implementation of the VCE including the professional development. The individual teacher is the major clients of the SSC consultants and it is with the teachers they spend most time. Consultancy based on contractual agreement is usually tasks and time specific and may or may not be available to teachers directly. Their services are not permanent. They take part in the area where their expertise fit into the implementation of the VCE. The contracted consultants take part mainly in developing strategies, setting priorities, and training the SSC consultants.

The extent and nature of teacher change required

Teachers are change agents who need to change their behaviour and practice in relation to ongoing curriculum reform and implementation for short-term and long-term success of a change. In the view of responsibilities of teachers, the VCE bring changes in (a) curriculum development (b) assessment and credentialling, (c) school organisation and development, (d) professional development, (e) teaching and learning strategies, and (f) reporting and accountability. For these reasons, the VCE teachers are required to adopt, not gradually but simultaneously, all the important changes for effective and efficient functioning as teachers in the context of rapid implementation of the VCE. In fact, the VCE requires a substantial multi-dimensional change in terms of learning, doing, understanding, adopting, creating, thinking, and delivering. Regardless of the personal opinion about the VCE, all teachers are required to change and practice within a predetermined timeframe. The extent and nature of teacher change required is not optional but may be considered as compulsory for functioning as VCE teachers. Some individual teachers involved may start with different opinions about the suitability and practicability of the VCE in their school context. For some teachers, the VCE may pose a threat or form of insecurity, incompetence, and insult or possible personal exposure. For these reasons, appropriate opportunities, support, facilities and motivation are being made available by the concerned authorities in the form of CDMS, workshops, conference, networks, news-letters,

seminars, public forums, and meetings. The VCE change involves having to learn new knowledge, skills, attitudes and undoing the old ones. The support and contribution of all teachers cannot be assumed, yet it is essential if the VCE is to be implemented successfully. The extent of change required from the VCE teachers is like preparing the seed-beds just before planting or seeding in seasons. It involves both helping teachers to understand changes and helping them to apprehend the nature of the VCE and its implementation.

Teacher types

Individuals differ both from each other and in their commitment to planned change. There is a general perception among educationists that the contribution of teachers is a necessary part of a planned curriculum change (Renner, 1990). The assumption underlying this perception is that while one group of teachers is able to influence the pace and direction of curriculum change and implementation, other groups tend to resist such change. Between these two extreme groups, one could see the notion of "teacher type" among teachers. In his report to the Commonwealth School Commission, Johnson (1989) adopted the typology developed by Doyle and Ponder (1977) to describe three types of teachers: rational adopter, stone-age obstructionist, and pragmatic skeptic. Accordingly, rational adopters change their practice and action by reflection and information. The stone-age obstructionist tends not to initiate improvement processes nor to react to outside change proposals. The pragmatic group includes majority of teachers and they are guided by practicability of change.

In the context of implementation of the VCE and related professional development programs, it is possible to characterise most teachers as rational adopters and pragmatic. The events led up to the current level of implementation of the VCE suggest that there is a considerable difference of opinions among VCE teachers as well as in the level of their contribution to and participation in the implementation processes. Teacher types influence motivation to seek, learn, improve, evaluate, share, and respond to and adapt the VCE curriculum change. In the absence of a right teacher type, it is difficult to envisage effective implementation of the VCE at classroom level and eventually this may cause a complex pattern in achievement of the implementation of the VCE among senior secondary schools. It should be noted however, that teacher type will be never static since it is likely to be affected by the overall progress and success of the implementation of the VCE.

Improvement to the professional development plan

Professional development for the VCE teachers offers opportunity for them to transform their teaching, assessing, reporting, and personal understanding about the VCE by adopting specific classroom strategies and responsibilities. But professional development programs must be dynamic and flexible to incorporate improvements needed to the plan. As the implementation of the VCE continues, one can expect to see variation in the competence achieved through the professional development programs from teacher to teacher, class to class, and school to school. Some of these differences could provide a basis for improvement to the existing professional development plan. Improvements for professional development programs must come from the teachers in the light of their participation in on-going professional development activities planned by the VCAB. Teachers can integrate the professional development programs with their classroom teaching and provide evaluative judgment for its further improvement especially during the planning process for improvement to professional development.

Improvement to the initial professional development plan may not be feasible until the VCE becomes fully operational in 1992 because the major focuses of the VCAB is mainly concerned with the intensive initial professional development programs for all the VCE teachers. However, it is important that professional development plan for VCE teachers be consisted of

short and long term, and teacher and school based for self-sustained improvement and progress in the implementation processes of the VCE.

ORGANISATIONAL DEVELOPMENT

Victorian Ministry of Education developed a three step processes to achieve quality and equity in schooling in Victoria: literacy and numeracy strategies for all, comprehensive curriculum through to Year 10, and the Victorian Certificate of Education for post-compulsory schooling. The VCE requires the system to reorganise and develop new organisational structures since many secondary schools are too small to provide a comprehensive curriculum on their own. In some districts, schools have already amalgamated or combined their resources with great success. By the time the VCE is fully introduced virtually every district will have reviewed its offering and reorganised where necessary to ensure that the full certificate is available to all senior secondary students in Victoria.

Importance of viewing the school as an organisation recently became integral part of curriculum change and implementation (Fullan, 1990). In addition, organisational attributes of schools are viewed as affecting the available resources for implementation of change (Sturman, 1982). The premise here is that any introduction of change to schools, curriculum innovation in particular, should focus on organisational health of school and its climate or growth state. It seems logical that any proposed curriculum change should have a full knowledge and assessment about the status and organisational health and climate of school where it intends to have direct impacts.

Organisational health

Understanding organisational health and its development are necessary for initiation, continuation, and achievement of success through the system wide curriculum change, the Victorian Certification of Education. Organisational development may involve one or combination of adjustments in materials and human resources, administrative strategies, curriculum change, and pedagogical change. Increasingly, curriculum change and implementation are concerned with the organisational health of school. In his writing on implementing curriculum change, Johnson (1989) reported several dimensions used by Miles (1965) to analyse the organisational health of a school. The dimensions include: goal focus, communication adequacy, optimal power of equalisation, resource utilisation, cohesiveness, morale, innovativeness, autonomy, adaptation, and problem solving adequacy. Table 2 shows the each of the dimensions of organisational health of senior secondary schools in general in Victoria in terms of both strengths and aspects of concern and suggest areas to be considered for improvement from the view point of the VCE. Accordingly, dimensions such as adequate communication, collaboration, resource utilisation, participatory decision making, motivation, adaptation, and trouble shooting are considered to be improved to have good organisational health necessary for the VCE curriculum implementation at school level.

School climate or growth state

School climate is one of the organisational features of a school and may predetermine success or failure of curriculum change and implementation. School climate differences can influence the rate of adoption and diffusion of curriculum innovation or change and the consequences therefore play a critical role in the attainment of the goals of the curriculum change. School climate can be categorised into three groups according to their effects on the professional development: depressant, maintenance-oriented, and energising (Joyce, Bush, & Mckibbin, 1982). Depressant climate is characterised as unstable and insecure, efforts are expended to stabilising the school unity, and professional development programs are often judged to be irrelevant by them. The maintenance-oriented climate is stable school system, efforts are expended on maintaining classroom practices and community liaison, and teachers are sensitive to threatening change proposals. The energising climate is characterised as stabilised, outreaching, cooperative, and self examining. Teachers in the energising group are receptive to curriculum support services and willing to implement curriculum change. In the climate of implementing the VCE, it is possible to see all three types of climate exist in schools in Victoria. The environment in which a school operates might influence both the organisational health and the climate of the school. Schools are affected by various factors and rules that govern the educational system within administrative context. Thus, the climate of the school may vary across school districts and even across schools within a district in Victoria. However, an interesting consequence of this variation is that VCE curriculum initiative to which a school is expected is determined, in part at least, by the climate of the school. Viewing the curriculum change as an organisational feature of the school underscores the fact that the current status of the school organisation is the primary determinant of degree of curriculum change, and intum it has a strong impact on what students learn in school. Consequently, differences in organisational health of the school result in a differentiation of the students body according to the amount or type of knowledge that different segments receive. Although the organisation of the school is one of the major determinants of curriculum implementation, the impact of it could be modified, often in a dramatic way, by introducing desired and needed improvements to the school (Halliman, 1987).

RECOMMENDATIONS AND CONCLUSION

Victoria is waking to the educational challenges of the 21st century which will be dominated by educational trends and issues, including quality, equity, access, participation of the disadvantaged, labour market, personal development, and international competition. Creating an education and training base now is vital to the development of the ranges of skills, knowledge, and attitude necessary to enable students to live and work productively both within and out of Victoria. Brawn (labour) stood this nation in good stead for its first 200 years, but it will be brain power (education) during the next century. Education is the key to the lives of our young people and also to our future economic prospects in a contemporary Victoria.

Table 2. Assessing the organisational health of the school

Dimension	Current situation	Desired change
Goal focus	Variations in both participation and understanding the focus in ever changing schools context.	Revise and refine the focus from the national perspective.
Communication adequacy	Less emphasis on personal communication strategies.	Adequate personal contact with several follow-ups.
Optimal power equalisation	A natural balance exists between collaboration and coercion.	High level of partnership development and collaborative actions and efforts.
Resources utilisation	Minimum resources are available, but some schools have unequal advantages over others.	Equitable distribution of resources and efficiency in their utilisation.
Cohesiveness	Differences in opinions and political groupings.	Participatory involvement and decision making strategies.
Morale	Deteriorating in many schools.	Reward restructuring with career development chances.
Innovativeness	Many kinds of support and encouragement by both state and Commonwealth governments.	Continued program support and adequate funding.
Autonomy	Certain degree of autonomy within statewide policies and guidelines.	Reduces the misconception and confusion around the autonomy.
Adaptation	Different rate and opportunities for adaptation.	Maintaining parity in the rate adaptation.
Problem solving adequacy	Supporting and consulting services are available close to schools.	Increasing the competencies of the consultants and reduce the duplications of functions by integrated strategies.

The VCE has an option for education as social empowerment, with substantially common outcomes of pupils completing school. Some see the VCE as mass democratic education; comprehensive, general education of all students to a high level. The VCE opts for a close relationship with teachers' unions and strong representation of others in the community. Only two subjects are compulsory for the VCE, English and the Australian Studies, a first in Australia. A 10 points letter grade from A to E recommended for the four Common Assessment Tasks in each unit or course, but the overall rating in each subject will be "satisfactory" or "unsatisfactory" (McGaw et al., 1990). Through VCE, a clear vision of excellence in education for schools, students, teachers, parents, industry, and community is being established. The VCE widely acclaims curriculum change, professional development and organisation development. The implementation of VCE will not be over soon, but it will continue for some years. If we think it ever is over, it will be a very strong mark of fruitless educational change ever carried out in Australia.

A blueprint for successful implementation of the VCE curriculum change does not exist. Nevertheless, the events led up to the enunciation and initial implementation of the VCE and the analysis of the characteristics of change, professional development, and organisational development covered in this paper shed some thoughts on some ways and means of accomplishing the implementation of the VCE for lasting change. Table 3 shows some of the chronological events that led up to the introduction and implementation of the VCE and the associated either positive or negative aspects of such events. In addition, having analysed the VCE from the perspective of the above dimensions, following recommendations are made for a unified implementation of the VCE in Victorian senior secondary schools.

Recommendation 1.

That roles and responsibilities of various partners associated with the VCE be clearly defined and keep up-to-date whenever appropriate. This is based on the assumption that an effective implementation of the VCE could only occur when everyone associated with VCE understands, supports, participates, and contributes to the implementation strategies beginning from the initial enunciation through full scale implementation. A system oriented curriculum change and its characteristics should be readily understood by students, parents, teachers, principals, community groups, and other administrative and supporting services personnel before they make commitment to the full scale implementation.

Recommendation 2.

That reflective approach to implementation be adopted for continued implementation of the VCE. This is based on the assumption that implementation of the VCE is complex processes and not a single activity. The implementation processes must have a mechanism for improvements based on the reflections and feedback gathered during the several stages of the implementation. In fact, the system wide change initiated from outside the school context needs more crafted knowledge as a basis for confidence and actions for the continuation of the implementation.

Table 3. Comments on the chronological developments in the enunciation and initial implementation of the VCE

Events	Comments
Community pressure for curriculum change came via Blackburn report in 1985.	Good response and climate
Initial proposal for the VCE and VCAB became sole agency for development of the VCE.	Lack of consultation with wider community.
Field of study committees were organised to develop course design and timelines for trialling and full-scale implementation.	Outcomes were predetermined with a limited flexibility.
Trialled in few volunteered schools and evaluation of trials were conducted.	Insufficient time for course development and wider trialling.
Integrated process of implementation, including Curriculum Development Support Materials, networking, public relation, course development, professional development are in progress.	Lack of support to school in implementation. Assessment aspect of the VCE dominated the curriculum development. Lack of coordination among agencies involved in them.
Spontaneous public criticism and comments emerged in the form of forum, media debate, and information session.	Agreement and consensus were made.

Recommendation 3.

That a priority based, simultaneous, integrated, unified, and continuous professional development program be designed as a part of the VCE implementation. This is based on the assumption that there is no place for a gradual, slow-paced, and superficial approach for professional development in the implementation of the VCE. In addition, there should not be any conflict between the needs of VCE teachers and the professional development plans as seen by the VCAB and its consultants. Professional development program must be derived from perceived and prioritised needs and should help teachers to solve problems that they encounter before, during, and after the different levels of the implementation processes. Further, professional development effects on students learning, teaching must be assessed and there should be closer link between a professional development program and the implementation of the VCE.

Recommendation 4.

That the organisational development of schools be consider to increase their capacity and performance for continuous implementation of the VCE. This is based on the assumption that the VCE is associated with the introduction of new studies and units of work development, new teaching and learning methods, increased responsibilities in planning, implementing, and evaluation, new strategies in classroom management, significant role in students assessment and reporting, and emerging need for professional development. The significance of this association is that the successful implementation of the VCE cannot be achieved without the appropriate development of schools.

The main implication of these recommendations is to refocus characteristics of VCE, professional and organisational development of schools so that they become part of an overall strategy for long lasting curriculum change in senior secondary schooling in Victoria. The details one is yet to understand the characteristics of the VCE, professional development of teachers, organisational health and climate of schools, the more practically feasible the VCE becomes. In contrast, the implementation of the VCE will never have its intended impact as long as it is grafted into schools in the form of discrete and unconnected activities. One must be aware the fact that many of the curriculum reform efforts actually work at cross-purposes to intended directions create unnecessary differences among schools, role ambiguities among teachers, and inefficient relationships among students, teachers, administrators, parents, and community. Further, the implementation takes place without consideration of the related dimensions of the curriculum change may initially progress in the short-run as feasible change but it may short-lived because the conditions of change may not conducive to maintaining such short-term progress through to long-term achievement. However, in the context of the VCE, the omens for progress in implementation is especially encouraging recently. However, VCAB has a much bigger role and responsibility to play in creating lasting curriculum change through the VCE.

REFERENCES

- Ainley, J., Reed, R., & Miller, H. (1986). *School organisation and the quality of schooling: A study of Victorian government secondary schools* (Research monograph, No. 29). Hawthorn, Victoria: Australian Council for Educational Research.
- Batten, M. (1989). *Year 12: Students' expectations and experiences* (Research monograph, No.33). Hawthorn, Victoria: Australian Council for Educational Research.
- Blackburn, J. (1985). *Ministerial review of postcompulsory schooling* (A report). Melbourne: Ministry of Education.
- Everard, K. B., & Morris, G. (1985). *Effective school management*. London: Harper & Row Publishers.
- Fullan, M. G. (1990). *Staff development, innovation, and institutional development*. In B. Joyce (eds.). *Changing culture through staff development: 1990 year book of the Association for Supervision and Curriculum Development*. Alexandria, VA: ASCD.
- Fullan, M. G. (1982). *The meaning of education change*. New York: Teachers College Press.
- Glatter, K., Preedy, M., Riches, C., & Materton, M. (1988). *Understanding school management*. Great Britain: Open University Press.
- Halliman, M. T. (1987) (eds.). (1987). *Social organisation of schools: New conceptualisations of the learning process*. New York: Plenum Press.
- Hocking, H. (1990). *Educational research in chaos: New paradigms for the changing era*. *Australian Educational Researcher*, 17(1), 1-22.
- Johnson, N. (1989). *Implementing curriculum change: Project of national significance*. Canberra: Curriculum Development Centre.
- Joyce, B., Bush, R., & Mckibbin, M. (1982). *Information and opinion from the California development study* (a report). Palo Alto: Booksend Laboratories.
- McGaw, B., Evers, V., Montgomery, J., Nicholls, B., & Poole, M. (1990). *Assessment in the Victorian Certificate of Education* (Report of a review commissioned by the Victorian Ministry of Education and the Victorian Curriculum Assessment Board). Melbourne: VCAB.
- McRae, D. (1988). *Teachers, schools and change*. Richmond, Victoria: Heinemann Educational Australia.
- Mellor, W. L. (1989). *Implementation of reforms for improving the quality and effectiveness of secondary education* (Occasional paper, No.16). Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.
- Ministry of Education. (1989). *Professional development using framework*. Melbourne: Office of the School Administration.
- Navaratnam, K. K. (1989). *Disadvantaged Schools Programs: Putting social justice policy into practice*. Paper presented at the annual conference of the Australian Sociological Association, 8-12 December. LaTrobe University.
- Nolan, B. C. (1989). *Management of change*. Armidale, NSW: Armidale College of Advanced Education.
- Owen, J. (1990). *Perspectives from down under*. In B. Joyce (eds.). *Changing culture through staff development: 1990 year book of the Association for Supervision and Curriculum Development*. Alexandria, VA: ASCD.
- Pink, W. T. (1990). *Staff development for urban school improvement: Lessons learned from two case studies*. *School effectiveness and school improvement: An international journal of research, policy and practice*, 1(1), 41-60.
- Renner, J. (1990). *Planned educational change: Statewide implementation of a new curriculum in Western Australia*. *Curriculum Perspective*, 10(2), 45-54.
- Spencer, J. D. (1988). *Staff development*. Armidale, NSW: Armidale College of Advanced Education.

- Sturman, A. (1982). Pattern of school organisation: Resources and responses in sixteen schools (Staffing and resources study report, No.3). Hawthorn, Victoria: Australian Council for Educational Research.
- Victorian Curriculum Assessment Board (1988). Assessment for the Victorian Certificate of Education. Melbourne: Author.
- Victorian Curriculum Assessment Board. (1990). Victorian Certificate of Education planning guide. Melbourne: Author.
- Victorian Curriculum Assessment Board. (1987). Victorian Certificate of education policy. Melbourne: Author.