CARINUS NURSING COLLEGE:
AN HISTORICAL STUDY OF
NURSING EDUCATION AND MANAGEMENT
USING THE
GENERAL SYSTEMS APPROACH,

BY

Beatrix Goodchild-Brown
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BEATRIX GOODCHILD-BROWN

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SUPERVISORS:--

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JULY 1990
The purpose of this dissertation is to research aspects of the historical development of Nursing Education and Nursing Management at the Carinus Nursing College from 1949 to 1987; to determine and explain how the College has adapted and coped with historical change and to determine whether proposals for the future can be made.

Research has been done by applying the general systems theory and by using the standard methods of historical analysis. Data has been collected by means of oral history, literature search and documentation. The variables isolated are the College as a system; the government or influential supersystems; resources such as financial, personnel and students and material inputs; and throughput or processing the work in the output, which leads to the professional nurse. The models used are Buchele's organizational system, Sharma's flow chart pattern, Mintzberg's parts of organizational systems, and power flows and as shown in Emery, Feibleman and Friends relations and rules of interaction in systems thinking.

Parsons' "imperatives of maintenance of a system" as well as Alvin Toffler's "second and third wave phenomena as responses to change" were two further models that were used. By using Robert Buchele's model, the work is divided into four parts:

i) the College as a system
ii) the supersystems
iii) the resources
iv) the throughput or processing.

A further design that emerged was that two eras could be distinguished, within which three historical phases:— Early, Middle and Late are developed.
RESULTS

The results of the study show that the nursing colleges developed as a result of changes in the environment.

The nursing profession itself, instigated change and stimulated development of the College. A highly differentiated structure and function developed as the College grew. Although the variables [elements] in the College responded to change in diverse ways, equilibrium was maintained as was the function of producing professional nurses.

The Nursing College in turn stimulated change in the profession.

The supersystems such as socio-political roots, health systems, boards, the university association, statutory professional bodies and the hospital school system were significant in producing change and were also affected by the change.

The resources, i.e. the finances, material resources, tutors and students indicate that measures of effectiveness can be established, and these could measure responses of the College to change during critical phases.

The throughput or processing has "systems meaning". It is a series of connected actions or changes where inputs are turned into outputs, i.e. work is done on the input. It is the how, what, where, when and why of an organization. As shown in the operational model, in the case of an educational institution it includes education and administration, and the philosophy, values, teaching and learning; scope of practice, curriculum, etc.

In the throughput or processing, changes in the aims and purposes of teaching and learning are evident.

Criteria that judge excellence in productivity in teaching and learning could be isolated.
(iii) ...continued.

The statutory changes in the curriculum demonstrate that a relationship exists between the curriculum and the need of health "consumers", i.e. the people who "use" health. The current andragogics that developed over a period of time testify to the sensitivity and awareness of the student's need to change. They change to meet current and future health needs.

Lastly, upon examining the Scope of Practice regulations over a period of time, the significant changes therein point to the changes in roles during a 40 year period. In all the parts the need for further research is evident.
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Painstaking recording of years.

Typing.
This dissertation attempts to determine and explain aspects of the historical development of nursing education and nursing administration at the Carinus Nursing College during the period 1949-1987 by using the general systems theory approach.

The reason for the choice of the period is that 1949 was the year the College opened and, as the first of its kind, it is an important landmark in the development of nursing education in the Republic of South Africa. However, the most momentous event of the century for nursing education was probably when in 1982 the decision was made that Colleges would enter into an agreement with Universities in which there were departments or sub­departments of Nursing. This decision was implemented at Carinus Nursing College in 1985, at the same time that the new comprehensive course was introduced. It heralded a new era. In my view the first era of the history of Carinus Nursing College stretched from 1949 to 1984, the second era commenced in 1985 and thus 1987 represented a three year period of this second era so rich in events that it is significant to record it. The second era also reflects the contemporary status of nursing education in this country.

There is a dearth of published literature on the history of nursing in South Africa and none relating to nursing colleges. Searle [1978], Koegelenberg [1962] and Medlen [1984] are the only authors/writers to date. Searle presents nursing history (1652-1960) in the broad context of South African history; Koegelenberg studied nursing at the Somerset...
Hospital (1862-1962); Medlen focussed on ten Nurse Leaders and their contribution to the development of nursing in South Africa during the period approximately 1918-1984. The need for further historical research is cited by each of the above authors and by other South African nursing authors.

In the history of nursing in South Africa, colleges are a recent development and the first, Carinus Nursing College, was established on 16th January 1949 as a result of the Report of the Van Binnendyk Commission. Events that led to this Commission were the Trade Union crisis of 1942, and the conditions within nursing (namely serious staff shortages, the gulf between the student and trained nurse, exploitation of students, heavy workloads, poor remuneration, long hours of work, indifferent education, poor promotional prospects, dissatisfaction with the S A Trained Nurses Association) resulted in discontent and labour action. A movement arose in Johannesburg to organise the nursing profession into a Trade Union. The movement was actively supported by Trade Unionists, members of the Labour Party and some medical practitioners. Nurses outside the Witwatersrand were bitterly opposed to Trade Unionism for nurses. Several meetings were held, matters were hotly debated and feelings ran high. Finally, Miss J. McLarty, who led the field against Trade Unionism, won the day as proposals for reform were made, and eventually these events led to statutory control of the profession with the formation of the S A Nursing Association and the S A Nursing Council. [Medlen: 1984: 206-212]. In the Cape the Van Binnendyk Commission sat to enquire into the training of nurses, consequent upon proposals for reform made by the S A Nursing Council. The Van Binnendyk Commission of Enquiry found that nursing education, in the Cape, was in fact in a parlous state; that there was a shortage of student nurses and tutors; that conditions of service needed improvement; that educational venues and facilities were inadequate; that the newly formed S A Nursing Council proposed reforms that would require change within the service and in education.

Before the advent of colleges, in many instances the Matron or the Assistant Matron of the hospital gave lectures and managed the hospital service. When the service tasks overshadowed the educational task, and
often happened, the educational task was neglected. The health needs of a
country can only be met by an adequate number of appropriately educated
professional nurses, as indicated by Searle [1965]. It was thought that a
college system would assist in solving many of the nursing problems of the
time, and that a college could implement the reforms advocated by the
S A Nursing Council, as stated in the Van Binnendyk Report, 1946.

The first college south of the Sahara was the Carinus Nursing College.
Before the advent of the College no formal tertiary educational
institution existed for professional nurse education, although the
University of Cape Town archives reflect that at the University of Cape
Town in 1934, at the University of the Witwatersrand in 1937;(2) and at
the University of Pretoria in 1949, post registration courses for Nurse
Tutors had been instituted. [Kotze: 1976: 2] With the advent of these
courses, the stage was set for the establishment of Nursing Colleges.

In the greater Cape Town area the opening of the Carinus College in 1949
was followed by the Otto du Plessis College in 1960. The latter was first
sited at the Karl Bremer Hospital and since 1970 at the Tygerberg
Hospital; the Nico Malan College in 1968, and the Saleh Dollie College in
1970. At present there are 8 Colleges in the Cape Province.

Since Carinus College served as the prototype for the many Nursing
Colleges subsequently established, the study of its progress in nursing
education and management are justified.

Whereas the organisation and structure of the College remained more or
less uniform from 1949 to 1984, in 1985, as a result of the Report of the
Van Wyk de Vries Commission(3) a major change was brought about in nursing
as Colleges of Nursing were linked to Universities. This development

(2) Letter dated 31 July, 1991 from University of Witwatersrand stating
that the first group of students to be admitted to the Diploma of
Nursing Education was 28 February 1937.

(3) Task of Commission was to inquire into and report on educational,
academic, financial and developmental aspects of universities.
heralded a new era in nursing education. As the first era is now complete and a new era begun, it is appropriate that the change should be studied.

Carinus Nursing College is a formal tertiary (nursing) educational institution which falls under the Cape Provincial Administration and offers basic nursing education to prepare students for professional practice as registered nurses. The College is affiliated to the University of Cape Town, and with general, psychiatric, and midwifery hospitals; also with State and local health and community services. Students undergo the required clinical professional practica learning experiences in these institutions. Colleges are approved by the South African Nursing Council and are established and maintained by the Administrator through a Provincial Ordinance. (4) Virtual autonomous control is vested in the Head of College.

The College’s function is the preparation of professional nurses(5) and this is significant as professional nurses constitute 55% of all health care professionals and 72.5% of the total registered and enrolled health services labour force in South Africa. [Kotze in Curationis, 10(4): 1987: 4] The College’s contribution to health care in the Republic of South Africa is thus vital. [Kotze: 1987: 4]

Colleges aim, through appropriate education, to have effective patient care as the main aim. Colleges are autonomous and free of service tasks, and are thus able to concentrate all their input and resources on students becoming professional nurses. Colleges have teaching staff who are qualified nurse educators, able to identify learning experiences and knowledge bases for contemporary professional practice to construct and implement curricula, and to carry out other educational tasks within the parameters of a stable educational system. Health care consists of highly specialised arts and sciences that constitute the art and science of


(5) Please see End-note 2, at the end of this chapter.
nursing, and are best taught in specialised nursing educational institutions.

Of significance too is the link the College has with the University of Cape Town. This link goes back 50 years when Miss C.M. Loopuyt, the first Principal of Carinus College, graduated from the University of Cape Town in 1939 as a Nurse Tutor. Since 1939, 97 nurse educators have qualified at the University of Cape Town, 25 of whom taught at Carinus Nursing College. [Letters: University of Cape Town records: 1988: 2-4] The four Heads of the College, to date, are University of Cape Town graduates, as are the Vice-Heads. As from 1985 the College has been affiliated with the Department of Nursing through the Faculty of Medicine and also with members from other Faculties through their membership of the College Council and College Senate. The affiliation is of significance to the educational standard of the College, and (thus through derivation) significant to health care too.

During 1949 to 1984, however, the functional units and subsystems underwent many changes and some of the adjustments were difficult to adapt to as varying degrees of instability sometimes resulted. From 1949-1960, the College was designated a "school" meaning that autonomous power was vested in the Head, and that all functions in respect of students were carried out by the College, including appointments, allocations, finances, providing theoretical and practical learning experiences. This degree of autonomy came to an end in 1960 and the hospital-school system was reverted to, wherein students were to receive only their theoretical education at the College. The many far-reaching effects of this system will be referred to in the text of this work. [A 1292: Archives: Vol. 1-12]

Because Nursing Education was in the doldrums in 1945, the S A Nursing Council and the colleges had an uphill task to bring nursing education to its present state i.e. being fully functioning tertiary educational institutions. The intervening period saw a transition in education and saw a transition in health care towards an integrated and comprehensive approach. There was a shift of emphasis from educating students as highly skilled in technology, to becoming more adept in the therapeutic use of
the self and the caring role. There was also the shift of emphasis from an ill person focus to one which focuses on the healthy individual, and in so doing seeing the needs of the individual in totality. Thus giving an increasingly community orientated service, with a change in importance of the view from curative care towards the prevention of illness and the promotion of health.

Nursing is a function or an institution within society. Change is, in a way, a supersystem that society imposes upon the institutions that serve it. The changes that are relevant to this study are:

- Changes in regional, national and international health needs and policies. Nursing, as an institution, fulfils a particular set of needs in society (the supersystem). Changes in the supersystem will necessitate changes in the institution. Thus changes in the needs of the community will affect nursing practices and policies.

- Changes that necessitated the advent of colleges; changes in structural-functional organisation of the colleges; changes in boards, committees, College Council and College Senate; changes in supersystems, resources and throughput. All of these changes shaped the changing aims and purposes of nursing education often, by means of feedback mechanisms.

- Changes in society as it would apply to nursing and education in South Africa. For example, in nursing education the "old" nursing culture, in which many grew up, changed. This challenged many old assumptions.

"Old ways of thinking, old dogmas, formulas and ideologies, no matter how cherished or useful in the past, seldom or no longer fit the facts. The world that is emerging from the clash of new values and new technologies, new geopolitical relationships, new styles and modes of communication, demands new ideas and analogies, classifications and concepts." [Toffler: 1983: 16]

The 1980s show new potentials to incorporate in nursing teaching. Although there are difficulties of adaptation there are also the important costs for not changing certain things rapidly enough.
Problem

The problem: "How did the College adapt to and cope with historical changes?" How did the external changes (i.e. supersystem changes) affect the resources and the internal throughput process (operations)? What would assist in making future proposals based on past experience? The focus is thus on the cause and effect of change as it affects the changing aims and purposes of nursing education.

Aim

The aim of this study is to relate/research historical events concerning aspects of the changing aims and purposes of nursing education and administration at Carinus Nursing College during the period 1949-1987 to determine how the College adapted to and coped with historical change according to a general systems theory approach and to determine if proposals for the future can be made.

To fulfil the aim, the following objectives will be met (to demonstrate how the coping mechanisms operated)

- To explain the systems approach, the models that will be used, and the structural functional organisation of the College.
- To identify and describe the effect of the supersystems in the environment which lie outside the system but which determine in part how the system operates and copes with changing aims and purposes of nursing education.
- To ascertain factors that gave rise to the College, in terms of the systems approach, to describe the opening of the College, and to provide a biography of Miss C.M. Loopuyt, the first Principal of the College (as an annexure). These factors were a response to demands to bring about changes in Nursing Education and Administration.
- To identify and assess the changes in financial, human, and material resources according to the input-output model of the general systems theory.
- To analyse (the throughput or) the process of conversion by examining adaptations in: philosophy and values; statutory changes in the curriculum; productivity in teaching and learning, and study
practices; alterations in the development of the scope of practice
in nursing.

Definitions are provided in Annex 1 to assist in orientation to the
College system.

The limits of the study

The time period limit 1949-1987 was chosen because Carinus Nursing
College, the first nursing college in the Republic of South Africa, had
opened in 1949 as a result of certain critical events. The decision that
universities would develop an association with nursing colleges was
implemented by the College in 1985. This heralded a new era of great
significance and change. By 1987 sufficient data had accrued to research
the effect of the change on the equilibrium of the College system.

Changes in the curriculum created three distinct periods, 1949-1974, 1975-
1984 and 1985-1987, each of which was so characteristic that it delimits
the marked difference that ensued in student education and thus in nursing
care.

Research design and methodology

The models that will be used are outlined in Chapter 2. The general
systems theory will be used as well as standard methods of historical
analysis. Data were collected by means of oral history, literature
search, and documentation. The variables are supersystems; resources:
financial, personnel and students, and material inputs; and the output is
the professional nurse.

1. Each supersystem in the environment was identified by making a
structural layout according to Sharma (1985) and was analysed
according to the following pattern in order to determine its
relationship with the college.
Figure 1.1: Flow chart

In the flow chart used in this research, the structures and functions of the College were examined. At the same time the supersystems input was determined. To do this the history of the supersystem had to be checked as it intersected with College history at given points so that implications could be interpreted. Advantageous and disadvantageous implications were investigated so that recommendations could follow.

2. The other variables were treated according to the objectives.
3. Within the systems framework the historical background which was developed is as follows:
<table>
<thead>
<tr>
<th>ERA</th>
<th>PERIOD</th>
<th>CONTENT</th>
<th>DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Early</td>
<td>Origin of College</td>
<td>1949-1959</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Early days and early problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Events leading up to 1960</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>The middle period and the problems in period</td>
<td>1960-1984</td>
</tr>
<tr>
<td>2</td>
<td>Late</td>
<td>The present period and present problems</td>
<td>1985-1987</td>
</tr>
</tbody>
</table>

Reliability and validity As stated, data was collected by means of oral history, literature search and documentation.

1. **Oral History**: "All history depends ultimately upon its social purpose.... This is why in the past it has been handed down by oral tradition and written chronicle..." [Thompson: 1978: 1] Reliability and validity in interpreting history is necessary so as to preserve social purpose.

Both Thompson [1978], and Burzum and Graff [1977] rate the interview highly because existing written records, since the turn of the century, reflect the standpoint of authority and often vindicate the wisdom of powers that be.

As recorders became aware that records are historical sources, so they became more guarded. Although recall, subjectivity and personality can bias oral History, it remains a rich source of data and can be verified against a diversity of sources. The interview technique is a primary method of data collection.

The social function of documentary sources has changed. Most important communications between people are no longer made exclusively through documents (if they ever were) but also orally, by meeting or telephone.
2. "Trustworthy, usable, data in historical research are known as historical evidence which is derived by the process of criticism". [Best: 1977: 350]

2.1 External criticism establishes authenticity and genuineness. Official documents will be used and, when subjectivity is evident, will be noted.

2.2 Internal criticism: evaluation of accuracy or worth will be made by examining agreement with other competent witnesses. Threats to internal validity are expected due to competing explanations for obtained result.

In Chapter 2 the models that will be used are outlined and the general systems theory will be discussed. A guide to outline the content of Chapter 2 is provided on the first page of that chapter. An overall outline of the education and administration during the early, middle and late periods 1949-1987 is provided. This serves as orientation to the chronological sequence of historical events because the thesis deals with units containing "blocks" of information, eg all about tutors, but the overall summary deals with tutors in the early, middle and late phase.
The RSA was the first country in the world to obtain state registration for professional nurses. 1991 marked the centenary of registration for professional nurses in the RSA secured by Sister Henrietta Stockdale of the Community of St Michael and All Angels in 1891. Sister Henrietta also made representation to have nursing education vested in a National Education Department to separate the control of nursing education from nursing service.

"Recalling this early continuing battle of the profession makes the implementation of nursing education in the RSA in the fortieth year of the Council's existence (1984) so much more meaningful." [Kotze in Curationis, 8(4): 1985: 14]

The van Binnendyk Commission and the SA Nursing Council in their first training policy formulated the same principle at the second meeting of the Council early in 1945. [SA Nursing Journal 8(5): and SANJ, 8(6) and Kotze in Curationis, 8(4)]
The college admitted only white students from 1949-1989. The first coloured and black bridging course(6) students were admitted in 1989. The first coloured student of the four-year course was selected in 1989 and there were six not-white students in 1990. In 1991 80% of students were not white.

The van Binnendyk Report [1946: 101-102] discussed the demographics of population groups, advocating that a college for coloured people be erected in the Western Province and a college for black persons at Lovedale, Umtata. Reports on nursing education in other countries, including England and the USA, were used by the van Binnendyk Commission and the committee resolved to provide separate facilities, as was the case in the USA.

In 1945, when the plans for a college came under consideration, the Western Province population consisted of mostly white and coloured persons due to influx control. The Original Black (Urban Areas) Consolidation Act No.25 of 1945 was known as the Influx Control Act. This Act was repealed in 1985 by the Black Communities Development Act No.4 of 1984. There was an overlap of 8 months between the respective Acts when many black persons moved into the Cape as there was less control. Black numbers grew significantly after 1984.

(6) The bridging course is a 2-year course for enrolled nurses to become registered (professional nurses).
AN OVERALL DESCRIPTION OF THE EDUCATION AND ADMINISTRATION
OF THE CARINUS NURSING COLLEGE DURING
THE EARLY, MIDDLE AND LATE PERIODS,

The historical periods that can be distinguished are:

<table>
<thead>
<tr>
<th>ERA</th>
<th>PERIOD</th>
<th>CONTENT</th>
<th>DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Early</td>
<td>Origin of College Early days and early problems Events leading up to 1960</td>
<td>1949 – 1959</td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>Middle period and concerns in that time</td>
<td>1960 – 1984</td>
</tr>
<tr>
<td>2</td>
<td>Late</td>
<td>Present period and current problems</td>
<td>1985 – 1987</td>
</tr>
</tbody>
</table>

The events responsible for the division are that the College opened in 1949 and nursing education moved out of hospitals into Colleges. Colleges became autonomous and were registered as schools of training for all aspects of nursing education. In 1960 after considerable upheaval the hospitals once again took over as schools and colleges were only concerned with the theoretical aspects of nursing education. In 1985 the hospital school system came to an end when colleges became associated with universities with a department or sub-department of Nursing. The College which was now part of the Tertiary education system, was once again responsible for all aspects of nursing education. The 1985 change came about because a new four year course leading to registration as a General, Psychiatric and Community and (Midwifery) Nurse had been promulgated by the South African Nursing Council.

The College is an educational centre which falls under the Cape Provincial Administration. The Provincial Ordinance which gives the College legal status is Ordinance No. 12 of 1948, amended by Ordinance No. 13 of 1958 and replaced in 1984.
The structure that will now be used to describe the overall conditions will follow the pattern of the main work, i.e. Introduction, Super-systems, Resources and Throughput or Processing.

**EARLY PERIOD:**

For many years nurse leaders attempted to establish statutory responsibility for the profession and accordingly, in 1938 tried to petition Parliament for a Nursing Act but were opposed by the Medical Council, according to Brownlee [1982:66]. After nurses overcame the threat of a Trade Union 'take-over' as well as the ensuing crisis that threatened to disrupt nursing service and to wreck the Professional Organisation, [the S.A.T.N.A.] the Nursing Act No. 45 of 1944 followed.

The Act provided for the South African Nursing Council and the South African Nursing Association and the establishment of Colleges.

In the Cape, the van Binnendyck enquiry was held consequent to the Nursing Council's proposals and recommended that colleges be instituted.

After the Carinus College, the first college south of the Sahara, opened in 1949 the immediate task was to implement the educational and administrative systems that had been created. According to the Annual reports of the time and the people interviewed these systems were further developed and refined over the three periods.
In the early period, 1949–1960, the Carinus School of Nursing Advisory Board became known as Carinus College Advisory Committee. This body serves the function in a college that a hospital board serves in a hospital. It dealt with administrative and educational matters and liaised with CPA head office and hospitals. Committee members visited and inspected the hospitals where students were placed to consider any complaints and to bring to the notice of the Administration any matter they may have considered necessary or desirable; furnished comments, collected subscriptions, accepted bequests, donations or gifts, administered trusts and appointed committees.

There was a minimum of committees and meetings at this time, as academic life was relatively simple as only one course namely General Nursing and two short Post Basic Provincial courses in Nursing Administration and Orthopaedic Nursing were offered.

The College was governed directly by the Cape Administration at first as the Hospitals Department was created in 1950. The Provincial Government is the employing body and control is exercised through various regulations. A Nursing Advisory division provided more direct input. Section four of the Nursing Act, No. 45 of 1944 promulgated by the newly formed South African Nursing Council provided that regulations for training and examination of Medical and Surgical nurses be instituted. A school of nursing would only be approved by the Council if it consisted of a Nursing College and affiliated hospitals. This gave further status to the College. The South African Nursing Council [SANC] and the South African Nursing Association [SANA] are the two governing super-systems.
EARLY PERIOD ...continued.

The former, has since its inception, promoted standards, controlled education and been responsible for registration and certification of nurses. The latter has assisted with the development of an effective nursing service in South Africa, mainly through professional development. Both institutions have grown and served both the community and nursing most admirably.

During 1949-1989 the majority of students at the College have been white. The first black and coloured basic course students were admitted in 1990. The first coloured student for the four year course was selected in 1989. There were 95% white students in 1990 and by 1991, 20% of the student population are white.

Changes that have occurred in Society at large, e.g. poor law nurses, the Nightingale tradition, the British impact, racial and military matters and international political instability, led to adaptive behaviour in the College.


In 1949 the tutor was to fulfill the new teaching role in a new college environment; to adjust to the regulations and criteria of the newly formed SANC; to form a new liaison role with hospitals and to assist with practical education in hospitals.

The teaching role was more concerned with curative health care and the responsibility for both the theoretical and the practical components of the course rested with the College. Methodology was mainly in the formal lecturing realm and much dictation was done, consistent with a dearth of textbooks. The students were on the College establishment.
Financial resources are important in the life of all institutions because they make all other resources available. During the early and middle periods finances were allocated directly to the College who did all the bookkeeping and administration of funds. The College has always been entirely dependent on the State for funding as it generates little money itself.

Material resources:–

The SANC grants approval of nursing schools inter alia on the available facilities. In all the periods, as reflected in Annual and other reports, the need for resources or the need to change resources was noted.

This was probably due to:–

1. Development of Science and technology.

2. Few Colleges were built as colleges and the converted buildings were not ideal.


4. Growth and development of people.

5. Post war building restrictions and recessions.

During the 24 years of it's existence the College occupied nine venues. Most moves occurred in the middle phase. Only in 1972 was a college completed that had been expressly designed as a college. Due to all the upheaval of moving, stability and homeostasis was difficult to maintain. The changes were also labour intensive and costly and the normal educational program had to be maintained during the changes.

Geographical and functional isolation from the hospitals with which the College was affiliated resulted during the early and middle periods.
EARLY PERIOD  ...continued.

As mentioned in the previous page/paragraph, the College occupied nine venues which mostly took place in the middle period.

In 1948, the training of additional nurses was of such urgency that it was decided to purchase the Hotel Assembly at No. 8 Queen Victoria Street. On 9 March 1948 the premises were purchased for the sum of 151 000 pounds. No. 8 Queen Victoria Street remained the base from 1948 to 1972.

The venues occupied by the College fall into two periods as follows:-

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>PLACE</th>
<th>DATES OF OCCUPANCY</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY</td>
<td>8 Queen Victoria St.</td>
<td>1948-1972</td>
<td>Base</td>
</tr>
<tr>
<td></td>
<td>UCT:Hiddingh Hall</td>
<td>16/1/48-30/5/56</td>
<td>Lecture rooms</td>
</tr>
<tr>
<td></td>
<td>Ashlar Hall, 29</td>
<td>1/2/54-1/4/61</td>
<td>Junior nurses</td>
</tr>
<tr>
<td></td>
<td>Annandale Street</td>
<td></td>
<td>Lecture rooms</td>
</tr>
<tr>
<td></td>
<td>Karl Bremer Hospital</td>
<td>1/6/56-30/9/58</td>
<td>Residence and Lecture rooms for juniors</td>
</tr>
<tr>
<td></td>
<td>Rust en Vreugde</td>
<td>1/5/57-1/4/61</td>
<td>Lecture rooms</td>
</tr>
<tr>
<td></td>
<td>Roslin</td>
<td>1/7/58-1/2/72</td>
<td>Residence</td>
</tr>
<tr>
<td></td>
<td>Westcliffe</td>
<td>1/5/61-21/12/71</td>
<td>Lecture rooms</td>
</tr>
<tr>
<td></td>
<td>New Somerset Hospital</td>
<td>1970-1971</td>
<td>Finalist Lecture rooms</td>
</tr>
<tr>
<td></td>
<td>New CNC on GSH site</td>
<td>1/1/72-Present</td>
<td>Residence and Lecture rooms</td>
</tr>
</tbody>
</table>

Personnel and students who attended college in the various venues will no doubt recall many incidents in their lives whilst there. The famous starch brigade was the local name for the students who walked through the Cape Town Gardens to classrooms from the residence as the College housed and taught students.
The College consists of an educational and a residential section which is also controlled by the Head of College with inordinate time spent on hotel functions. It is planned that the future College infrastructure should be designed to separate residential and educational systems.

Tutor and student resources:
In the early period there were not enough tutors posts and this was one of the reasons for the Van Binnendyk enquiry. It took time in the later periods to increase posts and qualified tutors. The advent of Colleges opened new career pathways for professional nurses as tutors. The continuing shortage of tutors is in part due to the increase in career opportunities and the disadvantaged career structure in nursing education in comparison with administrative and clinical components. The career pathways or streams that developed were clinical, administration and education. The titles of the two main streams changed.

In the throughput in the early period the philosophy was behaviouristic in nature. As a result of the dearth of textbooks tutors drew up their own notes and used the black-board as well as the lovely old charts, the mainstay of first generation teaching aids. The practical work was taught mainly by simulation as there were too few tutors to assist students in the wards.
EARLY PERIOD ...continued.

The number of posts taken over from hospitals on 16/1/1949 were 530; the number of appointments from 16/1/1949-28/2/1960 were 3,574; the Annual number of students attending College (turnover) in 1949 were 526; in 1959 - 1,121. Tutors numbered six in 1949 and seventeen in 1960. Miss C M Loopuyt was the Head of College from 1/7/1948-31/3/1960. (Appointed Head before the College opened). Sadly she died on 14/8/1989. On 29/2/1960, 711 posts were handed over to the hospitals.

Prior to 1949 nurses, had not been appointed as Heads of Institutions and now considerable autonomy and power was vested in the College Head. Some of the reasons why the 1960 change occurred was that parochial jealousy, power shifts and ego-ideals had developed; medical pressure, resistance to change was encountered; some really believed student education belonged in a hospital and that college education was far too academic.

Hospital-College affiliation:

The hospitals and institutions affiliated to Carinus Nursing College during the period 1949 - 1984

The first affiliation:-

The first four hospitals affiliated with CNC were Groote Schuur Hospital, Woodstock Hospital (until 1/1/1983), Rondebosch/Mowbray Cottage Hospital (until 31/12/1976) and Victoria Hospital, Wynberg. Groote Schuur Hospital fell under the Cape Hospital Board until 1/1/1950 and from then on Teaching Hospital Board which also advises/serve Red Cross Hospital.

The other three hospitals resorted under the Southern Suburbs Hospital Board.
EARLY PERIOD  ...continued.

The northern and rural affiliation:

The hospitals affiliated to CNC were the Karl Bremer Hospital (from 1956-1959), Paarl Hospital (1957-1959), Swartland Hospital, Worcester (1958-1959). These affiliations were established to prepare students for the Karl Bremer Hospital so that senior nurses and sisters would be available by the time the hospital opened. This was done at the request of Miss Loopuyt who foresaw the problem. She was supported by the Superintendent of Karl Bremer Hospital, Dr R L M Kotze, who became Director of Hospital Services. With the opening of Karl Bremer Hospital and later Tygerberg Hospital, afrikaans student numbers at Carinus Nursing College dwindled from +50% to 15% and later 6%. In 1977 Afrikaans medium Carinus Nursing College students commenced attending Otto du Plessis College and their English medium students attended Carinus College.
MIDDLE PERIOD:

This period commenced with the trauma of getting the hospitals approved as training schools as stated above and on page one. A rift was caused between the College and some hospitals that lasted for two decades.

The academic pace increased as the course expanded to include Midwifery / Psychiatric nursing (called 'Intergrated Course') and pupil nurse training commenced. Lectures were also given to assistant nurses. Mrs Gordon was Head of College after Miss Loopuyt, 6/9/1960-30/6/1967, the overlap of dates being due to leave taken and the 'acting capacity'. Mrs Gordon died 20/2/1989, six months before Miss Loopuyt, who found it very hard to come to terms with the loss.

Mrs P T Kingma was Head 1/7/1967-30/10/1976, followed by Mrs B Goodchild-Brown.

THE HOSPITALS AFFILIATED TO CNC IN THE MIDDLE PERIOD

The middle period affiliations (and enrolled affiliation)

Die Volkshospital, 1965 - own hospital board.

Conradie till 1983 - Northern Suburbs Hospital Board.

Red Cross Children's Hospital, 1959.

False Bay Hospital enrolled pupils from 31/3/1972.

Somerset Hospital, 1/6/1973.

The later affiliations

The Integrated Course affiliations 1/1/1975:-

- General hospitals as stated above.

- State Health Psychiatric Hospital – Valkenburg and Alexandra Hospitals.

- CPA Maternity Hospitals: Mowbray Maternity Hospital and Groote Schuur Hospital Midwifery block (opened 1961).
In 1960 the collective student establishment was returned to the hospitals and they became responsible for the clinical education and the College for theoretical education. A divide resulted in the tutors' role which was to last until 1985 (as stated previously). The tutor became immersed in academic issues and her role developed into the "theoretical specialist". The functional isolation had commenced.

By 1976 with the new Health Act and the shift of emphasis in health care, the 'drive' for preventive and promotive health was on and teaching became much more diversified. At the same time the curriculum changed, new courses were added, the scope and depth of the courses and thus the role of the tutor changed. The SANA held a convention in Bloemfontein at that time to assist Colleges and tutors to adjust to these changes. Student numbers were growing rapidly, the tutor establishment was nonetheless static and the tutor became even more firmly cloistered in the academic world as there was no time to do much else but manage the increasing teaching load. As Midwifery and/or Psychiatry had now been added, teaching became even more diversified. However, although integrated within the General Nursing Science curriculum, Midwifery and Psychiatry were seen as more or less separate units. As mentioned in the previous section, the role of the tutor had gradually expanded and by now they were being utilised in many fields by various authorities. Educational opportunities had improved, selection criteria also became more stringent and tutors also qualified in a variety of fields.
The 1972 Hospital Amendment Ordinance divided the Cape Provincial Services into regions delegating considerable powers to Regional Medical Superintendents. [In 1949 the Cape Hospital Board had been abolished and the first Provincial career medical superintendents appointed as at the same time the Hospitals Department was formed.] The College was not included in a region and remained autonomous.

The links between the University of Cape Town and the Carinus College was commenced by Miss Loopuyt [the first nurse-tutor to graduate from UCT and the first Head of College]. Thus UCT links traverse all three historical periods carried through from Miss Loopuyt by the many UCT Diploma in Nursing Education students who subsequently taught at the College. The link reached a 'crescendo' in 1985 with the association agreement for the four year or comprehensive course. The post-registration course for nurse tutors was established in 1937 at UCT. In 1960, a Department of Nursing Tuition, falling under the Faculty of Medicine was created. Of the 97 tutor graduates from UCT, 25 have taught at Carinus College and all Heads as well as Vice Heads have been UCT graduates. The Faculties of Medicine, Education, Humanities and Science have given inputs into the College. The contribution of Professor Patricia Harrison, retired professor of the Department of Nursing and Professor R A E Thompson, professor since 1/1/1983, cannot be overestimated.

The hospital-school system:--
As stated on the first page of this overall description it was the changes in the hospital-school system that defined the periods of the thesis in that either the hospital or the college was designated as the school by the registering body.
The titles of professional nurses changed. In 1974 the traditional matron, sister, principal and sister-tutor became chief, principal or senior matron; senior principal and tutor. In the late period the directorate, managerial and professional nurse titles were developed by the CFA. A grade system, based on chief, senior and 'ordinary' rank was used. The problem is that no special nomenclature is available for nurse-tutors which is a 'sore point' locally and confusing internationally and in the far future.

The student-tutor ratio was critical in the early and middle period, and though it improved later is far from ideal in comparison with the other tertiary educational institutions.

The changes in the tutor role is due to the interaction of various factors.
LATE PERIOD:--

It seems as if the conditions now prevalent in nursing have moved full circle. In 1949 the conditions that led to reform and the opening of the College are with us, once again. There are serious staff shortages, remuneration concerns, distance between students and registered staff, a financial recession, labour unrest and some talk of organising the nursing profession into a union. On the other hand things 'will never be the same again'. The educational organisation is on a tertiary footing, the UCT association has broadened the academic horizon. The provision of health now has a preventive and promotive philosophy and has changed the work of all participants, as have the 'new RSA' political moves. The professional bodies are well established and flourishing and they have legislated to enable them to cope with present unrest and problems. By and large conditions have improved but are not ideal, and continuing inputs have to be made. Vast new changes lie ahead in a future very different from what was envisaged by the majority of persons. In 1949 and 1984 the student education was transferred to the College from the hospitals. A strange periodic action-reaction seems to set in, in the hospital and the profession. No sooner is an educational function transferred but that a new one must be found to take its place. Time and again measures are taken to place courses at colleges and it would be preferable to negotiate at early rather than later stages. The probable reason for the above is a developmental need.

Hospital (English Medium) affiliations to CNC [for students only] in 1983 were:--

Tygerberg Hospital
Eben Donges Hospital
Karl Bremer Hospital
Paarl Hospital
Stellenbosch Hospital
Swartland Hospital
LATE PERIOD ...continued.

In 1985 the Advisory Committee was abolished due to the association formed with UCT and the College Council and College Senate came into being. The College Council has delegated authority from the Administrator to be in overall control of the College and the Senate is in control of academic matters. As a result the examination system changed. Whereas in the early phase the SANC controlled all facets of the examination system, from 1985 the College set and marked papers and the University moderated the examination. Due to the increased workload of implementing the new moves like the UCT association, changes in the scope and nature of the hospital affiliation, accompanying students in the wards, new labour intensive teaching and learning methods, new educational technology, responsibility for the practical for four disciplines, implementing the new bridging and several post-registration and post-basic courses, etc. the number of committees and meetings and the academic pace had increased considerably.

A most pertinent adaptation was that during the period of grand apartheid, 1945-1990, when only white students were admitted, the College was of assistance and support to a number of black colleges and colleagues. During the late period non-segregation developed in the region [literally before any other region]. The College has admitted coloured and black South Africans since 1989, forming an 80% majority amongst 1st year students in 1991 at the College. One reason for the above is that during most of the Colleges' history the Western Cape was predominantly a white area as influx of black people was minimal. The Acts concerned were the Black [Urban Areas] Consolidation Act No. 25 of 1945, called the influx Control Act, has repealed in 1985.
LATE PERIOD  ...continued.

In 1984 the Black Communities Development Act No. 4 of 1984 took the place of the influx Act. During the period of the 8 months overlap many black people streamed into the Cape.

The health supersystem in South Africa is a sub-system of government. The 1919 and 1977 Health Acts affect the giving of health care as well as education of health care givers by way of philosophy, policy and implementation. International policies/trends, e.g. the Alma Ata Declaration in 1978 also influences the national health system.

In the middle and late period the College, being the Groote Schuur Hospital Region, experienced regional input in the form of shared financial management and certain other shared functions and services. The relationship seen against the terms of the CPA/UCT memorandum of agreement presents conflicting spans of control and requires definition.

Resources:-

The selection criteria of tutors became increasingly well differentiated as the opportunities for tutors to study, develop and grow became not only available but also essential and with considerable intrinsic value attached to further qualifications. A well differentiated status was evident when the College associated with the University. The Senate and the Council developed the criteria further.
LATE PERIOD...continued.

By 1985, with the comprehensive course, the role of the tutor developed to encompass the General, Psychiatry, Midwifery and Community Nursing Science fields. An entirely new approach was required in that all four disciplines are fully integrated throughout each year of study. As Colleges were now required to enter into an association with a university, the functions the University was responsible for were implemented by the tutors. Early in 1980 the College had commenced preparation and the first tutors obtained the Psychiatric Nursing qualification in 1985. It was planned that one or two tutors would attend this course annually until as many as possible were qualified therein. Interpersonal skills courses were also followed in order to expand skills and so to create an appropriate therapeutic milieu in which teaching and care could take place.

"The Psychiatric hospitals" and Community Health units nationally have had very limited contact with tutors and students. Liaising with, overtaking and involving the nursing personnel of these services required, and continues to require, a significant investment of time by the tutors.

[Memorandum of UCT, CNC and NMNC to their councils: 10/11/1987: pg. 4]

The tutor's role now includes accompaniment of students to the clinical areas, to give guidance and support and to create appropriate learning opportunities in order to promote the personal and professional growth of the student, the consolidation of knowledge and the development of clinical skills. Clinical teaching is an extension of the formal teaching and learning in the classroom - a carefully planned, goal directed activity. Searle, C [1986], unpublished, said: "Formal clinical teaching and learning is not concerned with classical conditioning in the Pavlovian sense. It is the development of competent, thinking, creative, committed practitioners, fully aware of their accountability to their patients, society and their profession."
Clinical education is now the responsibility of the College and ensuring that students are competent in a large number of affective, cognitive and psychomotor skills added significant dimensions to the role of the tutor and the functions of the College. Further significant changes as a result of the comprehensive course also carved out new roles.

The Principal's Post:-

As a result of the historical changes and the limited levels of education posts, the principal's post by 1986 has an unsure future. This post occupied level 2 [second-in-charge] from 1967 to 1986 and from then on, No. 3 in the hierarchical structural configuration of the organization, and is historically the most disadvantaged. The change for this category should have been effected in 1967 when Sister-Tutor grade 1 was discontinued, and the incumbents became Principals, becoming the same rank as Senior Tutors. As the structure of educational posts and the incumbents' responsibilities and functions are not well known to persons outside the educational field, the likelihood of the discontinuation of this rank is there.
LATE PERIOD  ...continued.

Throughput:
As regards the educational process, the various policies and philosophies were not as well developed in the early as in the later stage. This development is ongoing – the goals and values have always been there albeit not spelled out. The pedagogical approach in the later stage was humanistic and andragogical (rather than pedagogical) – also consistent with the development of humanism. Once the systems essential for survival had been established it was possible to pay more attention to psycho-social systems.

Four criteria have been selected according to which excellence in productivity can be measured: research output, curriculum innovation, critical thinking and adult educational premises. In teaching and learning academic productivity is measured according to research output which was slow earlier, consistent with other tertiary educational systems. In the later stage momentum was gained as academic development progressed but is as yet, not well defined. Teaching productivity took time to develop. Research into teaching and learning started in the middle period in a small way, and is accelerating. This is also much the case in the other tertiary education centres in the RSA.
LATE PERIOD ...continued.

Curriculum innovation: curriculum development came to Colleges in the later period. To judge by responses (at National seminars) from tertiary educational systems, curriculum development is not really flourishing. In the early and middle period the syllabus and later the curriculum was provided by SANC in Regulations and Directives as a macro unit with schools provided micro-content. Course evaluation approaches and instruments are areas for future research.

Critical thinking is broadly defined by a critical attitude/spirit, scepticism of givens of existent norms and ways of doing. Although every effort is made to encourage this, it is easy to sabotage in view of long entrenched practises in nursing education and society in general. This kind of thinking was not encouraged in the early period.

A more recent development is adult education. The concepts that underscore this type of education interact to form a whole that has a variety of meanings for a variety of people: decrease of learner's dependency on the educator and defining their own needs, assuming increasing responsibility for their own learning, using experiential and participating educational methodology, etc. In concert with education at large, nursing education is more dedicated to student achievement at the cost of the process whereby the product is achieved, paying lip service to the stricter perceptions of meaning of Adult Education.
The link with the University and the premises underlying the new curriculum provides for a comprehensive approach to health care and is significant to the profession and the community.

**LEGEND:**

- CNC - Carinus Nursing College
- RSA - Republic of South Africa
- UCT - University of Cape Town
- CPA - Cape Provincial Administration
- SANC - South African Nursing Council
- SANA - South African Nursing Association
- CFA - Commission for administration
- SATNA - South African Trained Nurses Association
- NMNC - Nico Malan Nursing College
- SAPSE - South African Post Secondary Education
CHAPTER 2
THE SYSTEMS APPROACH

Because the historical development of the College is described according to a systems approach it is necessary to introduce the main tenets of the General Systems Theory. Thus this chapter deals with why a systems approach is used and the concept and definition of systems. Diagrams and explanations are presented as to the components of a simple system, demonstrating the relationship of the environment, element, subsystem and boundary. Hereafter the components of systems can be discussed in terms of subsystems, the environment and goal state, including feedback. As the parts of a system are the components or subsystems consisting of elements or variables, a short explanation of interaction between variables follows. Then the organization as a system is approached from two viewpoints, static (structure) and dynamic (functions, goals). The ways in which parts exist in combination with other parts to form the structure of the whole is based on relations, and there are ways of combination of elements of relations, that result in interactions. We now have elements of interaction and these lead to rules of interaction to show how elements function. Elements function owing to stimuli from the environment, and the kinds of interaction in stimulus-response-effect sequences result, which demonstrate responses of the organization.

Why use a systems approach?

The College is an organization and the systems approach is a way by which organizations can be understood. It is a framework for ordering and explaining complex phenomena as it assists in identifying the many interdependent elements in an organization. In relation of the history being researched, the elements as well as the interdependence between elements can be examined. The diverse units and variables form systems that can be identified and analyzed. The boundaries between systems prevent overlap of function and structure when the system is studied. The environment can be identified and analyzed. How feedback takes place can be classified, and ways of "combination" of elements as well as rules of interaction clarify what is occurring in cause and effect relationships.
"The emergence of the principle of wholeness is the starting point of the systems concept." [Sharma: 1985: 4] The word system has been defined differently by different individuals. The systems concept emerged with the work of von Bertalanffy in 1951 and Boulding in 1956, which led, with the work of others, to the general systems theory, which can be applied to many sciences. The antonym of systematic is chaotic. The systems approach to analysis refers to a scientific method of problem solving, decision-making and planning. Churchman [1968] and Silvern [1972] "equated the systems approach with analysisynthesis, that is, an iterative operation of analysis and synthesis." Thus the systems approach is useful to organise the historical content of the dissertation.

A system is defined in Webster's New International Dictionary as "an aggregation or assemblage of objects united by some form of regular interaction or interdependence; a group of diverse units, which function, operate or move in unison and often in obedience to some form of control; so combined by nature or art as to form an organic or organised whole. Von Bertalanffy [1951: 5] defines a system as "any arrangement or combination, as of parts or elements, in a whole." For example the College as a system consists of units to form a whole.

Boulding (1956), while discussing routes for an approach to a general systems theory, created a hierarchical taxonomy of systems, consisting of the nine levels:(1)

The notion of a system applies to a cell, a human being, a society, an organization as well as to an atom, a planet or a galaxy. In this work the social organization level is used.

(1) 1. Static systems 6. Animal kingdom
2. Simple dynamic 7. Human being as a system
3. Simple cybernetic systems 8. Social organizations
4. Open or self-maintaining systems 9. Conceptual constructs
5. Plant life
The concept of systems

A system is a whole entity (conceptual or physical) consisting of interdependent parts and existing in an environment, the supra-system or supersystem, divided by boundaries.

![Diagram of a simple system]

**Figure 2.1: A simple system**

A system consists of a whole, represented by a circle. The circumference is the outer edge, i.e., the boundary between the system and the environment or the supersystem wherein the system exists. If a diameter (straight line from outer edge to outer edge) is drawn and radius from centre to outer edge then the circle is divided into 4, then 4 quarter circles are formed, known as subsystems represented diagramatically by drawing a circle in each quarter circle. In turn each subsystem is divided forming 4 quarters in each subsystem and quartered (ad infinitum) until the smallest element is reached, known as a variable. The system is built up by variables.

When all these steps are demonstrated in one diagram, the result is evident in Figure 2.2. It can be likened to a Chinese puzzle, which is a wooden block that fits together to form a circle and when dismantled forms the repeatedly quartered circles described above.
Figure 2.2: Concept of the structure of a system

The behaviour of elements or variables (which are free parts of the components) will now be outlined in terms of structure and function as well as static and dynamic ways to examine organizations. Feibleman and Friend in Emery [1981: 40-67] set out structure and function to serve as 'an instrument for the investigation of empirical organizations at every level'. Thus canons are created to show purposive functions of the organization by highlighting the composition which fulfils functions. The organization as a system is approached from two viewpoints - the static and the dynamic. Static treats organizations as the description of structure, i.e., relationships between system, subsystem and elements. Dynamic refers to goal and function of the parts of the system/organization. The division into static and dynamic is not absolute as no organization is ever completely static or dynamic, all have structure and all suffer functional change.

Structure
The structure of the organization refers to the relationships between the whole, parts and subparts discussed in the previous section. Structure itself is static, that is without reference to function. Each subsystem or parts of a system is linked with another subsystem or system and this link is known as a relation.
The ways in which parts exist in combination with other parts to form the structure of the whole is thus based on relations. The elements of these relations form a group of relations, as demonstrated in Tables 2.1, 2.2 and Figure 2.12 respectively, the precedents of which can be applied throughout the work. (Table 2.2 can be found in Annexure 2)
Table 2.1
Ways of Combination of Elements of Relations

(a) transitivity: relate to middle and extreme  (-a) intransitivity
(b) connexity: two parts without third      (-b) non-connexity
(c) symmetry: change in part does not involve change in relation  (-c) asymmetry
(d) seriality: transitive, connected, asymmetrical  (-d) aseriality
(e) correlation: one-many , one-one , many-one , (-e) non-correlation many-many , relation of 2 series
(f) addition: join—- increase                 (-f) non-addition
(g) multiplication: join + involve            (-g) non-multiplication
(h) commutation: symmetric addition           (-h) non-commutation
(i) association: communicative + connected    (-i) non-association
(j) distribution: communicative + intransitive  (-j) non-distribution
(k) dependence: one part conditioned by other (-k) independence


Thus factors in the analysis of organizations have 'ways of combination'. For example, an apple is not composed of flesh, skin and seeds in any haphazard combination but in a definite set of relations between these. The ways of combination of elements of relations are described below.
In transitivity two parts relate to a middle part and to extreme parts; (-a) is intransitivity and is the absence of this relation. For example, the parts of an apple are transitive for the skin encloses flesh, flesh encloses seeds, skin encloses seeds. Grains of sand are intransitive since extreme parts are not related by a middle part.

In symmetry there is no change in relation. Seriality is transitive, asymmetrical and connected. Correlation (one-many, one-one, many-one, many-many) - akin to the statistical y-x concept. It is the relation between two series such that for every part of one series there is a corresponding part in the other. Addition is the relation of joining of parts so as to increase their number. Multiplication is the relation of joining of parts so as to involve them with each other. In commutation the addition and/or multiplication is symmetrical. In non-commutation the addition or multiplication as asymmetrical. Association is commutative and connected. Distribution is commutative and intransitive. In dependence one part is conditioned by another.

In Annexure 2 the rules of interaction of the elements of relation show how elements function in dynamic analysis. Annexure 3 demonstrates the kinds of interaction in stimulus - response sequences by developing the relationship between the organisation and the environment because the thesis is concerned with change and adaptation and the interactive functions follow. A discussion concerning the relationship of Annexures 2 and 3 follows in Annexure 4.

The components of a system, the environment of a system and the goal state are discussed in Annexure 5.
How the general systems theory will be applied in this work to the college as an organizational system i.e. methodological models used are demonstrated in Figure 2.10 and Figure 2.11.

```
Supersystems:
Inputs from the environment:
'Market' information, needs, competition, etc.

Participants/influence:
Legal and social restraints.
Human, financial, technical and knowledge resources

Inputs from inside the organisation:
People - talents, knowledge
Money
Material
Equipment, Buildings

To the environment
<---------------------------
Products and services

PROCESSING:
Goals and Values
Psycho-social sub-systems
Technical sub-systems
Structural sub-systems
Managerial sub-systems

Outputs

To the organisation
<---------------------------
Information

```

Figure 2.10: Organizational system
Generally there are six variables which are studied in the course of making an analysis of an education system. These are programmes, personnel, facilities, hardware and software, financial support, and students. The first five comprise the means whereby the educational objectives are attained. The sixth variable, the students, represent the products of the educational system, once the throughput process is complete.

In order to connect the purpose and the variables of this analysis Robert Buchele's conceptual model of an organizational model will be used as shown in Figure 2.12 below and adapted to the subject at hand. The most important premise of the general systems theory is the input-output model, and its role is crucial in the general systems theory.
Supersystems
input from
environment

Processing
throughput inside
organization

Resources
input from
inside the
organization

Output

To the environment

Products,
services,
information

Information

To the organization

Input

Figure 2.12: The basic organizational system

Source: Adapted from Robert Buchele’s organizational model and the operational model [1977: 29]

Inputs from the environment contain the ‘market’ information of the national-international community, eg needs, competition, information, the influence of participants, the legal and social restraints of influences, as well as technical, human, financial and knowledge resources, and these react with the organization, the college in the throughput. Further inputs are, of course, from the resources within the organization. The resources are the people in a college which are the students, tutors and other staff with certain talents and knowledge who use materials and equipment in an educational space - a college building. Finances purchase these resources. These inputs lead to the performing of tasks and reacting with supersystems in the throughput. Thus the data is arranged as follows:

Inputs in the throughput

In the throughput (or the processing) the work, of the college takes place by means of structural and functional sub-systems. The flow of materials/energy and information from input to output is via sub-systems which are goals and values, technology, organizational structure, psycho-
social and managerial in nature. All these components interact in the educational process to form the output, the professional nurse. In turn, this output makes an input into the environment as the output is the product which is the service the collegiate system offers the environment in the provision of health care. Not only is the product produced, but it also yields information, relevant to the supersystem which is used as data-input for further future interactions due to the interdependence of the whole. The output also engenders information which forms an input into the resources within the organization. Thus a chain of interactions constantly takes place between components. How these interactions progressed historically will be outlined in this work.

Organizations are not studied according to the tenets just discussed only but also according to parts, people, and organizational types.

The systems approach to parts of the organization

In the systems approach, the organization is studied, not merely as a formal arrangement of superiors and subordinates or as a social system in which people influence each other, but as a total system in which the environment, the formal arrangements, the social system and the technical system are all constantly interacting. The organization is not a static arrangement of jobs that can be captured easily in an organizational chart but a pattern of inputs, outputs, feedback delays and flows.

Mintzberg's systems approach

In order to understand how the college functions, an orientation to the five basic parts of the organization and the functions of the parts, is necessary. Figure 2.13.1 demonstrates the parts, and Figure 2.13.2 demonstrates the location of the organogram in the parts of the organization.
The formal flow of authority is located as follows:

"The organogram is a controversial picture of the structure" as it is an inadequate description of what really takes place in an organization. It should not be rejected, but rather placed in context. [Mintzberg: 1979: 37]

In order to place the organogram within the context of meaning of what an organization really does, orientation to the following five basic parts of organizations is necessary to understand how the college functions.
In the Strategic Apex are people charged with overall responsibility of the college. In the middle line are the 'supervisors' or middle line managers, who are the principals in charge of a particular year or department. The Operating Core consists of tutors, or clinical educators, concerned with the operating work flow of teaching. Clerical and household personnel are the support staff, whereas the Techno-structure deals with matters like work study, personnel and human resources management etc.
Types of organizations vary, and Mintzberg describes several types of organizations which are briefly summarised below. The reason for including the summary in this work is to identify the type of organization the college is, in comparison with other organizational systems, and to outline the role of adhocracy in the organization of the college.

The characteristics that identify the type of organization (design parameters) are: prime co-ordinating mechanism, key part of organization, type of decentralization. Accordingly, a nursing college is a professional bureaucracy, a divisionalised form of organization as well as an "adhocracy". These relationships are summarised in the following table:

<table>
<thead>
<tr>
<th>Structural Configuration</th>
<th>Prime Co-ordinating Mechanism</th>
<th>Key part of Organization</th>
<th>Type of Decentralization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple structure</td>
<td>Direct supervision</td>
<td>Strategic apex</td>
<td>Vertical and horizontal centralization</td>
</tr>
<tr>
<td>Machine bureaucracy</td>
<td>Standardization of work processes</td>
<td>Technostructure</td>
<td>Limited horizontal decentralization</td>
</tr>
<tr>
<td>Professional bureaucracy</td>
<td>Standardization of skills</td>
<td>Operating core</td>
<td>Vertical and horizontal decentralization</td>
</tr>
<tr>
<td>Divisionalised form</td>
<td>Standardization of outputs</td>
<td>Middle line</td>
<td>Limited vertical decentralization</td>
</tr>
<tr>
<td>Adhocracy</td>
<td>Mutual adjustment</td>
<td>Support staff</td>
<td>Selective decentralization</td>
</tr>
</tbody>
</table>

"We can explain this relationship by considering the organization as being pulled in five different directions, one by each of its parts. Most
organizations experience all five of these pulls; however, to the extent that conditions favour one over the others, the organization is drawn to structure itself as one of the configurations above." [Mintzberg: 1979: 38]

Thus, the strategic apex exerts a pull for centralization, by which it can retain control over decision making. This it achieves when direct supervision is relied upon for co-ordination. To the extent that conditions favour this pull, the configuration called Simple Structure emerges.

The technostructure exerts its pull for standardization - notably for that of work processes, the tightest form - because the design of the standards is its raison d'être. This amounts to a pull for limited horizontal decentralization. To the extent that conditions favour this pull, the organization structures itself as a Machine Bureaucracy.

In contrast, the members of the operating core seek to minimize the influence of the administrators - managers as well as analysts - over their work. That is, they promote horizontal and vertical decentralization. When they succeed, they work relatively autonomously, achieving whatever co-ordination is necessary through the standardization of skills." [Mintzberg: 1979: 39]

In the following tables, the configurations are summarized by reflecting the respective design parameters. In the throughput the designs are discussed as they affect the administrative and educational processes:
Table 2.4

Structural configurations of organisations

1. The Professional Bureaucracy:
   **Prime Co-ordinating Mechanism**: Standardization of skills
   **Key Part of Organization**: Operating core
   **Main Design Parameters**: Training, horizontal job specialization, vertical and horizontal decentralization
   **Contingency Factors**: Complex, stable environment, non-regulating, non-sophisticated technical system, fashionable

2. The Divisionalized Form:
   **Prime Co-ordinating Mechanism**: Standardization of outputs
   **Key Part of Organization**: Middle line
   **Main Design Parameters**: Market grouping, performance control system, limited vertical decentralization
   **Contingency factors**: Diversified markets (particularly products or services), old, large, power needs of middle managers, fashionable

3. The Adhocracy:
   **Prime Co-ordinating Mechanism**: Mutual adjustment
   **Key Part of Organization**: Support staff (in the Administrative Adhocracy; together with the operating core in the Operating Adhocracy)
   **Main Design Parameters**: Liaison devices, organic structure, selective decentralization, horizontal job specification, training, functional and marked grouping concurrently
   **Contingency Factors**: Complex, dynamic, (sometimes disparate) environment, young (especially Operating Adhocracy), sophisticated and often automated technical system (in the Administrative Adhocracy), fashionable.
The Adhocracy

The word adhocracy was borrowed by Mintzberg from Toffler and refers to a structural configuration able to fuse experts drawn from different disciplines into smoothly functioning ad hoc teams, hence the word "ad hoc cracy". In contrast to other forms of highly ordered structures, adhocracy is the most complex, yet not highly ordered.

"Adhocracy" was initiated in about 1980 in the College and it was by this means that the Comprehensive Course curriculum was designed and implemented. It remains the ongoing means of solving problems and brainstorming.

The basic structure of adhocracy [Mintzberg: 1979: 432]

Structural configurations:
- highly organic(2) with little formalization of behaviour
- highly horizontal job specialization based on formal training
- functional units for housekeeping but small project teams to do their work
- co-ordinating liaison mechanism between teams
- selective decentralization within and between these teams located in various places in the organization and involving admixtures of line, staff and operating experts

That which is up-to-date and current is incorporated. Sharp divisions of labour, extensive unit differentiation, emphasis on planning and control is not marked. Co-ordination comes through interactions, the configuration is flexible, self-renewing, organic and in Hedberg’s terms, a "tent" instead of a "palace" [in Mintzberg].(3)

Information and

(2) "Organic" refers to persons able to, or who often do, work of a higher or lower skill ordinarily not expected from the job description they have.

(3) A tent can be erected, dismantled, carried elsewhere.
decisional processes flow freely. There is a more even distribution of power and decision making in all parts, and there are more and innovative decisions.

Two types of adhocracy:

1. **Operating adhocracy** innovates and solves problems and is engaged in divergent thinking aimed at innovation. For every operating adhocracy, there is a professional bureaucracy with a narrower articulation engaged to pigeonhole a novel solution into a standard programme, engaged in convergent thinking aimed at perfection.

2. **Administrative adhocracy** functions with project teams but undertakes the project to serve itself. It cuts off (truncates) its operational component.

Roles of the strategic apex in adhocracy

1. Top managers of the strategic apex of the adhocracy may spend less time on strategy but must spend a good deal of their time on the battles that ensue over strategic choices and handling the many disturbances that arise over these fluid structures. Adhocracy, by its innovative characteristics, breeds aggressiveness and conflict which, if openly expressed, is channeled to productive ends. Managers should be masters of human relations, able to use persuasion, negotiation, coalition, reputation, rapport to fuse the individualistic experts into smooth functioning teams, according to Mintzberg [1972].

2. Managers devote much time to monitoring projects.

3. Liaison with external environment to ensure constant exchange of information and to engage upon the necessary negotiation.

Adhocracy may well be considered as the structural configuration of the last half of the century.

Having dealt with certain tenets of the General Systems theory and with parts of the structure and function of the College as a system, in the next chapter the factors that led to the establishment of the College system will be discussed.
In this chapter, factors that led to the establishment of the college are discussed. A general introduction is given on the development of nursing education in the Cape and this is followed by an overview of the abysmal conditions prevalent in nursing in the country in the early nineteen forties which culminated in the van Binnendyk Commission of Enquiry in the Cape, [which is briefly discussed]. Hereafter the College was established, its naming, opening and its first student resources are mentioned. The biography of the first principal, Miss C.M. Loopuyt, is presented in Appendix 8.

The establishment of the College was influenced by factors within the broad context of society and also in nursing, and preceded by development in nursing itself.

A general introduction to the development of nursing education in the Cape

The beginning of nursing was probably that first unheralded, undated, moment when behaviour expressing care, concern and compassion took place and, although buried in antiquity, it is a nirvana constantly returned to and developed which forms part of the context in which the nursing discipline is perceived. "I believe that the profession which we know as nursing results from the evolution from within society of a fundamental human activity - the activity of caring. The real origins of nursing are lost in the mists of time." [Thompson: 1986: 1]

"Nursing the sick has a long history covering many centuries." [Botha: 1950: 19] The formal training of nurses commenced in 1800 in Germany with the institution of a Nursing School at the University of Heidelberg by Professor Franz May. [Searle: 1965: 135] Several schools developed in Germany and the best known training centre for deaconesses was established by Pastor Theodor and Frederika Fliedner in 1836 at Kaiserworth. Florence Nightingale enrolled at this school in 1851 for a three-month course in Nursing Care and Institutional Management. [Louw in Kotze: 1976: 1] And
so it was not until the last half of the 19th century, that systematized training, laid down by Florence Nightingale, developed in England and spread throughout the world. The Nightingale system commenced in 1860 at St. Thomas Hospital in England and transformed the entire nursing world. "All modern medical and surgical advances put together - apart from preventative medicine and infant hygiene - have saved as many lives as the Reform of Nursing," according to Dr. C. Singer in Botha [1950: 19].

Sister Mary Agatha, of the All Saints Community, started the training of three nurses in 1886, at Somerset Hospital. [Searle: 1965: 150] Sister Henrietta Stockdale, of the community of St. Michael and All Saints, introduced nurse training into South Africa in 1887 at the Carnarvon(1) Hospital. [Searle: 1965: 140] In 1917 the Cape Hospital Board informed the Colonial Medical Council(2) that probationer nurses of Wynberg, Woodstock, and Rondebosch Hospitals would receive lectures jointly, according to Botha. [1950: 20]

The story of hospitals in South Africa began in the Cape Peninsula [Botha: 1950: 3], as does the story of colleges of nursing. The need for health services was a contributory factor in bringing western civilization to this land. [Louw: 1985: 2 in CPA Annual Report] The first hospital was built in 1656 by Jan van Riebeeck in the Mother City. The nursing staff consisted of male attendants assisted by slave aids, and Cape Town had to do without a hospital where its civil population could receive care when sick. Old Somerset Hospital, the first civilian hospital, opened by Dr. Samuel Bailey in 1918, established the genealogical line for the College. The most direct line of descent of college nursing education is via Miss Loopuyt from Somerset Hospital Teaching Department in 1932, to Groote Schuur Hospital in 1933 and to Carinus Nursing College in 1949.

Thus, before the end of the 19th century, instruction to hospital nurses had commenced in South Africa. The period of training was for two years in a hospital or one year in a hospital plus two years under the

(1) Later the Kimberley Hospital.

(2) Under whom nursing education resorted at the time.
supervision of a Medical Practitioner. In 1900 it became a three year course and training under a Medical Practitioner was eliminated. In 1927 revised nursing regulations were promulgated which were much more uniform and vastly improved in all four provinces. The period of training became three and a half years in Class I (larger) hospitals and four and a half years in Class II (smaller) hospitals. The Cape Hospital Board (CHB) regarded Sister Tutors as essential in all hospitals, due to the extended syllabus laid down by the S.A. Medical Council. Miss S.M. Marwick, the first Sister Tutor, was appointed to the Somerset Hospital on 29th March 1929. In 1930 Miss E.M. Foulkes Pritchard was appointed as Sister Tutor for Woodstock, Rondebosch, and Wynberg Hospitals. [Botha: 1950: 20] Up to that date lectures had been given by matrons and doctors. [HBC Minute Book of Somerset Hospital: Archives: 1929 : 9]

In June 1943 the Cape Hospital Board introduced the block system, the brain child of the Matron of Groote Schuur Hospital, Miss F.M. Pike. In 1945 she was awarded an honorary M.A. by the University of Cape Town. [A106: Archives : 176] Probationers underwent alternate periods of theoretical and practical training in wards, obviating studying at night after long hours of duty.

An overview to the factors that led to the movement to establish a college

From the beginning of the Second World War, health services and nursing education were handicapped by the shortage of trained nurses "and a representative conference convened by the Minister of Welfare and Demobilisation was held in 1943." [Botha: 1950: 27] A special committee, of which Captain Hare, Chairman of the Cape Hospital Board was a member, had the brief to investigate means to make the nursing profession more attractive.

"Among matters discussed were improved conditions in training schools, uniformity of salaries in the Union, affiliation of small hospitals to large training schools, the institution of an eight-hour day and the establishment of Nursing Colleges."
The conditions prevalent in nursing by 1945, as the Second World War was drawing to a close, indicated that nursing was in a state of crisis because of shortages of student nurses, registered nurse practitioners and tutors; conditions of service and conditions in nursing; and the negative effect the war had had upon nurses and upon society in general. The South African Nursing Council was newly formed and urgent changes were required consequent to its proposals for basic nurse training. If these changes were to be implemented, a new dispensation in nursing was essential.[All7 : Archives : 178]

The abnormal conditions that prevailed related to the following: The hours of work were excessive - often 72 hours per week. In certain areas there was only one day off per week. The many hours of overtime were thought to be due to the shortage of nurses; the fact was that nursing was extremely labour intensive and that good management techniques were lacking. There was a minimum number of medications available, surgical procedures were invasive, anaesthetics, equipment and techniques primitive, nursing interventions were laborious and often the mainstay of the treatment regime. There was a minimum of domestic help and ancillary medical assistance. Ancillary and support divisions were just developing and the nurse was the physiotherapist, almoner, launderer and dietician.

Nurses were regarded as expendable and the ward sisters often treated students very inconsiderately. These sisters also instituted control measures and procedures that exploited the time and energy of nurses. Nursing was seen as both emotionally and physically strenuous. Many young women with only a standard seven certificate were admitted.

Amidst all of this the student, tired and often dispirited, attended class in her off duty period. The curriculum was taxing, and the educational resources lacking. Instruction was given in unsuitable buildings and there was a lack of suitably qualified educators i.e. sister tutors, doctors, and clinical instructors. The matron often took on teaching tasks for which she was not qualified, and a conflict in interests developed between the educational and the service needs. There was also poor correlation between theory and practice. When workloads were high, the service needs were met at the expense of the educational needs.
Furthermore, there was a dearth of textbooks and a grave shortage of registered nurses which meant that students could not draw on registered nurses as learning resources. In addition they had to "double up" for registered nurses. Many elementary educational psychology principles were ignored and consequently wastage was high. In certain instances the theoretical portion of the curriculum was not structured as well nor rated as highly as the service or practical needs. [Searle: 1965: 236 and Botha: 1950: 20]

The above contained all the seeds for revolt and culminated in the Trade Union crisis, as described in a subsequent chapter. Finally the struggle for the Nursing Act, which brought about the SA Nursing Association and the SA Nursing Council was won.

In order to investigate all the above matters in the Cape, the van Binnendyk Commission of Inquiry was appointed, and published the van Binnendyk Report. This is discussed below.

**A summary of the van Binnendyk Report**

The van Binnendyk Report is based upon "An Inquiry into the Training of Nurses in the Province of the Cape of Good Hope, consequent upon proposals for Reforms made by the South African Nursing Council."

A committee consisting of the following members was appointed by the Administrator of the Province in 1945:

L. v D. Cilliers, Chief Medical Inspector of Schools;
C.J. Hofmeyr, Chief Inspector of Schools; and
D.A. van Binnendyk, Director of Hospital Services, Provincial Administration of the Cape of Good Hope.

The final Report was signed on 1 March 1946. In this section of this work it will be referred to as "The Report". This Committee was directed to undertake the enquiry [by the Executive Committee] - Minute No. 1296/1945 dated 15 May 1945 - as reported in Botha [1950: 27]. An interim report was submitted on 18 July 1945 stating that two problems were involved:

1) Increasing the output of trained nurses in view of the shortage of such
personnel; and 2) Improving the method of training nurses. [van Binnendyk: 1946: 1]

The final report, consisting of 155 pages, became available in March 1946. The final recommendations occupied 17 pages, but each chapter ended in recommendations.

As the Carinus College was established as a direct result of the recommendations of the Report, and as other colleges were subsequently developed, the Report must be regarded as a critical input into nursing education in Southern Africa. In 1948, following the publication of the Report, the first nursing education ordinance (No. 12 of 1948) in S.A. was promulgated in the Cape. The Report served as a blueprint to create the prototype college, and it is thus an historical document of note, reflecting as it does both the prevailing conditions and the proposed changes. The Report found that nursing was at the crossroads, and that an indicator or catalyst was needed to point out the way to the right road. This catalyst was a nursing college, because it would create a way in which conditions could be set right, personnel increased. It made possible the implementation of the regulations for basic nursing education promulgated by the S.A. Nursing Council.

The Report according to the general systems theory

This report has the characteristics of an open system by having a purpose, a content, a process and an outcome. The Report also has the structure of a system in that there is input, throughput, output and feedback, using the scientific research process.

The methodology of The Report

1. The problem which was concerned with increasing the number of registered nurses and improving the methods of nursing education was stated.

2. The study design, which isolated ten basic principles of education according to which standards should be designed for student nurses to receive specialized education was developed. The principles related
to standards of: general education; health; textbooks; states of mental and physical alertness in student nurses when they attended lectures while working in wards; systematic education (simple to complex, etc.); description of block system; suitable classrooms and staffing norms; appropriate time to cover all aspects of courses, course hours, lectures, practica, nature of work; adequate time for organized study; adequate practica; instruction; appropriately qualified nurse teachers.

3. Sources of data: Data was gathered in the Cape Province from questionnaires to nursing and medical personnel; hospital boards and committees; interviewing of nursing and medical witnesses; specialized witnesses. In addition reports from Great Britain, U.S.A., Canada and Australia were obtained.

4. Analyzing data: The 10 basic principles were elaborated by surveying the existing system of nursing education, and thereafter analysed.

5. Conclusions and recommendations were made.


Recommendations concerning Basic Principles

Basic Principles (as stated in 2) of Methodology of Report

Recommendations relating to Principle (summarised from the Report pp.6-14)

General standard of education:
1. Standard 8 as a minimum educational qualification for admission to the basic general nursing course. This was recognised as a compromise, as the new SANC syllabus was regarded as "exacting for a girl with that standard of education." (Too few women were in possession of a Standard 10 educational certificate at that time).

Psychological and physical suitability:
2. Not less than seventeen and a half years of age on admission to course; in robust physical and mental health; emotionally stable; of good character; keen to pursue profession; housed and fed suitably; provided with adequate recreation. Mental and physical
health assessed at commencement, a month later, and thereafter annually.

Textbooks and access to reference books:
3. Provision of a list of prescribed textbooks; (local authors encouraged); libraries to be instituted.

States of mental and physical alertness when attending lectures and working in the wards:
4. An 8-hour day; 5-day week; block periods at college in a ratio of 5 practical to 3 study periods. Ward hours to be worked - not longer than 40 hours per week.

5. Systematic progression of the course in accordance with educational principles. (Progressing from simple to complex, correlation of theory and practice, etc.) The 24 pages of this part of the Report is indicative of its significance. Subjects, and the number of lectures in each subject, and the number of Sister Tutors' and doctors' lectures were indicated.

Careful selection of instructors was advocated. Correlation of theory and practica was to be an important consideration. The theory and practica should run concurrently,(3) but this is far outweighed by the block system because:
- the wards are minimally disrupted
- of ease of organization of hospital work and student instruction
- there is less strain on the students

The need for co-operation, dialogue, consultation, discussion and conference between hospitals and college was stressed.

6. Case histories and clinical studies were advocated. Suitable lecture accommodation and facilities were to be provided. Hospitals suitable for training were specified as: those with not less than 100 beds; 75-100 medical and surgical in-patients; 1000 out-patients; 200 major and 400 minor operations. Staffing specifications: 1 matron, 1

(3) In the block system a period of theory is spent on theoretical learning away from the practica in the ward.
assistant matron or senior sister for supervision at night. There was to be 1 theatre sister, 2 trained nurses for every 15 beds, 5 medical officers.

Adequate time for organised study should be available to the students:

7. The duration of the whole course and, correspondingly, each portion thereof, should be such as to ensure the students receive adequate theoretical and practical instruction in all aspects of the subjects included in the course.

These principles were implemented in the subsequent college system.

The input of the Van Binnendyk Report as significant to Nursing Education and Management

Critical input that remediated the number, standards, and resources problem

- Critical contributions: Improved nursing education
- "The training of nurses was in a parlous state" [Searle: 1965: 286].

"The supply of nursing service to the community is dependent on two factors, namely: The number of nurses available and the quality of the service they provide" [Searle: 1965: 283].

"Quality" relates in part to the standard of education received. A college provides the infrastructure through which the educational standard could be raised.

- An increase in the number of student nurses, through establishing colleges, added to the supply as mentioned above and would increase registered personnel.

"By the end of World War II, the shortage of nurses was so acute that urgent remedial measures had to be undertaken to increase the production of nurses." [Searle: 1965: 288]
An increase in Sister Tutors. (4)

Few hospitals had established teaching departments with adequate teaching facilities. In the light of a shortage of nurses in the wards, the lack of tutors, and the low fee (one guinea per lecture) paid to medical practitioners, few hospitals provided more than the 100 lectures and 100 demonstrations prescribed by the South African Medical and Dental Council.

"Invariably an over-worked matron, who did triple duty elsewhere, did the teaching. The general practitioners, who assisted in teaching, were generally late for lectures, or had to cancel appointments due to workload", according to Searle [1965: 289]

Tutor numbers increased, but not relative to the need. This aspect is discussed under "Resources" in this work.

The link with the University of Cape Town (UCT) was established as the Commission advocated that the University be requested to provide assistance in the provision of courses for qualification as a tutor, and that the Province assist professional nurses with study leave to attend such courses. A two-year course for Sister Tutor, commenced in 1937 at UCT.

Feedback on the input of the van Binnendyk report

When the van Binnendyk recommendations were implemented, did they result in the envisaged improvements?

In a systems approach, if an input is increased and upgraded by a value in the throughput, the product increases and improves. So the answer to the

(4) In 1945 there were only 29 trained Sister Tutors in South Africa, of whom 15 were teaching in the Transvaal, 10 in the Cape, 4 in Natal, and 1 in the O.F.S. [Searle: 1965: 289]
question is tentatively "Yes", because the college system improved conditions.

"A chain of Nursing Colleges would be established throughout the Cape Province." [Cape Argus: 10.3.1949] "It was a much more efficient system than existed at that time and would be extended to cover the training of Coloured and Native nurses", which it did. [v. Binnendyk: 1946: 75] Registration and post-registration courses are in 1987 well established and abundant at nursing colleges. Colleges developed for other ethnic groups, but in 1987 the need for a Black college in the Western Province was felt, according to C.P.A. nursing advisory service.

Student nurse numbers increased. The van Binnendyk Report stated that "413 European girls were admitted to training in the Cape Province as medical and surgical nurses in 1944."

It was forecast that 1 in every 10 girls between the ages of 17-19 with Standard 8, 9, 10 would be needed for nursing in the future.

The Carinus Nursing College annual reports of 1949, 1960 and 1976 reflect:
16.01.49: "530 students taken over from the four hospitals into Carinus School of Nursing"
29.02.60: "711 students were in training in Carinus Nursing College, an increase of 181."

"By 1976 the student establishment was almost 1000 - an increase of 289 and a total increase of 470"

1976: The average number of students who qualified over the 10-year period 1973-1983 was 2189.

These figures are, however, relative as health needs and population growth escalated. "There have never been enough nurses." [White: 1978: 116]
The recommendation not adopted by the Executive Committee was that Nursing Education resort under the Department of Education, which was also a vision which Sr. Henrietta Stockdale held.

It should be noted in summary that:

1. The majority of colleges resort under the Department of Hospital Services, of the various Provincial Administrations, where the emphasis is on curative health care. Since it has no educational throughput system, this Department could not generate educational input into colleges. The educational input thus came via the S A Nursing Council, as the Chief Nursing Officer and Director of Hospital Services were both members of the SANC; it also came informally via the grace and favour of universities where the tutors were educated.

2. As the colleges entered into a formal association with universities in 1985, a worthwhile and more advantageous affiliation than the proposed Department of Education developed.

Most of the recommendations were adopted by the Executive Committee, but progress was hindered by the difficulty of providing accommodation, which was at a premium at the end of the war.

THE OPENING OF THE COLLEGE

After the van Binnendyk Report was published in 1946 and the decision taken to institute the collegiate system in the Cape, Dr. van Binnendyk summoned the matrons of the respective hospitals and Miss Loopuyt, the first Principal of the College, and announced the new approach to nursing education and management.

The establishment of the College

The Carinus School of Nursing was established on 16.1.1949. A college album was instituted and maintained. In the album, cuttings and memorabilia are pasted concerning important events. Miss C.M. Loopuyt, (Annexure 8), the first Principal of the College, writes in the College album "for many months the Chairman, Captain W. Hare, M.D., the Secretary
and Treasurer, W. Walham, Esq., of the Cape Hospital Board, had been inspecting large buildings and properties as they came onto the market. It came as a great surprise and pleasure to the Cape Hospital Board, and to members of the nursing and midwifery profession, when the announcement was made that the Hotel Assembly had been purchased by the Administration of the Province of the Cape of Good Hope, for use as a college, or the school for the training of nurses, midwives and other hospital personnel for European students in the City of Cape Town. The news was announced in the Cape Times of Wednesday, March 10th, 1948.

The Hotel Assembly was situated in 8 Queen Victoria Street, Cape Town, opposite the lovely and historical Gardens and the celebrated St. George’s Cathedral. The property abuts on the Provincial Building complex. "The hotel was purchased from a subsidiary of Amalgamated Hotels, in which Mr. Norbert Erleigh and Mr. Joseph Milne were leading figures." The hotel and Court Chambers, and an adjoining vacant site, were purchased for 151 000 pounds (R302 000 in terms of the value of currency in rand at that time). Crockery, linen and equipment were included in the purchase price, "but the liquor licence will remain the property of the sellers." [Cape Times: 10.3.48: and Cape Argus]

Some considerable Provincial Council debate and criticism of the purchase was reported, mainly by the "Argus" parliamentary reporter. The criticism was directed at existent accommodation shortages, the expense and the unsuitability of the building. Mr. J.P. Wolmarans (U.P. Wynberg) felt that a modern college could have been put up in a relatively short time. Mr M. Bense, the Provincial Secretary, thought it a bargain. Mr. J.G. Carinus, the Administrator, declared the purchase "a Godsend".

Announcements made in the Budget Speech at the Provincial Council sitting on 9th June 1948 [Cape Times, 10th June, 1948] that affected the College and the health service of the time were:

"as from October 1948, free education up to the age of 19 years would be introduced";
"as well as the first free hospitalization, an amount of 13 000 pounds (R26 000) was provided as a preliminary provision for salaries, wages and other expenses of the new college to be housed in the Hotel Assembly"

These financial arrangements were made possible by a surplus of 788 500 pounds. All the announcements had far-reaching effects.

Free hospitalization was announced in the Hospitals Ordinance, 1946, and fees were reduced by 50% with effect from 1 January 1948. At that time the Provincial Hospitals in Cape Town [Groote Schuur Hospital, Rondebosch, Somerset, Woodstock, Wynberg] and especially the Outpatients Departments, were the main health service resource in Cape Town. Health care was thus within the reach of all members of the community. More nurses would be required to give care.

Free education could mean that more potential student nurse candidates would be available. Subsequently, in the late seventies and early eighties, this free education became a bone of contention, and unrest followed.

The Hotel Assembly closed, as an hotel, on June 15th, 1948. Some staff were placed elsewhere while others stayed on in the employ of the Provincial Administration. Two such staff members were Mr Runner Pitso and Mr Shorty Zondeka, who remained in the employ of the College until November 1986, [Annual Report of College, 1986] when they retired. These two well-known and well-liked men became institutions in the College.

In retrospect Mr Wolmarans' statement should be supported. The hotel was 19 years old at the time of purchase and had to undergo considerable alteration, but on the other hand, it was fully furnished and equipped. However, soon accommodation was cramped and several additional "quarters" had to be found. It was 24 years later, on 1.1.1972, that the present college, built on the Groote Schuur Hospital complex ground, was inaugurated and when all the College systems were housed under one roof.

While Miss Goodacre was Matron of Somerset Hospital, she discussed with Miss Loopuyt the desirability of a nursing college but said "the time had
now come for one." [From curriculum vitae of Miss Goodacre in college files]

In 1940, when Miss Loopuyt was Acting Matron, Groote Schuur Hospital, Dr. van Binnendyk, Director of Hospital Services, called a meeting of matrons (Miss S.A.L. Westbrook, Woodstock; Miss du Toit, Rondebosch; Miss G. Balne, Victoria Hospital and Miss S. Marwick) as well as Miss Loopuyt.

Dr. van Binnendyk maintained matrons had two duties, A & B:

A. Running hospitals and being responsible for the care of sick
B. Training of student nurses

but went on to say

1. When these clash, the training of student nurses is forfeited.
2. The idea of the college was to relieve matrons snowed up with paperwork, and not enough time for hospital work.
3. College would attract recruits.
4. Every girl would get the same chance.
5. Lectures would be available in both languages.
6. Bursaries would be available to ward sisters to become tutors; tutors would be concentrated in a college where they could be better utilized.
7. A college could meet the need for substantial changes in training introduced by the S.A. Nursing Council.

A letter from the Provincial Administration of the Cape of Good Hope, dated 21 December 1948, signed by A.R. Bowley for the Director of Hospital Services, informed Miss Loopuyt as follows:

"I have to inform you that the Administrator has decided that the name of the first Nursing College, established under Ordinance No. 12 of 1948 and at present accommodated in the property previously known as the Hotel Assembly in Queen Victoria Street, Cape Town, shall be the "Carinus Nursing College". In its Afrikaans form the name will be "Carinusverpleegingskollege".
The College was named after Mr J.G. Carinus, Administrator of the Cape. (5)

The Opening

The opening of the college was on Wednesday, 2nd February, 1949, at 3 p.m., in Queen Victoria Street. Correspondence between the Director of Hospital Services, Miss Loopuyt and the Provincial Secretary, in January, 1949 deals with the organization of the opening ceremony. The invitations were issued by the Administrator and the guests were received formally. Miss Loopuyt called on the Administrator, Mr. J.G. Carinus, after whom the college was named, to open the college officially. Miss Loopuyt thanked him and invited guests to tea; many well known figures were present.

The first 21 senior nurses who took up their quarters in Court Chambers in the college, arrived at 8.30 p.m. on Monday, August 15th, 1948. As the alterations were not complete, they were taken by bus daily to and from Groote Schuur Hospital - only sleeping at 8 Queen Victoria Street. (6)(7) "The Senior Sister Tutor (of the College) will be the Senior Sister of the Province, Sister C.S.T. Roux" reported The Argus of 3.9.1948.

The college opened its doors for students on the 16th January, 1949. The first 120 nursing students arrived on that day, and the first classes were held on 17th January 1949. Ten of the students were Afrikaans-speaking,

(5) Please see Annex 7.

(6) This pioneer party showed the ropes to the newcomers.

(7) Once alterations were completed there would be room for 150 in the college, and the South African College School, the Good Hope Seminary and the Jan Van Riebeeck High School gave access to their tennis courts and playing fields.
and Mrs M.M.M. Gordon was their Sister Tutor. (8) Students remained at the college for a six weeks training period and then returned to the Peninsula Hospitals, coming back to the college a year later.

The Cape Argus, September 3rd, 1948, reports: "Quarter past five in the morning. In the Hotel Assembly - now the Administration’s training quarters for nurses - a light shone brightly from one window. The others looked blankly down on deserted Keerom Street."

And from that one light many thousands of lights of Carinus Nursing College Students and ex-students have gone on all over the world.

(8) There were "six Sister tutors under Miss Loopuyt’s command, two of whom went to visit the hospitals to supervise the practical side of the work." [Cape Times, 16.8.1948, and interview with Mr. Louis van Zyl, one of the pioneer party, in 1987.]
CHAPTER 4

THE STRUCTURAL-FUNCTIONAL ORGANIZATION OF THE COLLEGE

The structure and the function of the College is discussed to serve as an orientation to the organization and work of the College. The two main subsystems of the College system are the administrative and the educational subsystems. In Chapter Two the parts of the organization as a system were presented. In this chapter the focus will be on the administrative subsystem whereas the educational subsystem will be discussed in Part IV, the Throughput.

Various organizational approaches were used by the College during its history. In the early era the classical approach was developed but will not be discussed, as the traditional organogram configuration is well documented. In the middle era the approach was, by and large, behaviouristic and will not be discussed in this section, as it is best presented in the Throughput as an entity of the philosophical educational subsystem. Gradual transitions developed in the approaches so that the motivational-behaviouristic approach of Likert was in place by 1985. This will be demonstrated only by means of a diagram. In the present day era, the "later" era, the systems approach is presented in Chapter 2 according to Mintzberg’s work.

The Boards and Committees, the College Senate and College Council are dealt with in Section 4.2, being part of the strategic apex as well as part of the other structural components.

While the Carinus College was developing along the lines described, other colleges also developed in the Cape and other provinces. The other colleges are briefly mentioned to record that nursing education was developing and that community needs had to be met in various regions. Thus it is noted that colleges grew from one to eight in the Cape Province between 1949-1987. It should be mentioned that the SAPSE criteria was used in the later period and these criteria will be discussed at the end of Chapter 5. This approach assisted the College to describe its functions according to the SAPSE Programme classification. Prior to the
SAPSE approach, the functions were described according to staff and line classical approaches.

SECTION 4.1

The traditional structure of the organization as a system of formal authority is:

This traditional description of the organization is known as the organogram; (borrowed from the French.) When post-rank only is indicated on an organogram, structural configuration is reflected. Should functions be added, the structural-functional configuration is indicated. The lines inter-connecting the units indicate line and staff functions. Traditionally line positions have formal authority to make decisions and staff positions do not; they advise those who make the decisions. (The systems approach to organization was depicted in Chapter 2.)
Based on behaviourism wherein the goals of the individual and the organisation are fused or at least coincide. In the "linking pins" concept, groups are linked by means of overlapping groups of supervisors with high skills of interaction and performance goals.

Figure 4.1.1: The motivational approach (of Rensis Likert)
Mintzberg’s Systems Approach

Mintzberg’s model, described in Chapter 2, indicated the 5 parts of the structure of the organization: the strategic apex, middle line, operating core, techno-structure and support staff. The functions of the five parts will now be discussed, each part marked alphabetically, A, B, C, D, E.

A) The Strategic Apex (SA)

In the strategic apex are the people charged with overall responsibility of the College: the chief executive officer (Head of College), other top level managers (Senior Principals) and their support staff such as secretaries. Also included are the executive boards and committees.

The Strategic Apex ensures that "the organization serves its mission in an effective way and also that it serves the needs of those people who control or otherwise have power over the organization". [Mintzberg: 1979: 25]

Managers in the Strategic Apex have three clusters of functions:

1. Control of supervision: This includes resource allocation and supervision assigning people to do tasks, issuing work orders and authorization of major decisions. There is handling of disturbances (eg resolution of conflict and of exceptions, disturbances passed up the hierarchy for resolution). Managers have monitoring and evaluating activities as functions. They also disseminate information and act as leaders. In the leadership function, staff are involved in college activities, a motivating environment is provided, and staff are rewarded.

2. Relationship with environment: Managers act as spokesmen, informing influential people in the environment about the activities of the organization. Thus the manager liaises and develops high level contact for the organization. The environment is monitored, and tapped for information. The manager serves as a contact point for those influencing organizational goals, and negotiates on its behalf. The manager is also a figurehead in ceremonial duties.
3. Development of the strategy of the organization: Strategy is viewed as a mediating force between the organization and its environment. Strategy formulation, therefore, involves the interpretation of the environment and the development of consistent "patterns in streams" of organizational decision (strategies) to deal with it.

In managing and understanding the environment and in supervision, a strategy is tailored to strengths and needs without undue disruption. Top managers search for effective ways to carry out the mission/philosophy and sometimes seek to change that mission. Much time is spent on improvement projects whereby managers seek to impose strategic changes on the organization. Although other parts of the organization assist in strategy, the most important role in strategy is that of the manager. In general the Strategic Apex takes the widest and thus the most abstract perspective of the organization.

In summary, work at this level should be characterized by a minimum of standardization, considerable discretion and relatively long-term decision-making cycles. Mutual adjustment is the favoured mechanism for co-ordination among managers of the Strategic Apex itself.

B) The Middle Line (ML)

The Strategic Apex is joined to the operating core by the chain of middle line managers with formal authority. From 1985 the ML persons are principals, and prior to that, senior tutors.

Middle line managers are the Principals who have formal authority and who join the Strategic Apex to the operating core. The chain of command runs to first line supervisors (the senior tutors). Although, in theory, the Strategic Apex can supervise all operators, in practice the organization is reliant on middle line managers for direct supervision, because co-ordination and direct supervision require close personal contact, and there is some limit to the number of operators any one manager can supervise (a limit to the span of control).
Bl) Supervisors

As Moses was told to find leaders in the desert, so this level passes feedback from the SA to OC and aggregates it. They intervene in decision-making, handle disturbances, or pass the problem up. These managers assist with allocating resources, rules and plans, and they elaborate on implementation. These MLs manage boundary conditions, and they relate the environment with their units, and with other units, inside and outside organization. Supervisors are co-ordinators, they accompany the tutors, spend a good deal of time in with other institutions with persons whose work is interdependent. They also work with the technosphere to standardize/organize work procedure, develop a liaison network and give feedback. The work is less abstract and aggregated, and focussed on the workflow itself.

C) Operating Core (OC)

The OC encompasses the operators who perform the basic work related directly to the production of products and services. The operators in a college are senior tutors, tutors, and clinical educators. Administrative components assist them. Operators "secure the inputs" (selection and receiving), transform the inputs into outputs, (teaching and socialization), distribute outputs (allocate), provide direct support to inputs (accompaniment). The inputs are the students; the output the professional nurse. The hospitals or health units assist in this structure but are outside the organization. Thus the primary function of the operating core is education - teaching, and learning. According to Guilbert [1981 3.33-3.36] the complex task of teaching involves the following functions: to be available; to provide constructive criticism of learning objectives and methods; to analyze and evaluate health problems; to define learning objectives; to assess students' work; to prepare learning aids; to select professional activities for students; to confront students with new problems; to develop problem solving skills; to aid the understanding of basic scientific principles; to supervise students' progress; to identify the factors underlying health problems; to encourage intellectual discipline; to provide a positive role model and to record and post activities. In the SAPSE Instructional
Programme the educational function is to improve the learner's knowledge and skill by teaching in college and in health units during accompaniment. This programme is also necessary to facilitate teaching and learning, to give career instruction.

D) Support Staff (SS)

Support staff are those who provide support to the organization outside the operating work flow. Examples: Registrar, clerks, typists, reprography, learning resources centre, hotel functions units - only because the college has a residence and school under one roof.

Support staff have a distinct function to perform by providing an infrastructure that will permit the organization to focus on the operational work rather than on clerical and hotel (household) function and auxiliary functions.

The Registrar has special functions: the student service: health and welfare, allocation, recording and processing, control and checking, preparation of schedules, and so on.

E) The Technostructure (TS)

In the TS are the analysts (and their supporting clerical staff) who serve the organization by effecting the work of others. They are removed from the operating work flow; they may design, plan, change, train people to do the work. In a college, the TS is small and an outflow of the SA. Examples of TS function: Work study, Personnel and human resources management, and related to work performance skills.

The control analysts of the technostructure serve to effect standardization in the organization, reducing supervision and enabling clerks to do what managers once did. The functions are:
- Work study analysts who research and analyze nursing, educational, and nursing administrative procedure. Examples: clinical, professional, practica instruction committees, curriculum committees,
provincial workstudy analysts. This is done in order to standardize work processes
- Planning and control analysts eg long-range strategic planners, budget analysts, accountants
- Personnel analysts eg in a personnel and human resources management department. In an educational establishment the technosphere functions are not as sharply divided from the other parts of the organization as in a machine bureaucracy

The Internal and External Coalition

To relate the parts of organizations as set out in Chapter 2 to structural-functional organization in this chapter, elements that lie in and around the organization are discussed. Mintzberg likens this to actors in the organizational power system and looks at the power games and the players.

The external coalition are the external influencers that have power in and around organizations. In the case of the College, there is dispersed ownership, with co-operative ownership as a subdivision of dispersed ownership. [Mintzberg 1983: 33-41] Figure 4.2.1 demonstrates the power coalitions.

The internal coalition comprises six groups of influencers: the management and the chief executive officer ie the head of College, the operators, the (middle) line managers, the technostructure and the support staff as stated in Chapter 2. Finally in the organizational power system is the ideology of the organization - "the set of beliefs shared by internal influences that distinguishes it from other organizations." [Mintzberg: 1983: 29]

The external coalition (influencers) in the organizational power system are the owners, associates, employee associations, and the various ‘publics’ that surround all the internal influences. There is no legal ownership of the College by any identifiable group. Rather there are charters or ordinances to establish them granted by government to boards and senates.
The associates are detached and outside the power system, and trade for goods and services e.g. the associated hospitals and health services givers. They trade for student/professional nurses and services.

The associates include the following: the suppliers, which are the public, and schools that supply students and worker resources; clients that buy health care e.g. from professional nurses and services from health institutions; partners in co-operative undertakings, e.g., Nico Malan College; competitors e.g., other tertiary educational institutions and other colleges.

The employee associations, e.g., the SA Nursing Association have the interests of employees (nurses) at heart.

The public are, technically, the most detached from the organization and are sufficiently affected by the organization to influence it. Talcott Parsons, in Mintzberg [1983: 44], views the organization as an instrument of society - in other words, each organization exists to fulfill some purpose in society. Another view is that the public seeks to control the external part of the organization, leaving everything else to management and other more involved influences. Both these views are applicable to the College as an organization. The public that has power will be described in the chapter on Supersystems i.e., the National Government, Provincial and Regional Government, UCT, and the SA Nursing Council. Each of these has its own set of distinct needs to be satisfied by the organization. How they are able to evoke the outcomes they desire is discussed later.
Prior to 1985 the Board and Senate did not exist. An Advisory Committee acted as a Public body and the University of Cape Town was not the external influencer that it now is.

****

LEGEND
CEO = Chief Executive Officer (Head of College) and Management
SA = Strategic Apex
A = Internal coalition
B = External coalition

Adapted from Mintzberg H: Power in and around organisations [1983: 29]
Figure 4.1.2: The cast of players since 1985
SECTION 4.2

BOARDS, COMMITTEES, COLLEGE COUNCIL AND SENATE

In this section, being part of the Strategic Apex of College organization, aspects of the Boards and Committees in overall control of the College are discussed. Many historical changes took place that the College had to adapt to, in respect of Boards and Committees, as summarized below:

A Historical Overview of the Governing Boards

<table>
<thead>
<tr>
<th>Period</th>
<th>Year</th>
<th>Boards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early</td>
<td>1949-1960</td>
<td>Carinus School(1) of Nursing Advisory Board</td>
</tr>
<tr>
<td>Middle</td>
<td>1960-1985</td>
<td>Carinus Nursing College Advisory Committee</td>
</tr>
<tr>
<td>Late</td>
<td>1985-date</td>
<td>College Senate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>College Council</td>
</tr>
</tbody>
</table>

This section commences with a brief mention of hospital boards of the hospitals affiliated to the College because the students of the College are part of the establishment of the hospitals and each hospital (or group of hospitals) is attached to a hospital board. When colleges were inaugurated, the Provincial authority appointed an Advisory Board to the Carinus School, and later, to the Carinus College. Thus an Advisory Board serves the function in a college that a Hospital Board serves in a hospital. The Advisory Board is discussed briefly. Prior to discussing the College Senate and College Council, an orientation is given to the examination system of the College which highlights the 1985 change. Hereafter the events that led to the College Council and Senate are noted. In giving the structure of the Memorandum of Agreement, the structure and function of relevant systems is outlined. This is followed by implications of membership and implications of powers and functions of the College Senate and College Council. In these implications, the necessary committee systems are differentiated as output-input units to maintain goals.

(1) Designated school by SA Nursing Council i.e. a number of hospitals attending one institution.
Hospital Boards

In the chapter on the hospital school system, a brief outline of hospital boards is provided. Thus an overview only is given in this chapter. The hospital boards were instituted in 1913 and, although their function has changed, they are still operating today.

The present hospital boards (descended from the old Cape Hospital Board) of the affiliated hospitals, are: the Teaching Hospital Board (THB), Southern Suburbs Hospital Board (SSHB), Somerset Hospital Board (SHB), Northern Suburbs Hospital Board (NSHB).

The Boards are supersystems for the hospitals but have an indirect peripheral input through their hospitals into the College, namely eg, through financing the Graduation Ceremony, provision of some awards and medals, raising and administering funds - some of which are utilized for student amenities in the hospital system. Particularly the Southern Suburbs Hospital Board should be mentioned for their funding of the Captain Hare medals. The SSHB do so in honour of the Hare family who have served on the Hospital boards since the first Cape Hospital Board.

The Advisory Committee

The Nursing Education and Hospital Personnel Training Ordinance No. 12 of 1948 provides for the establishment and control of schools for the training of nurses, midwives and other hospital personnel. (Promulgated on 17.9.1948 and came into operation on 1.4.1948). In Regulation 7 of this Ordinance, provision was made for the establishment of Advisory Committees. The Advisory Committees were established to act in respect of colleges, as did Hospital Boards for hospitals. This Committee formed part of the educational and administrative programme of the College and was in office from 1949 to 1985 when it was replaced by the College Council and College Senate. The Administrator appointed the committee to liaise with Head Office; it was to act as an audit for the community; it was to be involved in decision-making processes concerning educational, administrative and cultural matters of the College; to advise the Administrator or the Director of Hospital Services.
There were eleven (and not fewer than five) members on this Committee and traditionally they were upper echelon office bearers/valued members of society, who represented the Church, Provincial Council (MPC); the hospitals affiliated were represented by their Medical Superintendents and the members of the community. The first Advisory Committee meeting was held on 26.4.1949 at 15:30 and its members were: Prof. B J Ryrie (Chairman), Mr A A Balsillie (MPC), Mr P S Duffett, Miss E M Pike and Miss Marwick (Chief Nursing Officer), Mrs S Visser (secretary), Mrs J Conradie; and Dr D A Binnendyk, Director of Hospital Services was in attendance. Miss C M Loopuyt was the Principal.

At the first meeting of the Advisory Committee the Director of Hospital Services stated that the College had been established, the Ordinance passed, and while the South African Nursing Council promulgation of revised rules and regulations were awaited, the Cape Provincial Administration and Cape Hospital Board would jointly control student nurses. Attention was drawn to the Van Binnendyk Commission, and how the College was to function, was explained.

Chairmen of the Advisory Committee

During the existence of the Advisory Committee, various chairmen held office:

- Dr J C Coetzee - member since October 1954, Chairman Jan. 1957 to Nov. 1972
- Mr F M Botha - member since 1.1.70, Chairman 1.1.73 to 8.2.73
- Dr A H Barzilay - 9.2.73 to 15.3.83
- Dr J A L Strauss - 16.3.83 until the inaugural meeting of College council on 9 October 1985

When the Advisory Committee was discontinued in October 1985, Mrs S C Badenhorst, as a community representative, was appointed to the first College Council (1985-1988) and in so doing continuity was afforded.

(2) Information extracted from the relevant Advisory Committee reports.
Tribute is paid to the members of the various Advisory Committees who for 37 years unstintingly gave of their time and energy to further the interests of the College Service. Monthly and Annual Reports were written by the Head of College for the Advisory Committee. The minutes of the Advisory Committee meeting are voluminous and a rich data source for a future research project which could reflect the different approaches to collegiate life.

Orientation to Examination Systems

Before discussing the College Council and College Senate, it should be noted that nursing education regulations are promulgated by the SA Nursing Council (SANC). From 1944 to 1983 this body also managed the external examination system for basic courses at colleges, thus ensuring the maintenance of standards throughout S.A. The hospital, designated by the SANC as a school, managed the practical examination system; the college managed the theoretical education. Prior to the SANC, the SA Medical and Dental Council (SAMDC) undertook this function and had two nursing representatives on the SAMDC. During the period 1944-1983, the College set internal examinations. CNC tutors have served on the SANC examination committees since 1983, and were appointed as sub-examiners for the SANC, marking many papers for a fee. Universities offering nursing courses have always set their own examination papers and utilize staff from other universities as external examiners and moderators in order to maintain standards. The SANC still sets examinations for post-registration courses for non-university institutions.

A development of note in the 1980s is thus that since 1986, colleges manage their own examination system and the university with which they are associated provide moderators and undertake surveillance of the system. For courses at colleges not within the university association, the SANC acts as moderator. The SANC had developed a national examination committee system as opposed to the internal SANC examiner system in the past. [8th Council Report: 1979-1984: 7] The national committee consists of members from all over S.A. as opposed to the previous system where an appointed SANC examiner was responsible for the work. All the above colleges to
cope with the new demands of the university association wherein colleges set and mark their own papers.

THE COLLEGE COUNCIL AND COLLEGE SENATE AS SUPERSYSTEMS

Events that Led to their Formation
The College Council and College Senate were created as a result of:
1. the SANC regulation 425 (Diploma in Nursing (General, Psychiatric, Community) and Midwifery Nursing Science) of 1.8.84 via the Memorandum of the Co-operation Agreement between the University of Cape Town and the Cape Provincial Administration (for Carinus Nursing College)
2. the CPA Training of Nurses and Midwives Ordinance of No.12, 1984

Main function: These systems have an input at all levels of the collegiate system, with feedback routes because the College Council is in overall control and the Senate is the body responsible for maintaining the academic standards of the College.

Summary of general implications of College Senate and Council
- Colleges, not hospitals, are training schools
- The degree of successful development colleges have achieved over a period of nearly 40 years of being prepared to act more independently
- Academic input and audit of universities upgrades the educational subsystem
- The added legal dimension of the Council and Senate
- Input is further upgraded as tertiary systems of education prevail
- The membership of the College Council and Senate is so instituted that a wider spectrum of skills operate in respect of four disciplines (ie General, Psychiatry, Community and Midwifery)
- The overall control of the College Council assists in the management of the college, thus the strategic apex has wider scope, depth and diversity
- New structural and functional systems are created to control college resources and throughput, more in line with contemporary educational and managerial strategies
College Council structures are outputs of the function of the Council, eg management, financial, disciplinary and selection committees. Via the Senate, the Council approves courses and curricula.

College Senate committee structures are academic in nature and are also outputs of the function of the Senate, eg teaching and learning, curriculum development, courses development, examination system committees, clinical professional practica instruction and research, year courses committees.

Examination results are authorised by Senate Examination Committees and ratified by Faculty of Medicine [and Department of Nursing] Examination Board. The Head of Department of Nursing is responsible for the curriculum development, examination, evaluation, moderation and staff and student development at the College (on behalf of the university).

**Constitution of the College Senate [Memorandum of Agreement: 1984: 11]**

<table>
<thead>
<tr>
<th>Office</th>
<th>Number</th>
<th>Representing</th>
<th>Nominated and appointed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Chairman</td>
<td>1</td>
<td>CNC</td>
<td>Administrator</td>
</tr>
<tr>
<td>Vice head</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Vice-chairman</td>
<td>1</td>
<td>CNC</td>
<td>Administrator</td>
</tr>
<tr>
<td>- Heads of departments in college</td>
<td>varies</td>
<td>Particular dept./course</td>
<td>College head submits</td>
</tr>
<tr>
<td>Nominees</td>
<td>3</td>
<td>College personnel</td>
<td>Administrator</td>
</tr>
<tr>
<td>- of college personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- University</td>
<td>3*</td>
<td>UCT</td>
<td>University Senate</td>
</tr>
<tr>
<td>College</td>
<td>2*</td>
<td>College Council</td>
<td>College Council</td>
</tr>
<tr>
<td>- council representative</td>
<td></td>
<td>(including Chief Nursing Service Manager of GSH)</td>
<td></td>
</tr>
<tr>
<td>- CPA Nursing Inspectorate</td>
<td>1*</td>
<td>Dept. of hospital service</td>
<td>Director</td>
</tr>
<tr>
<td>Office</td>
<td>Number</td>
<td>Representing</td>
<td>Nominated by</td>
</tr>
<tr>
<td>--------------</td>
<td>--------</td>
<td>-----------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>GSH Clinical</td>
<td>1</td>
<td>GSH clinical nurse</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>National Psychiatry Director</td>
<td>Community of Health and Nursing Welfare</td>
</tr>
<tr>
<td>(until 1986)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
<td>Committee clerk</td>
<td>Director</td>
</tr>
<tr>
<td>+25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Alternates may be appointed; GSH = Groote Schuur Hospital
CNC = Carinus Nursing College

**Powers**

- In submitting curricula and syllabi of subjects/courses, the SANC requirements and the situational analysis of community health needs are met, as well as the university needs for standards.

- Rules prescribing requirements for obtaining diplomas provide the structure according to which throughput proceeds.

- Committees are formed to act in the interim period before and after Senate sittings. The membership of committees is so arranged as to serve the interests of all representative systems.

- In the appointment of college examiners and university moderators, examination papers are set and marked, memoranda are constructed and the papers, memoranda and scripts are moderated by the university, ensuring maintenance of standards and providing growth and development, as this is a powerful learning opportunity.

- In consulting with the University Senate regarding acceptance of examinations passed at another college or institution, exemptions are catered for.

- When standards and requirements have been met, diplomas can be awarded.
Fig. 4.1.3  STRUCTURE OF THE MEMORANDUM OF AGREEMENT

OBJECTIVES:
Control overall
Academic control

DEFINITIONS:
Meetings, quorum
Term of Office

FACULTY BOARD
POWERS
Control administrative
Education
Financial matters
HOC appointment by CPA
- approval by UCT
Executive Officer
Physical facilities
Estimates Expenditure
Fees
Number of students
Courses approved
Posts
Conditions of service
Selection
Disciplinaries
Committee delegation

COLLEGE COUNCIL
(plus Committees)
Agreement is between
CPA and UCT as approved
by Minister of Health
on SANC recommendation

COLLEGE SENATE
(plus Committees)

SUBMIT:
Annual Report
Courses, Posts, Depts
Committees
Curricula acc to SANC
Rules
Proposals for:
**examiners
**moderators
Complied with
requirements
Credits

DEPT OF NURSING: UCT
Curriculum Development
Moderation
Examination
Evaluation
Development of staff
and Students

Medical Faculty Board
UCT Senate
Data that must be submitted by the Senate

- An Annual Report reflecting statistical, and such data as is indicative of college activities from which inferences can be made.
- Recommendations concerning courses, posts or departments at the college creates opportunities for development.
- Personnel and human resources management is served by making recommendations regarding personnel needs.
- Serves the interest of the College by making recommendations on matters referred to it by the Council, and by referring matters to the Council.

IMPLICATIONS OF THE STRUCTURE AND FUNCTION OF THE COLLEGE COUNCIL

Membership

- The Chairman is an outstanding person or general educationalist appointed by the Administrator in consultation with UCT, with the necessary skill to advise and give direction to collegiate activity.
- The Head of College, being the vice-chairman, and the vice-head of the college, being on the Council, can link the upward and downward flow of information and can co-ordinate activities.
- The inclusion of the Department of Nursing of the University, secures input and feedback re their specific functions of curriculum development, evaluation, examination, moderation, and staff and student development.
- The link with the Provincial authorities is secured by the Deputy Director of Nursing Advisory Services.
- The inclusion of the Region’s Medical Superintendent and the Region’s Deputy Director of Nursing Services ensures that the hospital services are represented.
- A member from the community guarantees social input and feedback.
- The National Health representative widens functional levels.
- The two Senate members on the Council link the interests of the two bodies.
Powers

- By advising on facilities needed, the resources that the College requires to maintain standards, are secured.
- By submitting estimates of expenditure and controlling finances, as well as student numbers and student fees, the means to acquire and utilize resources for the system are established. This still needs reorganization and pertinent attention, as mentioned in the section on Regional Devolution of Power, and in the section on Student Numbers.
- In consultation with the University, the course’s subsystem is organized by instituting or abolishing courses and subject courses, posts, or departments. Thus the resources are linked to the throughput where course functions take place.
- In submitting recommendations regarding conditions of service, the resources, security, and well-being of personnel is considered, and alternative options are made available to employing bodies.
- Being invested with disciplinary power, professional, educational and administrative standards are maintained.
- By delegating powers to the College Head or Council member of a committee, interim work flows and democracy are secured.
- In especially controlling educational, administrative and financial matters, College functions and structures are monitored and audited.

Other committees

There are other committees outside the College Senate and Council systems to keep the College’s goal state in equilibrium. The Teaching Personnel Committee is a communication system where the strategic apex and operational structure interacts, aggregating and dispersing information arising between the College system and the supersystem. It is also a subsystem that engenders some items for the agenda for the Council and Senate management. Committees are held for interaction between the strategic apex and middle-line managers. Committees dealing with support staff and technostructure systems exist.

Student committees deal with student needs that are outside the academic structure. (The latter is managed by the Teaching and Learning Committee
of the Senate where students have major input). It is the opinion of certain College Council and Senate members that students should be represented on these bodies. The input of students into the respective College programmes has been invaluable. Particularly in view of the student-centred philosophy of the College and the responses of the students thereunto, it is a recommendation for the future that students be represented on the College Council and Senate.

Committees deal with residential (hotel) and grounds and gardens functions.

Committee structures exist for the Provincial Supersystem to deal with systems in their environment. The CPA Nursing Advisory Service has created committees to liaise with educational and service needs as new needs arose.

Committee structures operate between the educational subsystem of the College and the affiliated hospitals for education/services liaison. Regional hospital committees and geographical regional services have various committee structures.

While Carinus Nursing College was developing along the lines just described, other colleges also developed in the Cape and the other Provinces.

Other colleges in the Cape

Otto du Plessis College, for white students opened on 23.5.1960 at Karl Bremer Hospital and on 3.6.1971 moved to the Tygerberg Hospital campus. The Tygerberg College: On 1.3.1970 the Senior Principal was appointed for planning and commissioning. On 2.6.1970 the white college was handed over. On 29.6.1970 the personnel moved in. These colleges amalgamated to form one college; the Otto du Plessis College on 14.2.1974. The coloured Sarleh Dollie College was taken over on 1.8.1970. The Nico Malan College in Athlone for coloured students opened in 1968 at the same time as Groote Schuur Hospital commenced education for coloured students. There are now eight colleges in the Cape. Carinus Nursing College and Otto du Plessis
College are linked in that Otto du Plessis students attended Carinus from 1956 to 1969. When both Nico Malan College and Carinus Nursing College were affiliated to UCT in 1985, a link was established and by 1987/88 they are ‘rationalising’ their respective programmes and learning experiences and examination systems to increase productivity and to prevent overload.(3)

The link between the Sharley Cribb and Carinus Nursing Colleges

Miss C M Roux was appointed as Sister-Tutor Grade A (Senior Tutor) and second-in-command at Carinus Nursing College from 1.9.48-31.7.1949. She was appointed Principal Grade II at Sharley Cribb on 1.8.1949 and before she left, according to Miss Loopuyt, provided a letter to Dr van Binnendyk, the Director of Hospital Services, requesting the SANC registration of the Sharley Cribb as a college. Thus the Sharley Cribb was registered with the SANC in September 1951 and Carinus Nursing College

(3) There are now eight colleges in the Cape Province and the four not listed above are:

<table>
<thead>
<tr>
<th>Name of College</th>
<th>Place</th>
<th>Ethnic Group</th>
<th>Year of Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharley Cribb</td>
<td>Port Elizabeth</td>
<td>White</td>
<td>1.1.1950</td>
</tr>
<tr>
<td>Henrietta</td>
<td>Kimberley</td>
<td>Multi-racial</td>
<td>July 1980</td>
</tr>
<tr>
<td>Stockdale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frere</td>
<td>East London</td>
<td>Multi-racial</td>
<td>1.7.1970</td>
</tr>
</tbody>
</table>

(Commenced as lecture unit in 1936 and later upgraded to a college. Frere Hospital opened in 1881 and in 1937 was the first hospital in the Cape to train ‘native nurses’)

Charlotte Searle Port Elizabeth Coloured/ Black April 1985

(Commenced as lecture unit in Livingstone Hospital which opened in 1954; the official opening was in October 1955. The lecture department commenced in 1954, and in January 1984, became the Livingstone Nursing College and, in 1985, the Charlotte Searle College.

(Data obtained from the respective colleges - July to December 1987)
in March 1955 (and the B G Alexander College on 1.7.1967) according to SANC records. The disparity of the time the two colleges were registered is not fully explained by the given circumstances nor significant in the ‘grand scheme of things’. Of importance is that collegiate nursing education commenced in South Africa in January 1949.

The number of colleges in South Africa grew.

This Section concludes Part I. In Part I, an orientation to the systems approach was outlined. Factors that led to the need for a nursing college were noted. The opening of the first college in Southern Africa, the Carinus College, followed. The College’s structural-functional organization was given, as well as the boards and committees that operate within the system.

Having provided details about the College as a system, the environment in which the College exists will be examined in Part II: the Supersystems. This is because a system does not exist in isolation but has a reciprocal interaction with its surroundings.
PART II

CHAPTER 5

THE SUPER-SYSTEMS

As mentioned in Chapter 2, a system operates in an environment which lies outside the system, known as the super-system, that determines in part how the system operates by greatly influencing the 'requirement schedule' of the system through related parameters (variables).

In Part II some of these super-systems in the environment of the college will be discussed briefly. In Figure 5.1 the environment of the college is diagramatically represented, which indicates in a simple way the flow of goods, people and information between the 'stars' in the galaxy which form the college's environment. The whole is linked, encircled and controlled by legislation and regulations. The super-system of which Carinus College is a component is the Health System of South Africa which is, in turn, a sub-system of government and society as a whole. "One can visualise the larger society as a galaxy consisting of a myriad parts, all of which interact in some way with some or all of the other parts." [Kane-Berman: 1978: 4]
It is not possible to analyze all the participants that influence the College and nursing in detail, but the more influential ones require some elaboration.

The Supersystems that will be discussed briefly in this chapter are as follows:

SECTION CONTENT
5.1 Socio-political changes 5.4 Provincial organization
5.2 Governing health supersystems 5.5 Hospital-school systems
5.3 Statutory professional bodies 5.6 University of Cape Town

The historical socio-political forces within the environment of the College system have interacted to create a destiny. This destiny was shaped inter alia by the cultural roots of the South African people, political intervention, the British influence, military influence and the heritage of the poor law nurses.

The supersystems in the environment were identified by making a structural layout according to Sharma (1985). Each supersystem is analyzed according to the following systems.(1)

(1) All the data gathered from the flow chart analysis can not be given in this work but is available from the researcher.
The supersystems discussed are human organizational systems and will be discussed applying sociological terms of institutions, economical, cultural, societal and political systems.

Figure 5.1.1: Flow chart

In the flow chart used in this research, the structures and functions of the College were examined. At the same time the supersystems input was determined. To do this the history of the supersystem had to be checked as it intersected with College history at given points so that implications could be interpreted. Advantageous and disadvantageous implications were investigated so that recommendations could follow.
5.1 SOCIO-POLITICAL CHANGES

The SOUTH AFRICAN cultural, socio-political and economic culture as a super-system

5.1.1 The South African culture

Parsons in Timasheff [1966] views culture as: "on the one hand the product of, on the other hand a determinant of, systems of human social interaction." The characteristics of South African culture in 1987 as a result of such interaction are marked by action-reaction dynamics. Change causes a constant motion to which both the environment and the organization must respond. In the see-saw of the attempts to attaining balance, equilibrium and disequilibrium exist in turn. This is manifested by the problems associated with diverse ethnic groups in SA. These include racialism, Western culture versus African culture, colonial versus Afrikaner viewpoints, a fragmented-divided society, and power shifts.

Historical orientation

Knowledge of the historical roots of a culture provides insight into caring for target populations and orientates one to the effect the political super-system has had on the development of the college.

It was primarily a health care need that moved the Dutch East India Company to establish a halfway station at the Cape in 1652, where the Khoisan people were present as nomads. From the Dutch and from subsequent smaller German and French settlers in 1688, the Afrikaner nation developed.

Heritage of the poor law nurses

South African nursing culture was influenced by British culture, specifically by the British culture in terms of poor law nurses. The British Poor Law Act was passed during the reign of Queen Elizabeth I. However it was not until the 19th century, with its rising urban
population and its industrial pressure, that the care of the sick came into "the hands of those we can recognise as the precursors of today's nursing profession". [White: 1978: Summary] Gradually the poor law nurses and the less numerous voluntary hospital nurses developed.(2) The poor law nurses developed a caring role and "gave breath to nursing". [White: 1978] They also focused on primary health care and independent nursing practice which is today once more an important facet in health care. The problem of ever growing health needs could in part be solved by independent (private) nurse practitioners, a role the poor law nurses cherished. Private nurses could provide ongoing care in communities experiencing a shortage of health-care givers, eg medical practitioners.(3)

Advantageous heritage of poor law nurses

They retained their caring role at the bedside until the implementation of the National Health Service Act of 1948 in Britain. In the nineteen-eighties, nursing is examining itself more critically than before and the movement to return to bedside nursing is growing. This movement of 'returning to roots' probably owes its development to the poor law nurses who resisted the pressures of advancing society because they cherished their role. "This freezing of their role gave stability and permanence to the roots of nursing while voluntary hospital nurses ... widened the gap and gave breadth to nursing." [White: 1978: 198]

The poor law nurse worked in the community from which her patients came, often going into houses and nursing patients in the family situation, making do with what was available and using herself therapeutically. In South Africa, once more the focus is on community care and primary health care.

(2) Poor law nurses in Britain nursed paupers in poor houses/workhouses and some of these nurses emigrated to South Africa.

The negative aura surrounding the poor law nurses was a powerful referent for early nurse leaders to ingrain the ethos of 'gentility' strongly and nurses were "deprived of power and too genteel to seek it". [White: 1987:219] The link of South Africa with the British Empire resulted in a strong 'English heritage' in society and in nursing.(4) The Nightingale tradition was adopted by South Africa through the Anglican Sisterhoods and by the immigration of British nurses according to Botha (1950]. Many traditions of military origin are inherent in nursing. [Mellish: 1988: 16] The social aspects of nursing were stimulated as an aftermath of war because women's rights, conditions of service, living conditions and education came under the spotlight.

Nurses in South Africa are still relatively powerless when an equal share of a say in the affairs of health is taken as a criterion. In the contemporary situation, there are still some powerful, medieval, and often reprehensible practices, and power games, unworthy of the respective players.

More recent political instability, both nationally and internationally, affects nursing education, for example by creating the necessity to cope with trade unions and to include disaster nursing, triage, traumatology and so on, in curricula.

South Africa's political position when the College opened

When the college opened in 1949, South Africa formed part of the British Commonwealth. As a result of the Balfour Declaration, Dominion status had been conferred in 1934. Although the Nationalist Party came into power in 1948 it was only in 1961 South Africa left the Commonwealth and became an independent Republic by virtue of the South Africa Republic Act 1961. Due to South Africa's link with Britain, British traditions influenced the College.

(4) The first influx of poor law nurses was during the Anglo-Boer War [White: 1978: 99]
The Nightingale tradition, on which nursing is based internationally, was adopted by South Africans through the Anglican sisterhoods and the immigration, in the early days, of British 'trained sisters', according to Botha [1950], influencing the structure and organization of the system. The first great influx of British nurses was during the Anglo-Boer War, when 900 nurses joined the war medical service; of these 628 returned. [White: 1978: 99] They were the persons responsible for the establishment of the British system in the South African hospitals, where students of the college were receiving clinical education.

In time, as South Africanism developed, a South African nursing culture consisting of White, Coloured and Black people, developed. It is postulated that the South African nursing culture is probably more in equilibrium than society at large. South-Africanism is a term used by Louw: [1969: 21] to indicate measures taken by South Africans to establish and develop their own culture, e.g. education in medicine (and nursing) as opposed to using overseas systems in its entirety.

Strong feelings existed between the Afrikaans and English people: in 1949 the Anglo-Boer War (1889-1902) was still within living memory. This war led to dissent between the two cultures and this dissent was evident for a long period. The college provided a dual medium nursing education. An educational institution, offering courses in both English and Afrikaans, had, of necessity, to remain neutral, and yet build into its system adaptations able to encompass the differences, and yet continue to strive to build its own identity.

Although Searle [1965: 235] states that separate development was the single-most powerful stimulant for Black and Coloured development, it cannot be entirely supported on the grounds of the division it caused among White, Black and Coloured nurses. In psycho-dynamic terms, most of the energy spent on the conflict and frustration of the separate development, could have been utilized and invested in a more fruitful manner. It was not until the late seventies that free exchange became a norm, and not until 1980 that integration in the Groote Schuur Hospital Region became evident. The conflict in this situation for the college is evident, as it is evident in greater society: systems have to adjust to
changes in the racial context, eg. experiencing reversed discrimination. How separate development affects nursing is outlined in the section on the professional bodies.

'Penny paring' has long been an ideal in many health institutions. This was the result of a lack of means and resulted in the poverty of early nurses. (Penny paring refers to extreme economical measures to make a 'penny go further'. In days of old, money was not stamped as in today. It was common practice to cut away, little by little, the copper, silver or gold coins to collect the metals to manufacture coins privately). The abysmal conditions impaired 'normal' development of status, infrastructure, economics, politics, education and conditions of service of the professional practitioner. A role model of unparalleled parsimony prevailed in the RSA in the mid-forties. This was an after-effect of the Depression of 1933 and the Second World War.

Poor law nurse-patient ratios were 1:40 in Britain and became established ratios in South Africa. By the end of 1945 this created near impossible working conditions in South Africa. Ratios steadily improved, culminating in the Commission for Administration (CFA) norms of 1986; these were far more realistic. These, however, did not solve the problem of inequitable ratios, as modern nursing programmes for patient-care require intensive input of professional nurses. In 1987 there was a move towards increasing the number of the professional nurse categories in relation to patient care. This will be discussed further under the section on Commission for Administration.

According to the systems theory proposed by Buchele, the participants who influence the system are contained in society. Only the social differences will be discussed in terms of the 1986 population of Cape Town. "The complexity of the population is far greater than the official classification indicates - each of the major population groups can be divided into a number of sub-groups with widely diversified cultural, ethnic, religious, language and constitutional difference." [Thompson in White: 1988: 165]
The population spread, the health and disease patterns and cultural norms of populations should be incorporated in nursing educational objectives. The vital statistics of the population are thus practical indicators for health care, not only physical but also as social and psychological barometers to implement health and ill health regimes to give preventative, promotive, diagnostic, curative and rehabilitative care to individuals, groups and communities.

Of further interest are the population pyramids reflecting the greater numbers of Black, Asian and Coloured persons in the four lowest age group intervals which, when matched against disease patterns, indicate the nature of the investment of care for the future.

Cape Town's estimated population in 1986:

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Whites</td>
<td>277 824</td>
</tr>
<tr>
<td>Coloureds</td>
<td>581 387</td>
</tr>
<tr>
<td>Asiatic</td>
<td>14 774</td>
</tr>
<tr>
<td>Black</td>
<td>140 652</td>
</tr>
<tr>
<td>Total</td>
<td>1 014 637 persons</td>
</tr>
</tbody>
</table>

The figures are based on the 1980 census and probably are too low because of a degree of non-compliance with census requirements.

[Source: 1986 City of Cape Town, Annual Report of the Medical Officer of Health.]

In South Africa, vast cultural, social, political and economical changes have occurred. These have direct and indirect consequences upon nursing education, mainly of an adjustment nature. Adjustment to integration, an unsure future, scarce and expensive learning resources, and an increasing degree of professional isolation as a result of sanctions. Changed health and economic needs, inflation and other changes will be discussed later. One such change was in the executive authority and the health authority.
5.2 HEALTH CARE SUPERSYSTEMS

The complicated relationship existing in the South African health system is discussed in this section.

The health system of South Africa is a subsystem of government and of society as a whole, as reflected in Figure 5.1. Health care embraces all dimensions of human existence. For this reason the organization of the executive authority and executive institutions for Own and General affairs is given in Annexures 9 and 10. These affect the College in diverse ways.

5.2.1 National and International health systems as supersystems

The 1919(1) and 1977(2) Health Acts affected the rendering of health care and education of health care givers by way of philosophy, policy and implementation.

Perspectives with regard to health service and education need to be evaluated, over the past decades, within the context of the development of health services in South Africa. Health perspectives and policies affect nursing education, policies, and philosophy. These, in turn, govern the implementation of health care.

In the Act of Union in 1910 there was no reference to health matters, nor were colonial health statutes repealed. The influenza pandemic of 1918 highlighted the imperfection of the rudimentary colonial health statutes and the Volksgezondheid Act (No.36 of 1919) was promulgated. This Act could not accommodate the ideal of a comprehensive health care service.

The Health Act (Act No.63) was promulgated in 1977 providing for the rendering and co-ordination of health services by the three tiers of government. It is reported that this three-tiered system led to

(1) Volksgezondheid Act No.36 of 1919.

(2) Health Act No.63 of 1977.
fragmentation and duplication of services, requiring an alternative (tricameral) parliamentary division. [National Health Plan: 1986: 2]

The Alma-Ata declaration by the International Conference on Primary Health Care, 12.9.1978 affected nursing education profoundly

1. Health as a fundamental human right requires the input of many other social and economic sectors in addition to the health sectors. Community resources input has become essential.

2. The current unacceptable existing inequality in health status is of common concern to all countries. White students particularly need to appreciate and consider the resources and culture of their target (client) population.

3. The practice and philosophy of nursing has broadened - issues other than health issues need to be addressed and incorporated in curricula. These issues include such subjects as economic and social development.

4. It is the right and duty of people to participate individually and collectively in the planning and implementation of health care. Nursing and medical care plans should undergo vast change. Medical and nursing practitioners are over-inclined to "tell, instruct, order" the client to do something.

5. The introduction of primary health care will facilitate health and lead to increased social and economic productivity. Nursing education has invested heavily in primary health care. This move should prove to have inestimable value, as it "constitutes the first element of a continuing health care process" [WHO: 1987]. Some of the subsystems of primary health care, now incorporated in nursing curricula include conditions prevalent in the community, main health problems, main needs provision, improvement of environmental conditions, community participation, supportive referral systems, the involvement of the health team.
6. National policies, strategies and plans embrace the concept of a comprehensive national health system and concomitant issues. A radical change has taken place in the basic nursing course which is now more comprehensive.

7. International health care co-operation and sharing of concerns is to the benefit of all countries involved.

8. Peaceful co-existence would permit a deployment of resources from, for example, armaments to health. A genuine policy of independence, peace and detente and disarmament would promote health in all its aspects.

In 1983 the tricameral parliament was formed, causing a division in health service.

The 1980 National Health Services Facilities Plan provided for 6 levels of care:

- Level 1 - provision of basic needs
- Level 2 - health education
- Levels 4, 5 & 6 - community, regional and academic hospital

This Plan contains a number of principles essential for the rendering of appropriate health service and it is thus important that nursing education incorporates these principles.

The principles are summarized as follows:

- The shifting of emphasis from the ill person to the healthy individual
- The needs of the individual are relevant in their totality
- Services have become increasingly community-orientated
- The shift of emphasis from the curative care towards the prevention of illness and health promotion
The legislation significantly indicated that nurses would then be the main providers of health care.

These principles were to have a remarkably positive effect on nursing education. The College philosophy embodied these principles and the emphasis of education started to swing away from hospital-centred services. There has been, to an extent, resistance to this concept because the majority of nurses work in hospital services, where curative emphasis and a sickness orientated philosophy prevails.

With the implementation of the new constitution in September 1984, three additional Departments of Health and Welfare were established:

- The House of Assembly dealing with health services for the white population
- The House of Representatives dealing with health services for the coloured population
- The House of Delegates dealing with health services for Indians

Nursing colleges in the Western Province have not undergone major organizational changes as a result of the moves, as they remain essentially regional (provincial) organizations, although civil servant status was approved on 1.8.1986. By the end of 1987 the transitional devolution has begun to take effect.

The nursing and medical community at large consider it alien to divide national control of health amongst three departments.[Uys: 1988] The fragmentation and division on colour/race is contrary to the respective oaths of service.

The relationship of various health practice acts and legislation to do with health practice

The Health Act No.63 of 1977 provided for a comprehensive health service, and facilitated the development of the comprehensive nursing education course regulations in South Africa. The regulations became obligatory on 1.1.1986 and were implemented at Carinus Nursing College in 1985. Subsequent to the 1977 Health Act:
1. The Alma-Ata declaration by the International Conference on Primary Health Care on 12.9.1978 took place - the attainment of health for all by the year 2000 was the central issue.

2. The National Health Services Facilities Plan (NHSFP), approved in 1980, was aimed at rendering a cost-effective health service to the community in relation to available resources (finances, personnel and facilities).

3. In 1983 the Tricameral parliament was formed, and

4. In 1985 the Carinus Nursing College was affiliated to the University of Cape Town, and

5. The Cape Provincial Administration hospital department was reorganized in 1986 to accommodate the devolution of health care practice
5.3 STATUTORY PROFESSIONAL BODIES

The South African Nursing Council (SANC) and South African Nursing Association (SANA) are the two statutory professional super-systems. (1) Being statutory bodies and dealing with nursing health care, they are a part of the governing health care super-systems. All these health care super-systems are auto-corrective feedback systems in the maintenance of health.

As a result of the Nursing Act, No. 45 of 1944, the SANC and the SANA were established, enabling nurses to audit and control their own profession. It was against the inauguration of these two super-systems in 1949 that the newly formed college commenced operation as a system.

Historical aspects of professional registration in South Africa

An occupation becomes a profession when (amongst other things) it demands that unskilled persons may not carry out the work without being educated according to predetermined standards of practice. In South Africa, nursing has long carried this state-legislated status through the Colonial Councils Act, No. 34 of 1891, being the first in the world so to qualify. Subsequently, also through the Provincial Medical Councils, which amalgamated in 1928 to form the South African Medical Council (SAMC), registration was continued. With the promulgation of the Medical, Dental and Pharmacy Act, (No. 13 of 1928), professional (trained) nurses "were united in membership of a recognized profession by the provision of uniform state registration as evidence of having received systematic education enabling them to render skilled service throughout the country in the public interest". [SANC 5th Report: 1970: 23]

The struggle for the Nursing Act

The battle for the promulgation of the Nursing Act by nurses is well documented and a brief outline is given to serve as orientation.

(1) According to the current Nursing Act (No. 50 of 1978).
Great tribute is paid to the tenacity and vision of those engaged upon the formation of the Act. Few authors pay tribute to the students of the time who had the courage of their convictions and were amongst the first to organize what was literally a revolt against appalling conditions.

During the war years nurses became increasingly dissatisfied with nursing conditions as stated in Chapter 1 concerning the trade union incident. The nursing representatives on the SAMC could do little to improve conditions as they were always out-voted, causing further dissatisfaction and active unrest. The SAMC co-opted two further nurse members (with no voting powers). Conditions deteriorated to the extent that the "Trade Unions stepped in with promises of improved salaries and service conditions" [Medlen: 1984: 183] - as reported by Sybil Marwick. This stimulus from the environment was drastic and the response of the nursing system was to become self-determinative.

The SA Trained Nurses Association (SATNA) after organizing a national referendum in South Africa, South West Africa and the then Rhodesias defeated the trade unions. The now famous question: "Do you wish to have trade union control or keep in SATNA and in addition have your own nursing act?" was asked. Overwhelming support was given for a new act and keeping trade unions out. The SANC was established on 8 November 1944. [Medlen: 1984: 184](2)

The importance of the SANC (and the Nursing Act) as a super-system: as a statutory professional body.

The Nursing Act is the single-most important super-system that has ever developed for South African nurses, and it is recognized as having a most significant historical input into nursing education. Nurses' education and professional development has progressed and developed more during the past thirty-eight years than during any other period. Generic education has progressed; post-registration courses have flourished; nursing

(2) Adaptive interactions had taken place as reflected in articles in the SA Nursing Journal 1942-1946.
colleges have been established; degree and post-graduate courses developed; research and publications have grown; the development of nursing theory and models in nursing have grown; education for coloured and black nurses has been stimulated; parity has been achieved; conditions of service improved; since 1972 all categories of sub-professional nurses have had to be compulsorily enrolled. This short list represents a few of the major contributions as a result of nurses governing nurses.

Colleges owe their existence in part to the SANC. The SANC regulations circulated proposed educational regulations to Provincial authorities in the mid-forties. This enabled colleges to investigate and plan systems before the regulations were promulgated. The first regulation for training was promulgated on 4 September 1953. In this first regulation it was stated that: "no school of nursing shall be appointed by the Council unless it consists of a nursing college appointed by the Council and an affiliated hospital or group of hospitals which has been approved by the Council as part of the nursing school system."
Fig. 5.3.1 Schematic structure of the Nursing Act, No. 50 of 1978 established the SANC and structural-functional components according to Chapter 5.

- Objectives
  - Definitions
- Powers
  - Committees
    - Disciplinary
    - Education
    - Other as necessary
  - South African Nursing Council
    - Chapter I
    - Staff
      - Office bearers - President
      - Members - Vice Pres.
      - - Treasurer
      - Meetings
    - Head office: Pretoria
- Ch. II
  - Education
  - Training
  - Registration
  - Enrollment
- Ch. III
  - Offences by persons not registered or enrolled
- Ch. IV
  - Disciplinary powers
- Ch. V
  - General & supplementary provisions
Figure 5.3.2: Functions of SANC

Each structural unit of the SANC has numerous functions which can form the three main configurations (clusters) of Function as above.
In Chapter 1 of the Act, the objectives of the SANC are outlined. They are: the promotion of health standards in South Africa; control of education and practice of all categories of nurses, subject to health care professions acts; the promotion of a liaison between education and other health care professions; the advising of the Minister of Health on matters within the Act; communicating with the Minister of Health on matters of public importance.

Details of the Nursing Act will not be provided as the Act is readily available. Because the Nursing Act deals with practice it is a Nurse Practice Act.

Aspects of the implications of the implementation of the Nursing Act in a College

1. Applying the Nursing Act to management of the college is not a problem because the Act and legislation that follow from it directs, in a majority way, many activities eg inspection, registration, and guarding against offences.

2. Applying the educational precepts of the SANC is a much more difficult task as the two subsystems of teaching and learning differentiate. In the taxonomy of learning objectives high levels of skills need to be reached. This is difficult in terms of student level of development and uniqueness and different outcomes must be expected in learning experiences. The test situation should be based on minimal safe practice standard. What this is, educationally, is not well understood for results are only apparent after a time.

In educational management the education and training regulations stated in Chapter 2 of the Act are to be fulfilled. In preparing for SANC approval of the college as a school, the school and affiliated hospitals shall fulfil criteria relating to all educational aspects eg. environment, teachers university qualifications, support systems, the curriculum and objectives, facilities, measuring instruments, learning experiences, didactics, evaluation and examination systems. The University Senate approval of the curriculum and allied
curricular activities must also be included in an application for approval. This ensures standards of education, and relates nursing educational standard to general education and to community health care and protection.

3. The dual reciprocal role based on the input-output model

3.1 Colleges educate professional nurses who serve a community. The major aim of the SANC is to safeguard the interest of the public by imposing standards of education, and standards of professional practice.

3.2 The act of licensure or registration admits all categories of practitioners to a public list which "sets the seal of public recognition on" the profession. [Searle: 1965: 181] The public is at once a super-system, a resource, and a throughput, acted upon by the product. As a super-system, the public finances health services, is a resource reservoir for personnel, determines throughput manoeuvres through its health needs, and provides the clients of the health service. Deeply sensitive psycho-social care relationships exist as the nurse is that category of health worker most intimately concerned with the public, and the rendering of a 24-hour service, in contrast with the minimal length of time spent by other health categories.

4. Other implications of the SANC as a super-system

The SANC is responsible for the approval of schools, curricula and learning experience systems, nursing functional and structural systems, fundamental service philosophical systems, theoretica, practica and technique model systems, educational philosophy systems, professional practice systems and the organizational and management systems underlying such practice, and the inter-professional relationship systems.
5. The ethical and disciplinary control systems of the SANC
[The above are contained in Chapter 4 of the Act: The disciplinary power of the Council.]

Although this power of the Council is a system within the SANC according to which it proceeds, the implementation of this power is usually preceded by action, at the local site of the infringement, eg. in a health unit or a college. Disciplinary control enables remediation of problems, creates learning experiences, controls, safeguards and sets standards.

Having discussed control of the profession, the organization of professional development follows.

The South African Nursing Association (SANA)

Few subjects can be as important to a profession as its organization and the basis upon which its recognized membership is founded. [Mrs Bedford-Fenwick in Searle: 1965: 238] A profession’s strength is enhanced when its members practise according to the objectives and philosophy of its corporate body. In the case of nursing, the corporate body is the South African Nursing Association(3) that controls, as a super-system, professional organization.

The objects of the Association as a whole are:

- to assist with the development of an adequate, efficient and effective nursing service for the Republic of South Africa;
- to raise the status, maintain the integrity and promote the interests of the profession of nursing and midwifery;
- to consider and deal with any matter concerning or affecting the profession of nursing and midwifery;

(3) Please see End Note 1 at the end of this section.
to perform acts necessary or incidental to the attainment of the above objects and to safeguard and further the interests of the Association and its members. [SANA Guide: 1983: 11]

4.1 These objectives are achieved through regional and central levels. The Central Board appoints executive staff who administer the affairs of the Association. Negotiations are entered into with respective authorities from time to time. Examples of negotiations are: yearly inputs to the Commission for Administration; the improvement in conditions of service; input concerning diploma and university education; initiating input for post-legislation courses.(4)

5. Nurse members are the human resources of the SANA and their benefits from the super-system are:

5.1 The democratic right to participate in affairs of the profession; branch membership; an avenue for professional advice and assistance; negotiable special offers and discounts due to large membership and strong power of negotiation; professional indemnity insurance; group personal accident insurance scheme; use of a specialized nursing library at head office; availability of a monthly newspaper, "Nursing News"; availability of SANA publications; availability of "Curationis", the professional nursing journal; scholarships and bursaries; recognition through a badge; recognition of achievement through awards and medals; welfare fund for aged and disabled members, the S A Nurses' Trust Fund.

5.2 Nurses have reciprocal feedback input to make in the forms of: active advancement to improve personal and professional conditions; participating in branch meetings and communicating Association activities; payment of annual fees; notification of

(4) The forerunner was the SA Trained Nurses Association, founded in 1914.
change of status, eg. change of name, address, employment, ceasing or resuming practice.

6. Through its structural components:

6.1 Sub-systems are formed by which members manage affairs of the Association at Branch, Regional Board and Central Board level. Seven standing committees of the Central Board manage various needs.

6.2 The administrative-executive "head office" functional levels are administrative, educational and socio-economic development levels.

6.3 Professional societies formed by members who have a special interest in a particular field, eg. curriculum development.

Having discussed the input-output of the national statutory professional bodies into health, health systems now devolute to Provincial level and this will be discussed in the next section.
The structural organization of SANA from 1944-1981 was too centralized, and this led to decentralization in 1982 enabling the encompassing of regional activity, thereby overcoming the centralization problem.

The 1982 Constitution to an extent corrected the segregational activity of 1957 and 1972. This, however, remains a source of deep concern because selectivism can be a dissociative social process, particularly so in turbulent times and especially when a country is engaged upon a struggle for its very survival. Such survival would include professional survival which is dependent upon the support of all members of the profession. In a profession well known for its high ethical and professional conduct, with caring as a central theme, this very fibre of "being" becomes suspect when it engages upon selectivism, however well the motivation for selectivism is developed. The increasing isolation of South African nurses internationally, and the implications thereof, has been countermanded by every and all means, including uniform support and informed votes to eliminate segregational clauses from the existent Constitution. (The 1988 SANA Congress changed the constitution to exclude racial discrimination).
5.4 PROVINCIAL ORGANIZATION OF HEALTH CARE

Provincial organization of health care

Provincial Executive Directors of hospital and health services are second-tier government structural components who are functional components on the health matters advisory committee and who head the department in a particular province. They are subject to the Administrator and the members of the executive committee, one of whom has the portfolio Hospital Services.(1)

The following will be discussed:

5.4.1 Organization of Hospital Department : Annex 9
5.4.2 Organization of Cape Provincial Administration Nursing Advisory Service : Annex 10
5.4.3 Regional health care levels

Control is exercised and formal communication is made through ordinances, regulations, personnel memoranda and circular minutes. As the Province is the employing body of collegiate systems, all college staff and students are subject to these provisions.

The Cape Provincial Administration, since 1985 through a Memorandum of Agreement, shares, with the University of Cape Town, in the overall and academic control, and through the tripartite agreement between the State, UCT, and CPA has an input via academic hospitals, where students undergo professional practice education.

Through CPA Directorate structures, services, amenities, personnel and administrative input is given through Inspectorate levels, dealing with diverse functional units, as shown in the organogram. The six advisory services, of which nursing is one, have more direct input and feedback.

(1) The Executive Director (or nominee) of Hospital and Health Services is represented on the South African Nursing Council and has thus a national and regional input.
Delegation documents indicate routes of communication sometimes via the Regions. Carinus Nursing college is in the Groote Schuur Hospital complex region.

Appointments are recommended at College Council Selection Committee level and ratified by the Executive Director of Hospital and Health Services, and the Executive Committee. "He who pays the piper calls the tune" - so it is not strictly correct to state that the service is only of an advisory nature.

As in all CPA control positions, the incumbents have powerful inputs to make into the systems under their control, and their awareness of their role, in respect of various divisions, is of paramount importance. As the nursing division has by far the largest establishment, constitutes the greatest number, but is reflected at the lowest level of the organogram as an advisory service, with a deputy-director as head, the question of the importance of this division in the hierarchy arises. It is a general professional concern.

Although governance is decentralized through Regional (hospital) complex units, the system is far from ideal (as discussed in the relevant section). However, in general:

- the worker seldom receives enough information to meet learning needs in respect of the organization for which he works. Particularly in the present climate of resistance and unrest, this is of paramount importance. Present systems should be upgraded, and additional structures should be created to meet the needs and to prevent future deterioration

- nursing no longer operates only on the curative level. The psychological and social concerns that nurses address are not always regarded as part of their work and must be incorporated in the brief they hold. They should be represented in all areas and at all levels. Governance systems should be scrutinised for reasons for excluding direct input and representation by nurses
The Department of Hospital Services became the Department of Hospital and Health Services as a result of implementing the new health plan dispensation, on 14 August 1986. Since 1910, health care in South Africa has developed mainly as a hospital-centred service, with the provincial authorities offering curative services, and the Department of National Health and Population Development responsible for preventive services. Thus the national health plan, mentioned earlier, devoluted power and expanded health care at provincial level - which henceforth would be responsible for delivering all facets of health care. This assisted the educational philosophy and educational process in the college concerned with implementing the shift of emphasis from curative to primary health care.

5.4.3 Regional health care levels

Power devolutes from the Province to the region. The regional-college relationship is discussed in this section. In the section on the University as a supersystem, the joint agreements concerning this section will be managed.

Historically, certain clusters of 'stars' rose to ascendency in the galaxy of the College system. This section highlights this aspect.

Regionalization

The Hospitals Amendment Ordinance of 1972 empowered the Administrator to classify Provincial Hospitals in relation to regions, delegating considerable responsibility of the Director of Hospital Services Regional Medical Superintendents. Regionalization and decentralization has made certain administrative processes less cumbersome and quicker, according to Kane Berman [1978].

The Cape is divided into 7 regions, one for each major academic hospital:

1. Groote Schuur Hospital region
2. Tygerberg Hospital region
3. Red Cross War Memorial Children's Hospital region (subsequent to 1972)
4. Western Cape region
5. Eastern Cape region
6. Border region
7. Northern Cape region

Groote Schuur Hospital region

The "new" Carinus College was built on Groote Schuur Hospital grounds, and as this move in 1972 coincided with regionalization within Groote Schuur Hospital region, it was possible effectively to traverse the bridge of the new legislation remaining in equilibrium. The advantage of being affiliated with a region, in the main, is to have vast productive resources immediately available.

When the Carinus School of Nursing opened on 16.1.1949, its closest interactional point was the Cape Provincial Administration. In the interim period, before the new SANC promulgated its regulations, the College control fell under Cape Provincial Administration and Cape Hospitals Board (as reported in the first annual report to the Advisory Committee).

Officially, all Provincial employees became civil servants on 1.8.1986.

The affiliated hospitals: various hospitals were affiliated from time to time and this will be treated in a subsequent section on hospital school systems.

The various regions have hospital boards, and the colleges, advisory committees; the latter was replaced in 1985 by a Senate and Council. This is discussed in Chapter 6.
The realities of being incorporated in a Region

Potential problems

The Head of College is virtually autonomous and is a nursing educationist and manager. The head of a region is a medical practitioner and, as the regional medical superintendent, manages the region and is the representative of the Executive Director of Hospital and Health Services (EDHHS) of the Province. The relationship between the Head of College and the Regional Medical Superintendent is maintained and determined by many service legislative documents. It is suggested that one single document be constructed to embrace the relationship within the region, as the existent system inherently holds potential hazards. Furthermore, it is a long outstanding need that a Nursing Education Act be formulated dealing with Nursing Education. Other than a Memorandum of Agreement and a one-and-a-half page Ordinance, Nursing Education has no structured legislation, and thus enjoys no formally authorized position within the vast governmental supersystems. It is simply lost within service legislation. As things now stand, a hundred years from now, it would be difficult to ascertain that an educational system existed.

The method of financial management communication routes, and the need to redefine the relationship in terms of the CAP/UCT memorandum of agreement has become essential.
5.5 THE HOSPITAL SCHOOL SYSTEM

In this chapter the hospital school system is discussed. In certain historical eras either the hospital or the college was designated as the school, ie. the body approved and appointed by the governing registering body to be responsible for the control of student education.

In South Africa the hospitals in a specific area are affiliated to a college, (and vice versa), as well as to other institutions, for the sake of pooling learning resources and learning experiences. The affiliations during the period 1949-1984 will be noted.

Thereafter the Carinus College as a school will be mentioned. In the last part of this section, the "hospital as school" concept is discussed in terms of functional criteria. Negative and positive results arise when the criteria can and cannot be met. How the hospital school system disadvantaged independent nursing practice follows. The chapter ends with problems and contemporary concerns engendered by the two systems.

The term "hospital school system" refers to the approval of hospitals as training schools (nursing educational centres) by the SANC as from 1960 to 1984, and before that, since 1928, by the SAMC when regulations concerning basic training were in line with those of the United Kingdom and the Commonwealth at that time.

**Hospital and college school systems**

Historically in this Cape area the periods were:

I Early hospital school days : 1656-1948 (Will not be discussed)
II The Carinus School of Nursing : 1949-1959
III Carinus College as school : 1985-present
IV Hospital as school : 1960-1984
Section four of the Nursing Act, No. 45 of 1944 promulgated by the Nursing Council provided that regulations for the training and examination of medical and surgical nurses be instituted. A school of nursing would only be approved by the Council if the school consisted of a nursing college and affiliated hospitals.

The control of student education and administration was handed over by hospitals in 1949 to the College. Five hundred and thirty posts were taken over, including students already in training. Although SAPSE(1) nomenclature was only introduced in the late nineteen seventies, it will be used here for its classificatory function and for the fact that the early college processes led to its development.

The system programmes that now formed were:

1. The instructional programme as set out in the chapter on the College as a system. The van Binnendyk report proposals, the SA Nursing Council ideas on reform, and the existent SA Medical Council regulations were adjusted to the new system. This included teaching, vocational and technical instruction, learning materials, the examination system, general studies and new roles. This system was created in the College and was not taken over from the hospitals.

2. The student service programme comprising recreation, counselling, and career guidance, student health and medical service, student auxiliary service and sports development.

3. The public service programme to meet community needs and problems, and to give patient care.

4. The research programme, like the former programme, gathered momentum in subsequent periods. Great deficits still exist. As discussed under Tutor Resources, the shortcoming is due to

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(1) South African Post Secondary Education.
the ever-present tutor shortage and the small percentage of nurses with degree and post-degree qualifications. This, in turn, relates to the earlier lack of general education amongst women to qualify for admission to universities.

5. An additional contributory factor is that the majority of students qualify as nurses by diploma and not the degree courses.

6. The student access programme includes those activities carried out to obtain a student body, eg. recruitment, selection criteria for admission, admissions processing and related financial activities, scholarships and prizes.

In the 1960 Annual Report Miss Loopuyt writes:

"On 29 February 1960, The Carinus School of Nursing ceased to exist. The Carinus School of Nursing had consisted of:

- Groote Schuur Hospital
- Victoria Hospital
- Woodstock Hospital
- Rondebosch/Mowbray Hospital
- Red Cross Children's Hospital
- Carinus Nursing College

From the 1st March 1960, the following hospitals became independent schools to which the Carinus Nursing College was affiliated:

- Groote Schuur Hospital
- Victoria Hospital
- Woodstock Hospital
- Rondebosch/Mowbray Hospital"

The control and administration of the training of students was handed over to matrons of the respective hospitals by the Principal of the Carinus Nursing College on 1.3.1960.(2) Miss Loopuyt then goes on in the 1960 report to write the first report of the Carinus College as opposed to the Carinus School of Nursing.

(2) It was 25 years later on 1.1.1985 that the college once again became the training school.
Direct handovers were:
1. Assignment of student nurses
2. Students' files and correspondence
3. Monthly transport schedules
4. Issue of uniforms etc.
5. Posts: student and staff section dealing with the student salaries, and leave records
6. The practical education. Henceforth the college would teach only the theory

With the new organization the allocation of student nurses as on 29.2.1960 (midnight) was as follows:

<table>
<thead>
<tr>
<th></th>
<th>GSH</th>
<th>Vic</th>
<th>Wdst</th>
<th>Rond</th>
<th>KBr</th>
<th>Paarl</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>503</td>
<td>82</td>
<td>59</td>
<td>59</td>
<td>4</td>
<td>1</td>
<td></td>
<td>708</td>
</tr>
<tr>
<td>(79</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>4</td>
<td>1</td>
<td></td>
<td>111</td>
</tr>
</tbody>
</table>

Of these (111 included in the totals) were handed over later as they were final-year student nurses who completed their training at Carinus Nursing College, indicated in brackets above.

Some significant statistics relevant to this section (detailed data available in section on student resources).

1. Posts:
   - 16.1.1949: 530 taken over from hospitals
   - 29.2.1960: 711 handed over to hospitals
   - 1960-1970: Approximately 1000 posts in hospital school system of eight affiliated hospitals
   - 1985: Posts available to Carinus Nursing School: approximately 385

The grave reduction in student posts and the resultant dearth of professional nurses and the high number of enrolled pupils is of national concern. The trumpets are sounding the extinction of the professional nurse and possibly professional health care.

2. Appointments:

   - Carinus School of Nursing 16.1.49-28.2.60 3 574
   - Carinus Nursing College 1.3.60-31.12.84 7 431
     \[\text{Total: 11 005}\]
   - Carinus Nursing College as school 1.1.85 456
     \[\text{Total: 11 461}\]

3. Passed final:
   - Carinus School of Nursing 1 825
   - Carinus Nursing College 4 075
   - Carinus Nursing College as school 45 (1988)
   \[\text{(enrolled pupils excluded) 5 945}\]


Why had this change occurred?

Prior to 1949 nurses had not been appointed as heads of institutions. Now autonomy and power was vested in the College head and for nursing solidarity it was a most significant event in the historical

Parochial jealousy concerning power shifts and ego-ideals had developed. Medical pressure (from matrons to medical superintendents to head office medical directorate) took place. Resistance to change occurred as the hospital school system had lasted just too long to lose the considerable benefits gained by educating students.

There were those (in the minority) who honestly believed that student education belonged in a hospital and that college education was far too academic. Humans have varying degrees of skills, knowledge and attitudes which govern their insight and vision, and they perceive and judge others according to their self-perception. Possibly, for many, the time for colleges as schools was not ripe. SANC R1013 of 8.7.1960 - hospitals approved as training schools in association with colleges concluded the matter of colleges or hospitals as training schools.

The affiliated hospitals and institutions 1949-1984

1. The first affiliations

The four first hospitals affiliated were Groote Schuur Hospital, Woodstock Hospital until 1.1.1983, Rondebosch/Mowbray Cottage Hospital until 31.12.1976 and Victoria Hospital, Wynberg. Groote Schuur Hospital fell under the Cape Hospital Board until 1.1.1950 then under the Teaching Hospital Board which also advises/attends the Red Cross War Memorial Children's Hospital.

The other three hospitals resorted under the Southern Suburbs Hospital Board. Even a brief history of hospitals cannot be managed in this thesis as a result of constraints of length.
2. **The northern and rural affiliations**

The Karl Bremer Hospital from 1956-1959, Paarl Hospital 1957-1959, Swartland Hospital (Worcester) 1958-1959. These affiliations were engineered to prepare students for the opening of the Karl Bremer Hospital so that senior nurses and sisters would be available by the time the hospital opened. This was done at the request of Miss Loopuyt, who foresaw the problem of preparing seniors before hand. She was supported by the superintendent of Karl Bremer Hospital, Dr R L M Kotze, who later became Director of Hospital Services. With the opening of the Karl Bremer Hospital, and later the Tygerberg Hospital, Afrikaans student numbers at Carinus Nursing College dwindled from + 50% in 1949 to 15% in 1976 and in 1985 to 6%. In 1977 Afrikaans-speaking Carinus Nursing College students started attending Otto du Plessis College, while their English-speaking counterparts attended Carinus College.

English Medium affiliations in 1983 were:

Tygerberg Hospital
Eben Donges Hospital
Karl Bremer Hospital
Paarl Hospital
Stellenbosch Hospital
Swartland Hospital

3. **The middle period affiliations (and enrolled affiliations)**

Die Volkshospital, 1965 - own hospital board
Conradie Hospital till 1983 - Northern Suburbs Hospital Board
Red Cross War Memorial Children’s Hospital, 1959
False Bay Hospital enrolled pupils from 31.3.72
Somerset Hospital, 1.6.73
4. The later affiliations

The integrated course affiliations 1.1.1975
- General hospitals as stated above
- State health psychiatric hospital - Valkenburg and Alexandra Hospitals
- CPA maternity hospitals: Mowbray Maternity Hospital and Groote Schuur Hospital Midwifery block (opened 1961)

5. The comprehensive course affiliations 1.1.85

- University of Cape Town, Faculty of Medicine, Department of Nursing (although co-operation had commenced 1983)
- General Nursing Science: Groote Schuur, Victoria and Somerset Hospitals
- Psychiatric Nursing Science: Valkenburg Hospital and Alexandra Rehabilitation Centre
- Midwifery Nursing Science: Mowbray Maternity Hospital and Groote Schuur Hospital Midwifery Block
- Community Nursing Science: local health Cape Town C.C., Divisional Council, Regional & State Health, industrial and commercial enterprises, schools and creches, and health education units

III The Carinus College as school: 1.1.1985

This came about as a result of the promulgation of SANC regulations for the comprehensive course. (3) The historical reasons were outlined in the chapter on the new structural and functional organization of the college as a system.

Sister Henrietta Stockdale had introduced nurse training in Kimberley in 1877 and had made representations to have nursing vested in a National Education Department and, in so doing, to separate the

control of nursing education from the service. These representations have been repeated endlessly until, finally, nearly a century later in 1983, this goal was achieved. [Thompson: 1988: 175]

The changes relating to the new system of the college as a school

1. The earliest goals as stated in the 1984 annual report were national, and concerned with the number of problems that had to be adapted to simultaneously:

- change from a medical to a nursing model
- instituting the nursing process
- offering a comprehensive course
- implementing university affiliation
- revamping post basic courses and offering these at colleges
- teaching students on old as well as new regulations

2. Out of these variables new structures and functions arose as a result of the development of the college as a fully functioning tertiary educational institution.

The most immediate concern was that the workload of the college increased about 150% as a result of the increase in course years from 3 and 3 and a half years to 4 years. Practice was now taught in college, and students had to be accompanied into clinical areas. The functional isolation with hospitals ended. Service needs could no longer take precedence over education needs. New approaches were developed and curriculum development activities escalated; the new system of examinations was instituted; new course (disciplines) development, recording of data, committees and committee work, change in educational didactics, and managing numerous new learning venues; development of practica, orientation to new course; transport for students, clinical allocation, selection, processing new student applications. The projected ongoing increase in workload is 75%. All categories of staff had to be doubled.
The following implications of the national changes in nursing education (implemented in 1985) had to be encompassed within the new collegiate system. These changes, as documented on 10.11.87 by the heads of Nico Malan, Carinus Nursing College and UCT Department of Nursing for the College Councils, included:

The demands of the College Senate and College Council, the development of an entirely new curriculum to include four disciplines, the development of clinical education and appropriate measuring instruments, and the establishment of uniformity and involving all the many institutions now concerned with the students' education, including psychiatric and community health units whose contact with students was previously limited. The establishment of a new examination system in conjunction with the University and the other college affiliated to the University (Nico Malan Nursing College), research, and staff and student development.

IV Hospital as school

The hospital school system : functional criteria

- The medical superintendent in overall control as from 1949. Prior to 1949, the hospital board and management committees were in control
- The (matron) nursing manager in control of nursing
- Licensed by appropriate authority (SANC) to fulfil conditions of approval as school
- Provides theoretical lectures during a specified time:
  - by being affiliated to a college (1960-1984) and conducting training courses jointly with the college
  - by providing the resources necessary to give lectures (in absence of a college) pre 1949. Develops curricula appropriately
- Provides practica education and supervises students' practica work and conducts examinations therein
- Provides practical learning experiences
- Fulfils conditions in relevant SANC regulations
- Registers students with the SANC. Keeps records of education
- Provides posts, fills these appropriately, carries out all personnel and human resources management functions eg. applications, selection, grievances, conditions of service, leave, salary, etc.
- Employs categories of nurse according to (SANC) scope of practice regulations
- Conducts the necessary research on the content of the nursing discipline that forms the basis of the education
- Provides adequate accommodation, nutrition and health care
- Assists in the personal and professional development of the young student

The negative results of the hospital school system

These were documented in earlier Chapters and arose as a result of the inability to fulfil functional criteria as set out heretofore:

1. Maintaining service in a hospital is the full-time occupation of the medical superintendent and nurse managers, and if a choice is to be made, the education does not receive priority. Matrons were in earlier times not licensed nurse educators (tutors) and could not give a sustained and appropriate educational input.

2. Licensing authorities prior to the establishment of the SANC did not (like the SANC) inspect schools with the aim of ascertaining if educational conditions for approval had been met. They inspected the service components only.

3. Theoretical education was not always maintained. There was insufficient staff and insufficient tutors. Matrons could not double up as both tutors and managers; resources were often inadequate, the syllabus was minimally developed, and conditions in regulations were minimally met.
4. Conditions of service, and the management of personnel and human resources were poor. Students were regarded as expendable pairs of service hands. Grievances were often very unsympathetically dealt with and an attitude of "like it or leave it":

- scope of practice regulations were in the developmental stage, and the passive 'handmaiden approach' was fostered
- little nursing research could be carried out
- there was inadequate accommodation, nutrition and staff health; human relations were poor; recreational facilities were often not available

Positive results

1. Obviously, various schools fulfilled the functional criteria to a greater or lesser extent, with improvement required to a greater or lesser degree.

2. For many years the hospital school system was the sole resource for providing nurses giving the necessary health care and producing persons of great merit. It must also be remembered that out of these very ranks came the pioneers who blazed the way to nursing self-governance and to effective educational systems suited to the times.

3. As the years went by general development escalated in excess of resources in hospitals and health units - yet they continued to give care, particularly to the 80% of the population (by 1987) unable to make a financial contribution.

After the colleges became schools in 1949, the following annexures were added to the criteria of a hospital by the SANC.(4)

(4) Annexure A contained the regulations for training.
Annexure B in the first SANC regulation on training of 4 September 1953 as part of a school of nursing:

- Adequate variety of health care and facilities would be required
- Student nurses shall be treated as students and their training shall normally receive precedence over any other duties that may be required of them
- Only professional nurses to participate in education
- Medical practitioners to be included in the boards of management
- Matrons' responsibility toward education (conditions of service had legal backing: a forty hour week, an eight hour day, one day off per week, 30 days annual leave, night duty: 10½ month of total period)
- Adequate accommodation, as above
- Ratio of 1 student per 4 professional nurses
- Withdrawal of approval if conditions of approval are not met

Annexure C on hospitals or groups of hospitals classified in Class I and II competent to train students according to specific criteria. (5)

The hospital school system disadvantaged independent nursing practice

The legality of nursing practice, particularly as applicable (inter alia) to the independent nurse practitioner and effect of poor law nursing, is documented by [Searle: 1986: 48-53]. The South African perspective is almost identical to the British perspective as described by White, 1978. Before the South African War (1899-1902) the majority of registered nurses were in private practice. They operated from rooms in their homes, established private nursing homes, established a network of small hospitals and home care facilities. "These were the foundation of the health service as it exists today." [Searle: 1986: 48-53] Simultaneously, institutional practice entrenched itself. After the South African War, the poor law nurses who remained, set the patterns in South African hospitals.

(5) See Annexure C.
As Britain had not yet acquired legislation to regulate nursing practice, "the subservient to the doctor role", and the "belief that the nurse was in the hospital to carry out the doctors' orders", developed. Since economic recessions caused nurses to seek employment in hospitals and to put up with conditions prevalent, the idea of independent professional practice was smothered. The neophytes of the profession were prepared in such a milieu by tutors who had qualified under the poor law system, thus perpetuating the situation. "There was no true preparation of a professional practitioner." This situation was also responsible for the development of the one-sided curatively inclined approach in the past.

Problems engendered by the two systems:

People can resist change, and people do not change because a regulation has been promulgated and a new system propagated. By and large, nursing educationalists supported collegiate systems whilst some service nurses criticized colleges for making nursing too academic, and in this they were often supported by medical practitioners. This theme proved to become established as a firm trend every time regulations changed, including the recent 1985 change.

The gap between the service and the academic system grew. Certain colleges became isolated from practice. This was rather as a result of the organizational components of colleges as the workloads were high and the tutor population small. Only with larger components of teaching personnel were tutors able to begin to re-establish their credibility as proficient practitioners. From 1985, real efforts were made to overcome this deficit. It must, however, be considered that tutors are not superwomen. They have developed specialist academic skills and are valued and expensive resources, cannot become specialists in every branch of practice in the service, and must settle for baseline proficiency. This baseline requires research and should receive national attention at a 'think-tank' level. There are the four disciplines as majors: general, community, psychiatric and
midwifery nursing science, as well as ethics and professional practice majors and eight ancillary subjects. It is not possible to cover so wide a range of detailed practica skills. If tutors are required to be clinically proficient, are the existent clinical specialists equally well versed in the academic constructs and in all branches of the speciality they work in and, if not, is it in order to perpetuate double standards?

Parochial jealousies occurred and the we-they group affiliation became established. However, with the introduction of the 1985 course, the distance between the college and the health unit shrank, and the college expanded its activities to other disciplines in other fields, so that it would be difficult firmly to establish where we-they now begins or ends.

The student has never been able to be a true student as duties in health units take precedence over educational needs. Up to 1985, it was difficult for colleges to negotiate with hospitals (who employed students) for teaching time. In general the service needs need only to be mentioned by hospitals to get decisions made in their favour. Ethically and professionally, it is a difficult concept to open up to bargaining and negotiation, as no-one can deny the clients’ need in the service. However, people often fail to understand that this negotiation is about the responsibility of the college and the service to future professionals and health care. The school is not yet out on this subject.

Conditions of service are relevant to conditions of service in the general social system at a particular time. Although the 1944 dissatisfaction was resolved in part, the employing bodies and the South African Nursing Association continue to negotiate for improvements.

The SAMC opposed the establishment of the SANC and the removal of control from its jurisdiction - as verbalised by Dr Karl Bremer during the reading of the nursing bills. [Medlan, 1984] This tradition lives on amongst certain medical practitioners.
The contemporary hospital and college as schools—concerns

Each hospital has a student establishment and the students have, in the main, patient-care and college education as their brief. Without the necessary education they cannot give the right kind of care, without the patient/client they are minus clinical professional practica learning experiences. The interdependence of this relationship is a fact of existence and is nearly always out of balance—in favour of the hospital—because of the importance attached to patient care. The curricular structure of the 4-year course has reduced the student’s service contribution; this was counteracted in services, by the appointment of enrolled categories into student posts.

The results of the imbalances are discussed in various areas of this work more fully. In summary it can be said that:

1. The manpower student needs to relate to the national need for professional nurses, and a national manpower study and regional allocation plan should be undertaken.

2. The Commission for Administration norms has established a functional division between professional nurses and students on the one side, and enrolled nurses and pupils on the other. Structural ratios are now required. These ratios will express the degree to which the nursing (and medical profession) are dedicated to having care given by professional nurses and professional nurses to be. Whereas not all the hospital and health unit work can be done by a student, she can be assisted by enrolled and pupil nurses (and not the other way around). A very high price has been paid thus far to the inverse relationship.

3. It is clear that the percentage time the student is not in the health unit, is the percentage time (or fraction) by which an establishment must be enlarged to cover the service.
4. Rationalization of establishments in general is imperative. The changed health dispensation, changed devolution of power (and establishments) from central to provincial government, changed educational dispensation, burgeoning health needs, increased workloads as a result of rapidly changing and increasing development of technology and science, and life stresses, have left a heritage that can do with restructuring to bring order.

5. Changes in attitudes, short-term planning without full consideration of strategic effects is not feasible. Basing attitudes on archaic perceptions of health care and nursing such as the "labour force pair of hands" syndrome is not worthy to be held by health care professionals.

Following the changes in the hospital school system, the University as a supersystem will be examined.
5.6 THE UNIVERSITY OF CAPE TOWN (UCT) AS A SUPER-SYSTEM

In this section a historical orientation to UCT, the University academic hospital-college relationship and implications thereof, UCT general influence including the influence of the Department of Nursing will be given.

Historical orientation to nurses on the UCT campus

In 1987, UCT celebrated 50 years of nurses on the campus, as the post-registration course for nurse tutors was established in 1937. (1) A century ago, in 1887, Queen Victoria’s golden Jubilee was marked through the general admission of women to the SA College - although the first woman was actually admitted the year before. (2)

In 1960 a Department of Nursing Tuition was created falling under the faculty of medicine. [Interview: Prof. P. Harrison] In June, 1959, Miss Harrison was seconded by the CNC head, Miss Loopuyt, to establish this Department, named the Department of Nursing Tuition by Prof. van der Ende. Miss Harrison was designated lecturer in charge and in 1961, UCT created this post. Prior to the creation of this Department the course was organized through the Faculty of Medicine or the Administration Office.

University, hospital and college relationship: medical and nursing interaction

In South Africa an academic hospital is one that is attached to a university, usually through a Joint Agreement between the hospital authority, the Province and the University. New Somerset Hospital was originally used for medical clinical learning experiences by UCT. When Groote Schuur Hospital opened in 1938, it became the primary system in respect of this function. The Cape Hospital Board was involved in the

(1) Correspondence dated 24.11.1984, between Professor Thompson, Head, Department of Nursing, UCT, and J.D.C. Drew, University archivist.

(2) This was also celebrated during 1987.
early days, and most of the medical care was provided by honorary part-time medical consultants.

The government appointed the Brebner Commission in 1948, to investigate the conduct of teaching in South African hospitals. At the same time the Cape Provincial Administration appointed a committee of enquiry into the organization and administration of the Groote Schuur Hospital. Subsequently the Cape Provincial Administration assumed responsibility for public hospitals in the Cape Province and entered into a Joint Agreement with UCT in 1951, which was reformulated in 1966 and followed more recently by the tripartite agreement between state health, UCT and the Cape Province.

UCT: general influence

The most direct implication is that nurse tutors are taught by members of various faculties eg. Education, Social Sciences and Humanities, Natural Sciences, Medical Faculty, through the Nursing Department. Each department, as a system, upholds philosophies affecting students’ subsequent views of life.

It is a professional and personal developmental requirement in nursing to upgrade and update knowledge. Various summer school UCT courses, new management technique courses and other diverse courses on various skills, are attended at a number of faculties and departments.

As stated in Chapter 1, of the 97 tutor graduates of UCT, 25 have taught at Carinus Nursing College and all four heads of college, as well as vice-heads, have been UCT graduates.

Since 1985 the direct input of UCT Department of Nursing has been significant as outlined in the structure of the memorandum of agreement.

The last large group of tutors that graduated from UCT was in 1979. The reasons for this are related to internal factors, and probably fiscal constraints: in that too few English medium applicants were available; that the growth of the Department of Nursing has outstripped the rate of
provision of staff; the long time it takes for the introduction of a new course. There is also the need to revamp and upgrade existent post-registration diploma courses to degree courses, permitting a number of majors like education and administration and probably community health qualifications; as well as the reticence of the University to embark on another nursing degree course when they already have one; and the debate on formative vs professional degrees, and so on.

There have never been sufficient tutors in the Cape. By 1987 there was a national shortage of tutors. Since 1985, at a number of nursing meetings, representatives of the area requested time and again that the UCT tutors' course be reinstituted. There are plans to reinstitute the Diploma in Nursing Education course in 1989 - a most welcome move.

In ending this section on the University and on the Faculty of Medicine, it is evident that the specific support of the Faculty is vital to nursing; appreciation is expressed for the contribution it makes. The support of the respective fraternities of the faculty for the nursing cause is probably based on interactive clinical experiences at the bedside.
PART III - CHAPTER 6

RESOURCES

According to the model used in this work, resources are inputs into the organisation: people, talents, knowledge, money, material/equipment and buildings. From the supersystems the system interacts with other systems through resources. Resources have inputs in the processing or throughput with information feedback from the outputs. Resources are also linked with the supersystems through outputs in the form of products, services and information to the environment. In turn, the environment forms an input together with resources into the throughput.

6.1 FINANCIAL RESOURCES

Importance of financial resources

Money is often given the highest priority as a resources input since "it purchases and makes available the other human and material resources". [Kane-Berman: 1978: 26 & 27] The whole process of financial management, from acquiring funds to auditing expenditure, can be considered as the College's financial input, as this process initiates all other activity within the organisation. Money is fundamental to the College's existence.

In the section on financial resources, a historical orientation to financial management at the CNC, will be given. Brief mention is made of the importance of financial resources as well as monetary input. In 1975 when finances were mechanised, vote numbers and items changed. This change is included to alert readers and future researchers to the reconciliation that would be necessary in comparative studies. A comparative table of expenditure over five decades is given and the cost norm of a student is discussed. In constructing a comparative table it became clear that it was not possible to make a reliable comparison and the reasons for this are noted. For the sake of interest, a graph consisting of totals of annual expenditure, over the years 1972-1987 is given. Finally cost and functional effectiveness of student vz pupil nurse
education is given. The finances mentioned are all adjusted according to the index of the purchasing power of the rand.

**Historical orientation to financial management at the CNC**

The Head of the College was held accountable during all phases of the College’s existence, for all financial structures and functions including policies, planning, budgeting and control within the confines of the relevant supersystem, i.e. implementing state policy. The finances of the College were administered as follows:

**Table 6.1.1**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year</th>
<th>Responsible to</th>
<th>Budget allocation</th>
<th>Bookkeeping and administration of funds</th>
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<tbody>
<tr>
<td>Early</td>
<td>1949-1951</td>
<td>Directly to CPA secretary</td>
<td>Individual:)</td>
<td>CNC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>direct to )</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hospitals department, CPA</td>
<td>)</td>
<td>)</td>
</tr>
<tr>
<td>Middle</td>
<td>1952-1971</td>
<td>Regional complex</td>
<td>Regional and)</td>
<td>CNC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>thereafter )</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>individual )</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(on paper) )</td>
<td></td>
</tr>
<tr>
<td>Late</td>
<td>1972-1984</td>
<td>College council and the Regional complex</td>
<td>College council to Region to Administration to individual</td>
<td>Region makes payments</td>
</tr>
</tbody>
</table>
Money input

The Carinus College is an institution of the Cape Provincial Administration Department of Hospital Services, totally dependent upon the Province for funding as it generates little money itself. The financial model that prevails is typical of the general systems theory. Money input is generated from the taxpayer in various ways and revenue accrues to the Treasury. Allocations are made along various routes to the Provincial Administration, which, in turn, allocate finances according to the needs of its departments, one of which is the Department of Hospital Services. This department allocates finances to the regions which, in turn, allocate money to the College according to a budget put forward by the College. The product of the College is the professional nurse who gives health care to clients/patients of the community consisting of taxpayers. It therefore becomes clear that taxpayers purchase health care through direct and indirect routes.

It is not within the scope of this work to proceed beyond this simplified version of the input-processing-output model as information on the matter is abundant in any number of sources.(1)

(1) Information is available from the researcher.
There is a vast resource of data available in this section able to support a number of individual research theses as this section involves grounds, buildings, equipment, specialised space and all plant and technical operations - including changes that have occurred, and systems that have evolved. The SA Nursing Council grants approval to schools inter alia on the available physical facilities and the College Council makes recommendations concerning physical operations. Although the SAPSE(2) and SA Hospital norms determine space and operations to an extent, it is up to the end user how that space will be used. Thus a very wide variation exists in how respective colleges utilise this resource and in what way they establish systems common to all usage.

From the vast data available, only the following will be mentioned briefly: the concern of occupying many venues; geographical and functional isolation; the lack of planning, and commissioning science principles in the early days; residential hotel functions and the contemporary philosophy concerning learning venues; a list of buildings occupied and some experiences in those venues.

In the 24 years of existence of the College it has occupied nine different venues. Whilst the normal educational program had to be maintained, each of the new buildings entailed planning and commissioning to effect the necessary transition from an ordinary building into an operational college. The Provincial Administration was most accommodating in the assistance that was given, but the College staff was small and no additional staff was available to cope with the workload these changes gave rise to. The ventures were also costly. In terms of labour and finance and the stress of temporary change in organisation, as well as creating new systems to cope with the change, it is a lesson well learnt for the future in establishing new colleges.

Geographical and functional isolation from the hospitals with which the College was associated, in particular Groote Schuur Hospital, the major

(2) South African Post Secondary Education.
academic hospital, resulted. "Although tutors had easy access to hospitals, the logistic constraints (e.g. large classes) and time (heavy teaching loads) made bedside tutorials "and accompaniment" difficult. As a result there was limited contact between the College and the hospital, and virtually no contact between clinical personnel and the college." [Memorandum to College Councils: 1987: 1]. This position was rectified to a degree when the college moved in 1972 to Groote Schuur Hospital premises, but it was from 1983 with the promulgation of a new course that the isolation ended and reciprocal relationships developed. This, too, is a lesson pertinent for future college planning with reference to distance.

Lack of planning and commissioning

"Historically, planning and commissioning (PC) is an old concept for Britain but relatively new in South Africa." [GSH: Systems" 1987: 2] The historical roots of PC in the Cape at CPA level go back to 1972 (Dr Wilson and Cairns) but the GSH PC unit was only created in 1981. Before the establishment of a PC unit, the "end users" were seldom consulted and the needs of the planners held sway in planning. The earlier colleges have thus undergone many alterations in order to suit the end users. It is probable that no one in the future would enter into a new venture without employing the principles of planning and commissioning, of developing the brief for architects to plan the facility needed, writing the operational narrative, finalising room data sheets, operational policy manuals, etc. so that, come commissioning, the building is utilised to its greatest extent for the purpose for which it was planned.

The College building now consists of the necessary facilities for education, and a residential section which is also controlled by the head of the College with inordinate time spent on hotel functions. Future colleges should be designed to separate residential and educational systems. Strategic consideration also needs to be given to designing residences which comply with contemporary personnel needs. The College head continues to be seen as 'in loco-parentis' to students by the authorities and the community. Whereas this is satisfying for the staff and the parents, it detracts from educational function and it is in
conflict with how the students see their independence, and it needs to be researched.

The approaches in connection with material resources has altered vastly during the College’s existence. In the past, the College building was seen as the main educational venue. Contemporary philosophy sees the entire spectrum of venues, eg community, hospitals, clinics etc., as educational resources.

The venues occupied

The Carinus College occupied many venues between 1942-1972.

In 1948 the Cape Provincial Administration planned to set up a chain of nursing colleges throughout the Province, and the Carinus Nursing College was to be the pilot centre. Why, it may be asked, if it was a pilot centre and thus of importance, did it occupy so many buildings?

1. The post-war building restrictions and the urgency of the situation were the deciding factors in purchasing existing buildings instead of erecting a new building.

2. It was planned that the College would be near the Groote Schuur Hospital and the medical school campus complex would take a few years to erect. In the end "the few years" turned out to be 24 years. Nevertheless it was an inordinately long period to make the decision to raze the professional nurses’ residence on the GSH complex grounds and to build the College there on the slopes of Devil’s Peak in 1972. This final site of the College is on ground where the early trekboere stored their wheat here, hence the name ‘groot schuur’ (great barn). The adjacent ground is part of Rhodes’ trust - a trust left to the nation - and is the site of the UCT buildings.

The establishment of colleges in the Cape was also considered to be necessary to train additional nurses, in the numbers needed for the development of hospital services, as required at that time. In 1948 there were approximately 1500 nurses training in the Cape Province, of which by
1949, 600 were at the Carinus Nursing College. In 1968 there were 3033, including 887 Blacks and 684 Coloureds. By 1988, 4551 nurses were training in the Cape Province, albeit only 51% of posts are suitably filled.

In 1948, the training of additional nurses was of such urgency that it was decided to purchase the Hotel Assembly at No. 8 Queen Victoria Street. On the 9th of March 1948, the premises were purchased for the sum of 151 000 pounds. No. 8 Queen Victoria Street remained the base from 1948 to 1972. (Although it was converted to serve both as a college and a residence, it soon proved to be inadequate.)

The venues occupied by the college fall into two periods as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>Place</th>
<th>Dates of Occupancy</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early</td>
<td>8 Queen Victoria St.</td>
<td>1948-1972</td>
<td>Base</td>
</tr>
<tr>
<td></td>
<td>UCT Hiddingh Hall</td>
<td>16.1.48-30.5.56</td>
<td>Lecture rooms (4)</td>
</tr>
<tr>
<td></td>
<td>Ashlar Hall, 29</td>
<td>1.2.54-1.4.61</td>
<td>Junior nurses</td>
</tr>
<tr>
<td></td>
<td>Annandale St</td>
<td></td>
<td>Lecture rooms</td>
</tr>
<tr>
<td></td>
<td>Karl Bremer Hospital</td>
<td>1.6.56-30.9.58</td>
<td>Residence and lecture rooms for juniors</td>
</tr>
<tr>
<td></td>
<td>Rust en Vreugde</td>
<td>1.5.57-1.4.61</td>
<td>Lecture rooms</td>
</tr>
<tr>
<td></td>
<td>Roslin</td>
<td>1.7.58-1.2.72</td>
<td>Residence</td>
</tr>
<tr>
<td></td>
<td>Westcliffe</td>
<td>1.5.61-21.12.71</td>
<td>Lecture rooms</td>
</tr>
<tr>
<td></td>
<td>New Somerset Hospital</td>
<td>1970-1971</td>
<td>Finalist lecture rooms</td>
</tr>
<tr>
<td>Later</td>
<td>New C.N.C. on GSH site</td>
<td>1.1.72-present</td>
<td>Residence and lecture rooms</td>
</tr>
</tbody>
</table>

Personnel and students who attended college in the various venues will no doubt recall many incidents in their lives whilst there. The famous ‘starch brigade’ was the local name for the students who walked through the lovely Cape Town Gardens between the residence(s) and the classrooms.
In July 1968 the Cape Provincial Administration announced that a new college was to be built on the Groote Schuur Hospital complex grounds on the site of the professional nurses' residence. On the 9th of September 1968 the building was commenced. The contractor was Messrs Julius Cohen and the architect Mr C.E. Turner-Smith of Messrs Frances Hawkins and Turner-Smith. On the 1st of January 1972 the first students became residents and commenced classes in the new building. It was built at the cost of R1 000 000 and the cost of the furniture, carpets and curtaining was R80 000. Thus, on the 30th August 1971, the buildings in Queen Victoria Street were closed and handed over to the Director of Works. On 21st December 1971 Westcliffe School, Park Road, Tamboerskloof was closed and handed over to 'Capab', and on the 1st of February 1972, Roslin, New Church Street, Tamboerskloof was handed over to the Director of Works. The new college was occupied on 1.1.1972.

Having examined the material resources, the focus now turns to the 'human resources'.
6.3 TUTOR RESOURCES

The people in an organisational system are the human resources. Their talents, knowledge and skills are inputs from inside the organisation that interact with other resources, as well as supersystems in the throughput. The human resources that will be discussed are teaching staff in section 6.3 and students in section 6.4.

In this section on tutor resources the first part of the discussion deals with factors that interacted to create a new career pathway for professional nurses – that of teaching. In order to determine the position of the educational pathway, the career structure in nursing is examined historically. In 1949 the post structure and rank allocation were limited in both the service, and educational components; by 1974 post structure had developed, and by 1982, 12 professional classes were established and ‘domestic nomenclatures’ were discarded. Using Thompson’s 1980 levels within each of the three career streams in nursing, a comparison is made with the 1986 levels. This demonstrates the continuation of a disadvantaged educational career structure viz a service/administration career structure. The implications of the nursing career structure and the risks of the restriction within the career structure are discussed.

In the second part, the historical development of selection criteria and criteria of effectiveness for tutors is discussed. It was found that development of selection criteria closely followed the development of the career pathway. Certain factors hampered development of selection criteria. Disequilibrium existed in the early and the late phases of development as a result of inadequate numbers of tutors. The nursing system instituted several measures to change the available environment in this regard, eg study grants, UNISA nursing courses, altering philosophies and goals to make degree qualifications desirable; altering selection criteria in accordance with university affiliation and general educational needs in the academic environment.

Subsequently the numbers of tutors available for strategic apex functions, middle line functions, and the operational core was analysed and a graph
given of the numbers of teaching staff 1949-1987. Once more, shortages of tutors were found. The reasons for the deficit are discussed, as well as the resultant imbalance in student-tutor ratios and the effect this had on teaching, and development of the college. The national and international ratios in tertiary educational systems is examined.

By 1987, as a result of the Commission for Administration class and post structure classification, the college staff no longer have an educational nomenclature but are included in service nomenclature. So that the evolution of the rank of head of college is not lost to posterity, it is summarised. The present post of Principal is now in middle line management, and in danger of being discontinued. Evidence is given as to why this should not come to pass. A brief summary of the job description of this category is given to support the evidence.

Lastly, the 1949, 1960, 1976 and 1985 changes in the role of the tutor and teaching staff is given. It is by now evident that as society’s needs change, health care needs change, requiring changes in health care givers, their education, roles and responsibilities. Thus, chain reactions are set in motion in the environment, resources, throughput and input-output model in the form of feedback.

The new career pathway for professional nurses

The nursing profession itself, assisted by medical practitioners (on the SA Medical Council) voiced the need for qualified nurse educators from the 1920s. Six events that finally justified this need were: (1) instituting nursing education regulations by SANC, (2) division of labour, (3) the need for an alternative educational system, (4) university courses for nurse educators, (5) the formation of the S.A. Nursing Council and (6) the formation of colleges.

Regulations that control the education of nurses were revised from time to time as new needs arose. The need for uniformity in nursing education in the four Provinces was realised by the 1927 revised regulations by the SAMC. Upgrading knowledge content in regulations meant that a nurse educator with specialised skills was needed to teach the courses. The
increasing demand on the time of matrons and doctors, who were giving the lectures at that time, made it difficult for them to give the necessary attention to the education of nurses and this emphasised the need for nurse educators. Hence Miss S.M. Marwick was appointed as Sister Tutor at Somerset Hospital in 1928 and Miss E.M. Faulkes Pritchard in 1930 for the Woodstock, Rondebosch and Wynberg Hospitals. "The extended syllabus laid down for such training by the SA Medical Council rendered the appointment of a Sister Tutor necessary" [Botha: 1950: 20] according to the Cape Hospital Board.

Both the tutors mentioned had qualified as tutors in Great Britain. The University of Cape Town and Witwatersrand, and subsequently many other universities (as they were formed) provided courses for professional nurses to qualify as tutors. The stage was set for colleges to develop, and took on a more South African character.

Although the move to provide tutors commenced in the late nineteen twenties, this need could not be adequately met. Conditions had deteriorated by the early nineteen forties. During 1945 the block system was introduced. This further complicated the situation, as even more tutors were needed to operate it. The need to provide alternate periods of theoretical and practical instruction so that nurses coming off duty did not have to spend their evenings studying, and more satisfactory educational venues, led to the block system. Thus the necessity for a structured alternate system of education was established.

A teaching space was also now required. By and large, lectures were being given in any available space. Before the block system was introduced, lecture periods were irregularly spaced at times when the ward was quiet and the matron or doctor could be 'spared'. Students on night duty had to break in on their nights off to attend lectures during the day - which was most unsatisfactory.

Hereafter the van Binnendyk Commission sat, as described in Chapter 2, and led to the establishment of colleges in 1949. This provided the much needed teaching space, and a different and more structured educational system could be introduced. The advent of the college itself created
further work opportunity and, to utilise the opportunity, bursaries and full-time study leave became available for professional nurses training to become tutors. Being a tutor carried considerable status and promotional opportunity, as it ranked high in the infrastructure of nursing posts. The additional knowledge and skills acquired was a source of job satisfaction; hours were congenial. Even though the workload was high and after-hour preparation and marking was considerable, being a tutor was an attractive position.

The first nursing education regulations published by the SANC in 1953 specified the number of lectures which could be given only by a Sister Tutor. In so doing, the SANC established the central position of tutors in the education of nurses in South Africa. Even more than the 1927 regulations, the ‘new’ SANC regulations in 1953 required a tutor to teach a significant part of the content and to manage the process of education. No longer could the method of nursing education of the past fit the newly created system. At the same time legality was given to colleges through the Cape Province Nursing Education Ordinance and South-Africanism in nursing education became firmly established. The road forward was thus opened for the development of nurse tutors.

Career Structure

Having described how a new career pathway for professional nurses as sister tutors developed, the post-structure (and routes) will now be examined to demonstrate how three career pathways or streams have developed, namely the service-oriented pathway, consisting of administrative and clinical subsystems, and the education oriented pathway. These pathways developed in three phases, as indicated overleaf and in the Annexures.
Table 6.3: Changes in pathways and titles of nursing career structure

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year</th>
<th>Service titles</th>
<th>Educational Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early</td>
<td>1949</td>
<td>Traditional matron in chief, assistant</td>
<td>Principal and sister tutor</td>
</tr>
<tr>
<td></td>
<td>to approximately 1973</td>
<td>matron, sister</td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>by 1974-1979</td>
<td>Chief and senior matron, sister</td>
<td>Senior principal and tutor</td>
</tr>
<tr>
<td>Late</td>
<td>1980-87</td>
<td>Managerial titles</td>
<td>(1986) Deputy directors Head of College</td>
</tr>
</tbody>
</table>

In Annexure 11 the following tables and figures can be found:

Tables 6.3.1 and 6.3.2 contain the equivalent between ranks that developed in nursing service and nursing education in 1949 and on 1.7.1974.

Table 6.3.3 reflects the 1982 Commission for Administration's 12 nursing ranks.

Figures 6.3.1 and 6.3.2 indicate levels in career structure in 1980 and 1986 based on ratios of starting salary and maximum salary of all ranks compared with the professional nurse.

Highlights and implications of changes in teaching staff establishment

The year 1949 heralded, for the first time in the history of nursing in South Africa, the establishment of a college with a dedicated teaching staff consisting of: 1 Principal, (3) 1 Sister tutor grade B (4) and 5 Tutors grade B (total 7). Not all the posts were filled by tutors. Experienced professional nurses were often appointed to tutor posts.

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(3) Miss Loopuyt.

(4) Miss C. Roux.
Within 10 years (1949-1959) the operational core (sister tutors) at CNC had trebled, thereafter remaining more or less static until 1986. In 1964 the nomenclature of ‘sister tutor’ changed and nurse teachers became ‘tutors’.

The tutors, as the operational core, continued to be the largest group of the College staff establishment. Within the institution there was, for many years, very little promotional scope to the rank of senior tutor, as, at first, only one post existed and later only two such posts. In 1973 this category increased to five, and in 1975, all the tutor’s posts were converted to ‘senior tutor posts’, and in 1986 new tutors’ posts were created.

Implications of the nursing career structure nationally

As can be noted in Annexure 13, certain problems are evident:

1. The Cape, as mentioned in Chapter 4, is excluded in having a "full" director in the top nursing position.

2. ‘Educational posts’ were summarily dismissed as "domestic classifications". Thus, unless ‘in the know’ one could never deduce from the 1982 CFA nursing post classification that a nursing education section exists. (Researchers in the next century may wonder what happened to education?) [CPA Circular Minute No. M138]

3. The ‘educational infrastructure’ remained at a disadvantage in comparison with the service, thus affecting recruitment to nursing education.

4. The students’ classification as ‘assistants’ was difficult to accept. "... This measure not at all compares the student professional nurse with the ‘nursing assistant’, nor does it indicate a role similarity. It is only a nomenclature indicative of the basic provision category in order to get away from the large number of salaries and bases for personnel in training." [CPA Circular minute No. M138/1982:3]
5. Recent post improvements(5)

5.1 The 'Chief Matron (special grade)' is an additional higher rank instituted for academic hospitals (Tygerberg and Groote Schuur Hospitals) and became 'Deputy Directors Nursing Service' in 1986. At the same time the rank of the Senior Principal (NSM) was upgraded to Senior Nursing Service Manager. The gap between the ranks of service and educational personnel widened further. The low previous 'level 2' of the college head post had lasted for 26 years.

The education stream is restricted, and only reached the third level in 1986, whereas it had been on level one in the 1960 historical phase. This also means that all educational posts are at lower levels than service administrative posts. The potential risk is that 'ambitious' senior tutors will not remain in the education stream. As education is specialised, productivity is affected when constant brain-drain is experienced. Another potential risk is for those who do stay for job satisfaction. They must be prepared to accept lower ranks, lower levels of reimbursement and status, which affects their standard of living and final retirement gratuity and annuity.

5.2 The creation of the post of 'principal sister' for the clinical nurse was pioneered by the Cape Provincial Administration "as a direct result of a study by Saunders and her preliminary report to the Director of Hospital Services" in 1975. [Thompson: 1980: 21] Transvaal and OFS Provincial Administrations followed suit. As can be noted from the definition of nursing in Chapter 1, nursing is a clinical health science, and it is essential to have experienced senior clinical nurses. Although the career structure for the clinical nurse improved, she remains excluded from the upper echelons of the nursing hierarchy. Ambitious

clinical nurses are thus unlikely to remain in "principal sisters" posts, and shortages in that branch will be perpetuated. This holds considerable potential risk for the implementation of clinical nursing - its theoretical and research constructs - as well as frustration for those who wish to remain clinical nurses. The recent move in 1987 to create medical and surgical nursing pavilions at Groote Schuur Hospital with a senior nursing service manager in control of each such pavilion's clinical activities is probably a counter reaction to the vacuum existing in clinical nursing, and augurs well for the future.

Finally, Thompson [1980] and Bergman [1978] and other authors and commissions should be supported in the following recommendations:

Statutory institutions, professional organisations and employing bodies need to investigate the whole subject of career development for senior nursing personnel, as acceptable systems of education, and clinical nursing are unlikely to emerge satisfactorily if this is not done. A master plan that will facilitate achievement of career goals, and which will not exclude transfer into other streams on completion of supplementary preparation, is essential. [Bergman in Thompson: 1980: 22] The present Roux commission is addressing some of these problems. Career decisions are still largely based on "available opportunity rather than specific spheres of interest." [Thompson: 1980: 21] The identification of potentially suitable candidates is a management function but should not be only opportunity linked, but also on an ongoing development plan in the personnel and human resources management division of institutions where nurses are employed. Career counselling and personal career planning are both personal and institutional responsibilities.
Historical development of selection criteria of teaching staff

Historically these criteria may be divided into the phases as stated below, closely following the development of the career pathway for tutors.

Table 6.3.4: Development of selection criteria of teaching staff

<table>
<thead>
<tr>
<th>Phase</th>
<th>Approximate year dates</th>
<th>Stimulus</th>
<th>Degree of differentiation of selection criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Early</td>
<td>1920s-1947</td>
<td>Improved standards of Student needs: SA Nursing Council regulations Establishment of nursing departments at universities</td>
<td>Un-differentiation</td>
</tr>
<tr>
<td>Middle</td>
<td>1948-1975</td>
<td>Advent of colleges Advent of SANC Advent of UNISA Dept. of Nursing offering wider post-grad courses for nurses</td>
<td>Partly differentiated</td>
</tr>
<tr>
<td>II Late</td>
<td>1983</td>
<td>Affiliation of colleges to universities Formation of college senate and college council</td>
<td>Well-differentiated</td>
</tr>
</tbody>
</table>
The foregoing table reflects that certain stimuli or variables affected the selection criteria. Thus, over a period of time, these criteria moved from an earlier un-differentiated stage to a later well-differentiated stage. Selection criteria concerning women in general relate to the standard of education of women in the general educational standard prevalent in a culture, and are thus culturally dependent. "Although nursing was one of the two main professions open to women, and although the doors to university education for nurses were opened in 1937 when the first diploma courses leading to registration as a tutor were offered at the universities of Witwatersrand and Cape Town, the development of nursing education to graduate level and post-graduate level... was slow."

[Thompson in White: 1988: 189] The reasons for this must initially be sought in the general education system which, in turn, compounded the problem in the development of nursing education. The progression towards university education was hampered by a number of factors according to Brownlee [1982: 60]: poor general education, economic stringency, and competition for those suitably educated; shortage of teachers of mathematics, science and biology; failure on the part of educators to recognise the need to educate girls at least to matriculation level.

Thus in the earlier phases, although the regulations concerning student needs in training required adequately prepared tutors, tutors could not qualify fast enough. Matrons, doctors, and 'teaching' professional nurses, plus a few tutors, taught students, and criteria were not well differentiated.[Table 6.3.4]

With improved standards of education in the "middle phase", the advent of colleges and the establishment of the SANC and SANA criteria (as shown in Table 6.3.4) became more structured. In this phase, professional nurses with 2 years' experience in health units could study for the Diploma in Nursing education. In the early middle phase, only persons with considerably more than 2 years' experience were selected and the tutor population was, by and large, an "older" one. At this time, promotional opportunities were also limited, and the ward sister population was much older than at present. Tutor recruits usually came from amongst the ward sisters. During the past thirty years tutor and the ward sisters have
tended to be much younger than in the past. The majority of tutors continue to obtain their qualifications via the diploma courses.

The University of South Africa (UNISA) is a non-residential university teaching by tele-tuition or distance education to an international student body. The Department of Nursing at UNISA was established in 1975 and Professor Charlotte Searle was appointed head. "It had become imperative that large numbers of nurses be academically prepared to fill key positions in the health services." [Thompson in White: 1988: 194] Far too few nurses had obtained degrees, the health service was expanding, there was a shortage of senior personnel with post-registration degree qualifications, and the inability of many to enrol in residential full-time courses were some of the factors that indicated a need for this UNISA move. The general education levels had improved, women were now better able to meet educational needs, and were expanding their roles and thus also the selection criteria that would enable them to fulfil those roles. Nursing was not left behind.

As can be noted in the definitions of the various teaching ranks (in Annex 1) and the CFA norms, that possession of a degree at operational (tutor) level is a recommendation, but a necessity at the strategic apex level, with masters degrees preferable in most senior positions. Whereas in 1970 the majority of staff were qualified in education at diploma level, in 1987 they are often qualified at degree level and many are engaged on further degree study. In examining the average number of qualifications of staff applying for posts, it was found that in 1970 these were three in number, and five by 1987. However, it remains difficult for tutors to further their studies in view of their high workloads, their domestic responsibilities as wives and mothers, and the toll of the creative work demands of teaching. It will take many years to reach desired standards.

When the College entered into an association-agreement with UCT in 1985, further impetus was given to well-differentiated selection criteria for tutors, as the academic input into the system was upgraded. The College Council Selection Committee and College Senate formulated selection criteria in line with both the Cape Provincial the needs and needs within its own system. Of note is that prior to the 1985 university association-
agreement, teaching staff of colleges were selected at Provincial headquarters level. With the association-agreement and the formation of a College Council Selection Committee the College, University and provincial authorities engage in a joint effort which should assist the process of selection.
Figure 6.3.3: Summary of numbers - Teaching staff 1949-1987
Establishment increase and appropriate career structure

Every annual report in the eighties reports on the lack of appropriate career structure in Nursing Education. The long-term implications of Nursing Education, being at a disadvantage in relation to the career structure in Nursing Administration (and Clinical Nursing), is cause for concern.

The requirements for the various ranks in education would seem to be considerably more stringent than those of equivalent rank in the spheres of Nursing Administration and Clinical Nursing. The tutors need to be considered for a new dispensation re hours of work, leave, sabbaticals, a better career infra-structure, and salaries. Tutors are scarce and valuable persons. Year after year, additional needs are fulfilled by tutors and they continue to rise to the occasion.

Numbers of teaching staff

The strategic apex, middle line management and operational core of the college system are dependent upon the availability of an adequate number of tutors. Figure 6.3.1 reflects the number of teaching staff from 1949 to 1987, and Table 6.3.4 contains a summary of the number and the changes of nomenclature of teaching staff.

The operational core of the system are tutors and they form the major portion of the teaching staff. Historically, there has always been an inadequate staffing establishment. The availability of tutors is vital for the system, as it affects the teaching and learning methods that can be employed, and thus the nature of the product.

The reasons for tutor shortages

1. Source problems: from 1945-1985 the colleges had to rely on the services to send professional nurses on study leave to obtain the Diploma in Nursing Education. As this ‘trickle’ of tutors was
dependent on the small number of posts available in hospitals for
study leave, colleges were naive to believe that sufficient numbers
would be so generated. College tutor establishments barely met the
college system needs, and could not cater for study leave. It was
evident in 1975 that student numbers would reach an all time high in
1978 and 1979. At the same time there was also a critical shortage
of tutors and none had graduated from UCT since 1972. This led to
the active recruitment of professional nurses by the College in co-
operation with the hospital matron, and urgent requests to UCT to re-
institute(6) the nursing education course.(7)

UCT is regarded as the main source of English speaking tutors for the
College. As the last group had graduated in 1979, the shortage of
tutors again became acute.

The 4-year or comprehensive course of 1985 stimulated the need for
more teachers and clinical educators (as colleges once more became
responsible for practica education). Nearly R1 000 000 extra was
required for teaching and administrative posts. (The percentage
increase in workloads, and the reasons for that are reflected in
Chapter 7.) The treasury agreed to provide three sums of money
totalling R1 million over a period of three years, the last of which
is still expected, but unlikely to be granted in view of the present
financial recession. Once the establishment of college tutors was
increased, it was possible to find solutions, as noted in the
following extract from the 1986 annual report of the College:

"Shortage of Tutors. Ex South African Nursing Council data bank on
14.02.87: There are 1 200 white tutors in the Republic of South
Africa, of which 87 are in the Western Cape and 35 are English

(6) UCT discontinued the Diploma in Nursing Education course in 1980.

(7) Thus in 1978 and 1979 six tutors qualified at UCT, the last for a
decade. Student numbers increased from 1543 in late 1975 to 2296 in
1978 and the all time high of 2406 was reached in 1979.
speaking. The only possible solution is to select promising Professional Nurses and to sponsor them in the attainment of a suitable teaching qualification.

Limited time and woman-power as well as administrative infrastructure problems affect the production of publications and research that the College must do."

Though the UNISA Department of Nursing instituted in 1975 has assisted in the provision of tutors, too few have been provided.

2. Another reason for the shortage of tutors is inadequate infrastructure of the College posts as stated. Personnel records reflect that in the period 1975-1985 the number of vacant posts averaged 26%, an added problem.

3. The C.F.A. norms. In the section on Post Structure, it is indicated that the C.F.A. nomenclature, Senior Professional Nurse, (SPN), applies to both the tutor in the educational stream, and the senior sister in the clinical or administrative stream. The diploma in nursing education (DNE) which the tutor must study, is a difficult qualification to obtain in terms of the number of courses and degree of difficulty. As the workload and after-hour work of the tutor is considerable, there is little incentive to become a tutor. Add to this the reason advanced in (2) above, and there can also be little incentive to stay. Admission criteria for entry to the DNE, and the study programme itself, is of a high standard, so that the number of eligible candidates is not significant. In the past, progress at universities was hampered owing to many women lacking the educational standard to pursue studies, and the earlier deficits are still felt. Furthermore, the tutors are in demand in the private sector and in the other services.

4. The expanded role of the tutor led to an ever-increasing need in the number of tutors. Dynamic development of university nursing education, post-registration courses, sub-professional nursing courses at hospitals, and the burgeoning needs of diverse personnel
training courses at health units(8) and in professional organizations, as well as in allied health and military service - all demand tutors, and the demand exceeds the supply. National planning norms have not been established, and are essential for planning and meeting needs.

5. Hospital nursing management needs: According to the SANC regulations on basic and post-registration courses, the heads of hospitals must have a nursing education qualification registered against their names before the health unit can be approved as an educational centre by the SANC.

6. National planning needs would be difficult to establish, as the SANC register of tutors is a live one. It reflects all the names of those who have an educational qualification, whether they are practising as tutors in a college or not.

7. Tutor numbers are related to changes in educational philosophy and didactics: Prior to 1985, the shortage of tutors could be compensated for in five ways: 1) the hospitals being responsible for practica and the colleges being responsible for theory; 2) by instituting a tri-annual intake, and a block repetition of all classes three times a year, creating a conveyor system of pedagogic education; 3) by the SANC managing the examination system; 4) by the provision of standardised notes; 5) by using teacher-centred education. The divide that developed between education and service was a direct result of the force of these circumstances that caused academic isolation of tutors in colleges. Subsequent development is outlined in a following section, on the changes in the role of the tutor, and forms of the 6th factor, namely, the effect of the comprehensive course on tutor numbers.

(8) Health units are any venue concerned with health or ill-health, eg hospitals, clinics, nursing homes.
The 1986 and 1987 changes when all staff components were either increased or upgraded

As discussed in the previous section, for many years the staff components remained small and extraordinary measures were utilised to combat this. The 1986/87 increases, as a result of the SAPSE norms and comprehensive course needs. Examples of increased course needs are the creation of a Practical Department or laboratory; the need to accompany students in health units, and to provide the opportunity to engage in student-centred didactics because this required more tutors. Furthermore, tutors could now move into fields previously not possible, i.e. the Midwifery, Psychiatry and Community Health fields. The staff numbers and changes in nomenclature is reflected in Table 6.3.5.
<table>
<thead>
<tr>
<th>Year</th>
<th>Sister Education</th>
<th>Sister Teaching</th>
<th>Teaching Sister</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>1987</td>
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</tbody>
</table>

Summary of numbers and changes of nomenclature: Teaching staff 1949-1987
Ratios: As a result of the small staff complement and the large student turnover together with a 26% average of staff turnover per annum, very high tutor-student ratios were in operation. In comparing the annual attendance of students with the tutor establishment in consecutive 10-year periods, the ratios are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Students</th>
<th>Tutors and Teaching Sisters</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949</td>
<td>526</td>
<td>6</td>
<td>1:87</td>
</tr>
<tr>
<td>1959</td>
<td>1121</td>
<td>19</td>
<td>1:59</td>
</tr>
<tr>
<td>1969</td>
<td>2033</td>
<td>15</td>
<td>1:135</td>
</tr>
<tr>
<td>1979</td>
<td>2406</td>
<td>19</td>
<td>1:126</td>
</tr>
<tr>
<td>Totals</td>
<td>6086</td>
<td>59</td>
<td>1:407</td>
</tr>
<tr>
<td>Average</td>
<td>1521</td>
<td>14.5</td>
<td>1:101</td>
</tr>
</tbody>
</table>

Source: CNC Annual Reports 1949-1979

As half students were in college at any one time, a ratio of 1:50 is a closer approximation.

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>10.9</td>
<td>11.0</td>
<td>11.2</td>
<td>11.5</td>
<td>11.6</td>
</tr>
<tr>
<td>Science</td>
<td>8.8</td>
<td>9.0</td>
<td>9.2</td>
<td>9.8</td>
<td>9.8</td>
</tr>
<tr>
<td>Clinical</td>
<td>5.4</td>
<td>5.6</td>
<td>5.8</td>
<td>6.4</td>
<td>6.4</td>
</tr>
<tr>
<td>Total</td>
<td>9.3</td>
<td>9.4</td>
<td>9.7</td>
<td>10.1</td>
<td>10.2</td>
</tr>
</tbody>
</table>


The ratio represents the full-time equivalent student load to the number of full-time staff.

The student-staff ratios for polytechnics are shown in Table 6.3.7.
Table 6.3.7
Student-staff Ratios in Polytechnics in England

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gr.1 (lab-based)</td>
<td>8.0</td>
<td>8.5</td>
<td>9.1</td>
<td>9.5</td>
<td>10.1</td>
</tr>
<tr>
<td>Gr.2 (class-based)</td>
<td>9.3</td>
<td>9.7</td>
<td>10.7</td>
<td>11.4</td>
<td>12.4</td>
</tr>
<tr>
<td>Art and design</td>
<td>6.2</td>
<td>6.9</td>
<td>7.6</td>
<td>8.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Total</td>
<td>8.4</td>
<td>8.9</td>
<td>9.7</td>
<td>10.3</td>
<td>11.1</td>
</tr>
</tbody>
</table>


Present and strategic ratios were calculated to give 1 : 30 for tutors/students and 1 : 10 for clinical practica accompaniment. However a 1 : 10 ratio means that in an 8 hour day each student is only exposed to an accompanier for 48 minutes per day. A 1 : 6 ratio, though more beneficial, only gives each student 1 hour exposure. Direct teaching and accompaniment are of course not the only function of teachers. Lectures/tutorials have to be prepared, resources obtained, demonstrations organised and given, measuring instruments designed, examination papers and memoranda set and marked, interviews held, recording done, committee work done, and so on.

The strategic apex (nurse managerial) ratios were even higher in the past as one Senior Principal and one Principal managed all student, teaching, clerical and household components. There is a general trend in practice that the span of control of the nursing strategic apex is virtually limitless. This leads to many problems, not least of which is the impossibility of giving sustained attention to any one particular facet of work. As there are no norms for this kind of span of control, research is needed to assist in creating more advantageous staff ratios in the
future. Nurse managers are overloaded with administrative functions to the extent that they cannot participate effectively in teaching, research, publication and clinical work. The 1:2 ratio is a practical rule of thumb measure that is often demonstrated in organisations, for example:

<table>
<thead>
<tr>
<th>1 Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Senior Principal</td>
</tr>
<tr>
<td>8 Principals</td>
</tr>
<tr>
<td>16 Senior Tutors</td>
</tr>
<tr>
<td>32 Tutors</td>
</tr>
<tr>
<td>61 Total</td>
</tr>
</tbody>
</table>

**THE RANK HEAD OF THE COLLEGE**

**Historical Orientation : Evolution of the principal in colleges**

*Historically:* In 1949 when colleges were formed, the Principal was the head of the college and the same rank as the matron-in-charge of the hospital. The college was a school with student posts on the college establishment, and the college allocated students to hospitals who were affiliated to it. As a result of this the Senior Principal post was created in 1958 and upgraded from Principal to Senior Principal for the large colleges. This was discontinued in 1960 when student posts reverted to the hospitals.

In 1963 the Senior Principal nomenclature was reinstated, and the Principal became Senior Principal. The next rank to a Senior Principal/principal was the Sister Tutor grade 1 (senior tutor).

(9) Unlike other tertiary education students, student nurses are in posts with all the bureaucratic administration that is generated for the hospitals and the college.
In 1967 the term Principal was reintroduced and the Sister Tutor grade 1 discontinued (Sister Tutor grade 1, in other words, became Principals). The salary for Principals was higher than that of Sister Tutor, Gr. I.

In 1982, with the first CFA PAS(10) nursing dispensation, the Principal and Senior Tutor were both designated Chief Professional Nurses, receiving the same salaries. In 1986, the Senior Principal (Nursing Service Manager) was upgraded to Senior Nursing Service Manager, and Principals to Nursing Service Manager.

Although the Head of College has, since 1949, managed a student number in excess of the number any one 'matron' does (as up to 8 hospitals can be affiliated to the college) this has never been a consideration in engendering numbers in the pyramid of criteria that underlie post and rank. Since 1985, with the college once more a school responsible for all student activities, and now offering 4 disciplines instead of one, in association with the university with student posts transferred to the college and the transfer of post-registration courses imminent, strong representation can now be made for a new dispensation in the infrastructure of college posts.

THE PRINCIPALS POST

As a result of the changes in the past and the limited levels of educational posts, the principal's post by 1986 has an unsure future. This post occupied level 2 (second-in-charge) from 1967 to 1986 and from then on it became number 3 in the organization's hierarchy. It is thus the most disadvantaged post. The change for this category should have been effected in 1967 when Sister-Tutor grade 1 was discontinued, and the incumbents became Principals of the same rank as Senior Tutors. As the structure of educational posts and the incumbents' responsibilities and functions are not well known to persons outside the educational field, the likelihood of the discontinuation of this rank is probable.

(10) Personnel Adjustment Standards.

The 1949 role of the tutor was to fulfil the new teaching role in a new college environment, to adjust to the regulations and criteria of the newly formed S.A.N.C.; and to form a new liaison role with hospitals and in so doing to assist with the students' practical education in hospitals. The teaching role was more concerned with curative health care, and the responsibility of both the theoretical and the practical components of the course was vested in the college. Methodology was mainly formal lecturing and much dictation was done as a result of the shortage of textbooks. The students were in posts on the college establishment.

In 1960 the student establishment was returned to the hospitals which now became responsible for the clinical component while the college had responsibility for the theoretical component of the curriculum. A dichotomy resulted in the tutors' role which was to last until 1985. The tutor became involved in academic issues and her role developed into the "theoretical specialist". The functional isolation had commenced.

By 1976, with the new Health Act No. 63 of 1977 and the shift of emphasis in health care, the "drive" for preventive and promotive health was on and teaching became much more diversified. At the same time the curriculum changed, new courses were added, the scope and depth of the courses were increased and with this the role of the tutor changed. The SANA held a convention in Bloemfontein at that time to assist colleges and tutors to adjust to these changes. Student numbers were growing rapidly. The tutor establishment was nonetheless static, and the tutor became even more firmly cloistered in the academic world, as there was no time to do much more than manage the increasing teaching load. As Midwifery and/or Psychiatry had now been added, teaching became even more diversified. However, although integrated within the General Nursing Science curriculum, Midwifery and Psychiatry were seen as more or less separate units. As mentioned in the previous section, the role of tutor had gradually expanded and by now they were being utilised in a number of fields by various authorities. Educational opportunities had improved, selection criteria also became more stringent and tutors also qualified in a variety of fields, eg community health and degree studies.
By 1985, with the introduction of the comprehensive course, the tutor’s role developed to encompass the General, Psychiatric, Midwifery and Community Nursing Science. An entirely new approach was required in that all four disciplines are fully integrated throughout each year of study. As colleges were now required to enter into an association with a university department or sub-department of nursing, the functions the university was responsible for were implemented by the tutors. Early in 1980 the College had commenced preparation and the first tutors obtained the Psychiatric Nursing qualification in 1985. It was planned that one or two tutors would attend this course annually until as many as possible were qualified therein. Interpersonal skills courses were also followed, in order to expand skills to create an appropriate therapeutic milieu in which teaching and care could take place. "The Psychiatric hospitals and Community Health units nationally have had very limited contact with tutors and students. Liaising with, orientating and involving the nursing personnel of these services required, and continues to require, a significant involvement in time" and thus role investment from tutors. [Memorandum of U.C.T., C.N.C. and N.M.N.C. to respective college councils: 10.11.87: p.4]

In addition to formal teaching and the academic and administrative work this entails, the tutors’ role now includes accompaniment of students to the clinical areas, to give guidance and support, and to create appropriate learning opportunities in order to promote the personal and professional growth of the student, the consolidation of knowledge, and the development of clinical skills. Clinical teaching is an extension of the formal teaching and learning in the classroom - a carefully planned, goal directed activity. Searle, [1986](12) [unpublished] said: "Formal clinical teaching and learning is not concerned with classical conditioning in the Pavlovian sense. It is the development of competent, thinking, creative, committed practitioners, fully aware of their

(11) For example, standards like curriculum building, examination setting etc.

(12) Mentioned in Memorandum for College Councils, p.2.
accountability to their patients, society, and their profession." Clinical education is now the responsibility of the college and ensuring that students are competent in a large number of affective, cognitive and psychomotor skills added significant dimensions to the role of the tutor and the functions of the college. Further significant changes like the new examination system as a result of the comprehensive course, also carved out new functions.

In the next section, the student human resources are discussed.
Nursing students are the primary resources input in a college, the reason for the existence of the college and the body of people that generate supersystems input. They are the focal point of all collegiate activities, especially in the throughput, and become the product, the professional nurse, who gives health care.

In this section data are arranged chronologically according to the student's life experience in the college. Once selected the candidate is given a post on the hospital/college establishment. Establishments have changed and this is reflected in Table 6.4.7. Having a post turns the candidate into a student. The evolution of the nomenclature, student, and some implications thereof are examined.

The annual attendance and number of blocks and modules is given in a table accompanied by relevant graphs. Not all students complete the course, thus annual applications, transfers to and from the college, completions and resignations will be reflected during the period 1949-1987. The section ends with a discussion of the often conflicting roles of students.

Even though statistics are available two items beyond the scope of this work are the health and welfare, and reasons for resignation of students.

What happens to students in the college and how they progress is discussed in the throughput, comparing selection criteria with final results of students in 1954, 1975 and 1987. The rationale for engaging in this exercise is to find out how students progressed during critical periods in the history of the educational system of the college i.e. in the early years: in the 1975 period of radical change, as a result of introducing the Integrated course; and in the 'renaissance period' subsequent to 1985 as a result of introducing the Comprehensive course.

The historical development of selection criteria is highlighted, as these were not as structured in the early years as they have been since 1985. Questions addressed are: 'were results in earlier years poorer as a result of standard eight being an admission criterion?' What was the educational
standard of students? How did the College results compare with the S.A. Nursing Council national results?

The unpublished research that was done in 1979 and in 1983 on selection criteria relate to the above questions (students' educational data vs 'vocational' results) and to establishing firmer selection criteria.(13) It had been said that having a college would increase numbers, and the quality of candidates would improve in respect of educational input and output. Did this happen?

Further questions that are researched are: What is the educational profile of the first group of students who engaged in the comprehensive course? Researching this enabled the college to identify improved selection criteria.

What is the national situations as regards differential selection criteria, and where does nursing education stand in relation to the other three (of the four) tertiary educational systems?

The early period

The reason for isolating 1954 is that an accurate record of data required for students who commenced in 1949 and 1950 was not available. The 1951 data was complete in all respects. It was also valid to choose a year subsequent to the opening when systems had "settled".

The 1954 relationships

In 1949, 705 applications were received, resulting in a waiting list that stretched into 1953. The duration of the course was three and a half years, the educational standard required for entry was Junior Certificate (JC) (10 years of schooling). Although a senior certificate entry qualification was desirable, it would have excluded too many candidates, owing to the general standard of education of women at that time as discussed in the chapter on Tutor Resources. Other than the J.C., good

(13) Available from researcher.
health and two confidential reports were required as selection criteria. An interview was arranged if candidates lived locally. The course at this time was called 'The Certificate for Medical and Surgical Nurses'.

The data that will be used for evaluating critical periods will be educational statistics and final results of the Carinus School of Nursing as compared to the overall results for the Republic, as published by the examining body, the S.A. Nursing Council. Students who commenced in 1951 wrote finals in 1954.

Table 6.4.1
Comparative educational qualifications of students of the Carinus School of Nursing and students of the South African Nursing Council for 1952 (1951 and 1953 serve as comparisons. Figures are given in percentages

<table>
<thead>
<tr>
<th>Educational Qualification</th>
<th>Carinus Sch. of Nursing 1951</th>
<th>Carinus Sch. of Nursing 1952</th>
<th>S.A. Nursing Council Republic 1952</th>
<th>S.A. Nursing Council Republic 1953</th>
</tr>
</thead>
<tbody>
<tr>
<td>University exemption</td>
<td>2.5</td>
<td>2.2</td>
<td>0.16</td>
<td>0.10</td>
</tr>
<tr>
<td>Matric and Senior Certificates</td>
<td>59.0</td>
<td>54.7</td>
<td>32.43</td>
<td>24.92</td>
</tr>
<tr>
<td>Standards 8 and 9</td>
<td>38.5</td>
<td>42.9</td>
<td>57.42</td>
<td>74.98</td>
</tr>
<tr>
<td></td>
<td>100.00</td>
<td>100.00</td>
<td>90.01</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Sources: (1) [Searle: 1964: 297]
(2) CNC Annual Reports 1951, 1952, 1953
Table 6.4.2

The 1954 final results of students (who commenced in 1951) at Carinus School of Nursing

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honours in theory</td>
<td>3</td>
<td>1.5%</td>
</tr>
<tr>
<td>Honours in practica</td>
<td>10</td>
<td>5.1%</td>
</tr>
<tr>
<td>Passes</td>
<td>143</td>
<td>72.9%</td>
</tr>
<tr>
<td>Failures in theory</td>
<td>5</td>
<td>2.5%</td>
</tr>
<tr>
<td>Failures in practica</td>
<td>27</td>
<td>13.6%</td>
</tr>
<tr>
<td>Failures in whole exam</td>
<td>8</td>
<td>4.0%</td>
</tr>
<tr>
<td>Absent</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td></td>
<td>196</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: CNC Annual report of 1954 and 1954 examination result file

The examination covered Medical and Surgical and Special Disease nursing.

The examination covered 3 x 3 hour papers on Medical, Surgical Nursing and Theory and Practice of Nursing. An S.A.N.C. examiner undertook the practical and oral examination.
Table 6.4.3.
Comparative data: Carinus School of Nursing and South African Nursing Council

1. Annual average passes including distinctions in percentages

<table>
<thead>
<tr>
<th>Period</th>
<th>Carinus School of Nursing results</th>
<th>SANC results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949-60</td>
<td>78.2</td>
<td>65.2 (range 86-56)</td>
</tr>
<tr>
<td>1954</td>
<td>79.4</td>
<td>56.0</td>
</tr>
<tr>
<td>1967-77</td>
<td>91.4 (range 74.7-98.2%)</td>
<td></td>
</tr>
</tbody>
</table>

2. Total number of students attending CNC to indicate the size of samples under discussion:

<table>
<thead>
<tr>
<th>Year</th>
<th>Students &amp; Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954</td>
<td>613</td>
</tr>
<tr>
<td>1975</td>
<td>914 students &amp; 284 pupils</td>
</tr>
</tbody>
</table>

Source: S.A. Nursing Council data on Republic [Searle: 1965: 300] and calculated from Carinus School and College of Nursing annual reports of the periods.

The 1975 course

In 1975 the course once more was of three and a half years duration and, since 1969, the educational standard required for entry was the Senior Certificate. This course was the most challenging course which had to date been promulgated. Students could qualify with the Diploma in General and/or Midwifery and/or Psychiatric nursing. This course became known as the Integrated course. The 1975 course content increased in both scope and depth as compared with previous courses.
### Table 6.4.4
Comparative table of final results of C.N.C and S.A.N.C. in 1977. Results are given in percentages

The 1975 group of CNC students wrote SANC finals in 1977.

<table>
<thead>
<tr>
<th>Examination (Course)</th>
<th>Honours CNC</th>
<th>SANG Rep</th>
<th>Passes CNC</th>
<th>SANG Rep</th>
<th>Fail CNC</th>
<th>SANG Rep</th>
<th>Passed incl. hons. CNC</th>
<th>SANG Rep</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNSA III</td>
<td>9.54</td>
<td>9.84</td>
<td>90.48</td>
<td>87.98</td>
<td>-</td>
<td>2.18</td>
<td>100</td>
<td>97.82</td>
</tr>
<tr>
<td>Social Science</td>
<td>9.53</td>
<td>9.97</td>
<td>85.71</td>
<td>72.65</td>
<td>4.76</td>
<td>17.38</td>
<td>95.55</td>
<td>82.62</td>
</tr>
<tr>
<td>Preventive &amp; Promotive health</td>
<td>14.29</td>
<td>8.24</td>
<td>85.71</td>
<td>91.19</td>
<td>-</td>
<td>0.57</td>
<td>100</td>
<td>99.43</td>
</tr>
</tbody>
</table>

**Average**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11.25</td>
<td>87.66</td>
<td>4.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rep = SANC results for Republic
GNSA = General Nursing Science and Art

Source: Annual report of CNC, 1977: 14b, in percentage.

**Conclusions - 1954**

Good progress was made in the early years and the College was attracting candidates with good educational qualifications. More than half of the candidates had matric or senior certificates as compared with the national situation where only about one third were so qualified. The number of students had increased. The results of the 1954 final examination were 23.5% higher than the national average and compared with the national average during the period 1949-1960, 33.94% higher. The 1954 result, when compared with the College average for the years 1949-1960, was 1.2% higher. But such a small difference is not statistically significant. Compared with the College results during the period 1967-1977, the 1954 results are 11.96% lower. In 1969 the senior certificate as entry qualification became compulsory so that the 1967-1977 difference could be attributed to the higher entry requirement.
An inspection of preliminary examination results (written after 15-18 months of education) based on part 1, a written paper on Anatomy, Physiology and Public Health Hygiene, and part 2, Practica and First Aid, (a school examination), reflects that many candidates had failed and this can be attributed to being Standard 8 candidates. Having experienced the level of the skills of these students as a class teacher, some were outstanding, other so weak that special additional classes and tuition had to be arranged for them. Some outstanding nurses, who started out on their professional careers with only a Standard 8 qualification, subsequently developed their career pathways most adequately, but they were the exception, not the rule.

Conclusions - 1975

Progress was still evident and from Table 6.4.4 it is clear that Carinus students were holding their own nationally and had exceeded their own college average success rate for the period 1967-1977. The number of students had also increased to an all time high.

The 1985 comprehensive or 4-year course

In 1985, the first comprehensive course students entered the collegiate system. The response of the system to this critical input is indicated by presenting a profile of the students concerned. The profile is based on an analysis of the educational achievement of the group that completed the 4th year, according to matriculation results and according to academic college results; tentative predictions are made. The profile is followed by the final results of all the students who entered this course.

1985: Profile of students registered for the Diploma in Nursing (General, Psychiatric and Community) and Midwifery Nursing Science

The profile of the 1985 intake who completed in December 1988: The Survivors' Profile: The Educational Profile of students who completed the course is reflected in percentages.
Matriculation Exemption 37: aggregate: B - 13; C - 33; D - 50. Only 21% of matriculation subjects were taken at standard grade (47/215).

Matriculation Symbols: English: B - 9; C - 28; D - 37; E - 7. Unknown and other 19
Afrikaans: B - 2; C - 23; D - 28; E - 16; F - 12; Unknown and other 19

Choice of subjects in rank order (percentages:)
Biology - 91
Mathematics - 65
Geography - 51
History - 44
Home economics - 32
Physical science - 28
Typing - 26
Accountancy - 16
German - 14
Less than 16 - Latin, French, Xhosa, Business economics, Art, Needlework, Divinity, English Literature.

Nursing Examinations: Results of 8 of the 11 courses passed in respect of obtaining 3 and more firsts (75%), indicate the educational profile of comprehensive course of students obtaining 3 or more firsts. A table was drawn of the results of these eight students. The conclusions drawn are that one student obtained six distinctions, one student obtained five distinctions, three students obtained four distinctions, and three students obtained three distinctions. The Senior Certificate aggregates were B, C, or D. They also obtained 11 (out of 24) subjects on the standard grade. The subjects they studied: all took Mathematics and Biology, 3 took Accountancy, 2 Physical Science, 2 Geography. There are students with similar or better records who did not achieve as well. (Studying subjects on the higher grade results in a greater grand total.)

Results of 8 students who failed 2 or more examination papers, but passed the supplementary examination: Six students rewrote 2 courses and two students rewrote 3 courses. The Senior Certificate aggregates were C, D,
or E. They obtained C, D, or E for English. The students took 22 subjects on the standard grade.

Trends indicate that students with more than 2 Es and more than 2 subjects on the standard grade are at risk, and care should be taken in selecting them if they do not obtain a D aggregate. Students with aggregate Es and 4/5 subjects on the standard grade are most at risk.

Final profile

Students who obtained E, D, or C Senior Certificate aggregates, who obtained C, D, or E for English, who took 22 (out of 48) subjects on standard grade, who all studied Biology and other diverse subjects, who obtained + 2 Es in their subjects at school and who studied between 2-5 subjects on the standard grade, manage the course.

Table 6.4.5

CNC summary of status of student numbers of 1985 intake: Diploma in Nursing: (General, Psychiatric, Community) and Midwifery Nursing Science:

Of an intake of 82, 41 remain on course (50%), of which 3 repeated Community Nursing Science and passed. 1 failed final. Thus 50% completed course

13% still in profession: 5 pupils + 1 transfer to another institution and 4 repeats
37% left nursing (31 students)

<table>
<thead>
<tr>
<th>Transfers as students</th>
<th>1985</th>
<th>1986</th>
<th>1987</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers to pupil nurse course</td>
<td>4</td>
<td>1</td>
<td>nil</td>
<td></td>
</tr>
<tr>
<td>Terminations</td>
<td>26</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Course too difficult</td>
<td>9</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Demands of practica too high</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wrong career choice</td>
<td>6</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Health reasons</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>26</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Therefore 82 - (26+4+4+1+1+1) = 45 - 4 repeat 41
Selection criteria

When, in 1944, the S.A. Nursing Council took over control of the profession, representation was made to the appropriate authorities that nurse training should include the four disciplines: general, psychiatric, public health nursing and midwifery, and that colleges should be affiliated with universities. Although approved, it could not be implemented for the reasons previously stated - inter alia: economic, poor education, failure to recognise the need to educate girls to at least matriculation level. Thus the statutory requirement of the Senior Certificate as an entry requirement to nursing courses was delayed until 1969. The Senior Certificate qualification was a necessary preparation for entry to tertiary education, which became a reality when colleges became associated with universities in 1985 and the four disciplines were included in nurse training. Prior to 1985, hospitals were responsible for student selection with the exception of the period 1946-1960, in which the college had this responsibility.

Introduction: Why use selection criteria?

Through the ages, selection of novices in many professions (and occupations) continues to intrigue and often baffle the selectors. Every profession holds certain ideals ‘sacred’ and seek to perpetuate these and to socialize the neophytes therein. The fact that the neophyte is the future professional; that her education is expensive in terms of finance, labour and material; that she also holds potential legal risks in subsequent professional practice, makes the application of appropriate selection criteria essential, especially in nursing where life and death issues are everyday occurrences.

Research methodology on how to proceed to find significant immediate, intermediate, and long-term criteria, is well established in theory but not in practice. Owing to the widely divergent variables within and among fully fledged professionals, reliability and validity cannot be established with certainty.
If selection criteria are set too high or too low, exclusion results in that too few meet high criteria, and low criteria candidates can exclude themselves through later failure. Whereas psychomotor and cognitive skill criteria are amenable to measurement, affective skills are not. Nursing has caring as a central theme and this often expresses what is most sacred to the human. It is both an advantage and a disadvantage that these skills cannot be measured. If they could be measured, they could be used as selection criteria. But the very act of describing and measuring involves subjective description, and expectations that could distort the nature of the skill. Thus most selection criteria are set in measurable cognitive and psychomotor terms accompanied by a set of more or less descriptive affective attributes, as required in the standard confidential forms that prospective applicants must provide through referees.

A conflict exists in the selection process in the nursing system. Whereas the most appropriate candidates are desirable as future professional nurses, the need for professional nurses in the health care system is so acute that the exigency of the latter can override the former concern.

In the following section the research done at Carinus Nursing College concerning selection criteria is reflected.

All categories of nurses form 72.5% of the total health care service manpower [Kotze: 1987: 4]. To give effective health care, the supply and demand of nurses rests upon both the quality and the quantity of nursing manpower according to Searle (1965). "The demand for more and better qualified nurses is continuously increasing", says Sanders (1976).
Discussion concerning research on selection criteria:(14) There is now a shortage of professional nurses in the RSA and a projected dearth by the year 2000. A major reason is the decreased number of students owing to the appointment of sub-professional groups, (pupils) instead of students, and the losses of students for non-academic and academic reasons, particularly in the first year. Between 1949-1985 at Carinus Nursing College, about one third who commenced their studies did not complete them. In certain years at this college, and nationally 50-60%, drop-out rate has occurred. In spite of numerous student support and advisory services, as well as in-depth improvement of conditions, drop-out rates remain high.

The de Villiers Committee of Enquiry [1984: 19] stated that "the greatest immediate need in South Africa, so far as health manpower is concerned, is for nurses, and the State and the professions should take immediate steps to solve the problem of recruitment, training facilities and teaching staff." Appropriate selection would assist in these problems.

The pass mark for nursing courses is 50%. The average percentage of students with matriculation exemption at the College is about 50%, the remainder qualifying at senior certificate level. For a number of years some 10% of enrolled nurses qualified for entry as 'senior certificate equivalents'. The transition from passing at school with less than 50% to passing at college at 50% has to be made. Increasingly higher standards of education are demanded by health practice. There is a change in the approach to maintaining health, to treating the sick, to meeting the extensive advances and development in health care treatment; to meet the increased needs of the population, the more rapid turnover in health units and improvements in communication systems. The increased demands

(14) In 1979, 1983 and 1987 an extensive investigation into differential selection criteria for a Nursing Educational Institution at the Carinus Nursing College was done and results were compared with results of national nursing and other tertiary educational centres, as available in the 1985 WS-31 HRSC investigation by Stoker and others. The results are available from the researcher.
and expectations for health care have created a continuously increasing demand for more and better qualified nurses.

In the Matriculation examination, the minimum aggregate for matriculation exemption is 950 marks (+45% average). Passing nursing courses at 50% can be problematical for those with and without exemption. Increasing the points for matric exemption to 1050 (+50% average) could assist in solving the problem. It could also be argued that lowering standards by decreasing nursing course pass marks could also solve the problem. As the I.Q. of 50% of the population stands at 100, the nursing profession will, according to the normal distribution curve, not receive more than certain percentages from each of the I.Q. groups, thus it cannot rely on such a speculation. (15) In view of the reasons furthered for better qualified nurses, the 50% course pass mark can't be lowered. Moreover, such students would not be successful at post-registration course level and a self-defeating process would be perpetuated. However, the main reason for a 50% pass-mark is health-legal hazards. At 50%, only half of the facts are known; at less than 50%, even less. The relationship between a lack of cognitive skill and health and safety hazards is positive and well established. (16)

The 1979 and 1983 research assisted in drawing up the selection criteria for the Comprehensive course. [Annex 14] The profile of the first students subjected to these criteria is to be found in a preceding section, on comparing selection criteria with final results during critical periods.

The evolution of the nomenclature, Student, and the implications thereof:

In this section the nomenclature of the nursing student is discussed. Three periods are differentiated in which certain factors that contributed to the evolution of nomenclature are discussed. The criteria to highlight the implications of the evolution are: concern for the conditions of

(15) It is recognised that the highly motivated student can achieve results well above what might be expected.

(16) However, of consequence is the process by which criteria for determining the pass/fail point are derived.
nurses; conditions of service prevalent within a period; degree of structure (highly structured, structured and unstructured) within educational and licensing examinations; degree of status; practice orientation, and the worth and value of the neophytes of the profession.

The word "nurse" through the ages has meant many different things to different people, and different things to the same people. A study of all the ramifications of the context of the meaning of "nurse" could support an individual research thesis.

**Early period: "Probationer nurse"**

"Probationer nurse" was in common use at the turn of the century, inherited from the British system, and it persisted into the early nineteen forty period. "Probation" means, according to the Oxford dictionary, "testing of a person's conduct or character especially before admission to regular employment or full membership of a society". [The word is derived from L. probo — prove.] In later years the term was applied to a 3-month probationary period that a student underwent prior to appointment as a student. It is probable that in S.A.N.C. regulations on the "three months grace in registering a student" is related to the remnants of a "probationary" period.

"Probationer nurse" carries many negative connotations. [Botha: 1950: 18-21]: "there was little concern for the conditions of hospital nurses in South Africa before the opening of the present century." Salaries were low, hours long, they worked in an atmosphere of disease. Duty hours were 7 a.m. - 8.30 p.m. and before 1913 the position was: 2 hours off per day, half a day a month and three months night duty with no night off. Before the end of the 19th century, instruction for hospital nurses had commenced, no educational test being required. In 1914, a year after the Cape Hospital Board (C.H.B.) came into existence, the S.A. Trained Nurses Association (S.A.T.N.A.) came into being. In the chapter on statutory bodies the objectives of S.A.T.N.A. were noted, inter alia to see the nursing profession attract candidates that would "improve efficiency in nursing." S.A.T.N.A. and C.H.B., and subsequently S.A. Nursing Association in 1944, formulated policies to improve conditions. Thus
implications are: a lack of concern, appalling working conditions and conditions of service, a lack of licensing examinations and structure therein, disregard for absence of structured selection criteria, low status, curative oriented practice, and a certain disregard of rights of candidates. "It was not until 1928, when the S.A. Medical Council was created, that uniformity came about and education improved. Before then, each Province had its own medical council which governed training and registration of nurses, there was no uniformity." Miss C.M. Loopuyt, in her curriculum vitae, refers to herself as a probationer in 1930. Miss E.M. Pike, the first matron of Groote Schuur Hospital, in a 15 page document on her curriculum vitae and description of early days at Groote Schuur Hospital (1938), refers to "student nurses" but also to "students" and "nurses". Botha refers to probationers up to 1931. The writer was known as a probationer in 1945.

Middle period : 1945 : "Student nurses"

It seems likely that the term student nurse was in relatively common use by 1945, as demonstrated in the van Binnendyk Report, S.A. Nursing Council communications, Cape Provincial Administration (C.P.A.) documents of the time, and College annual reports in 1949. Because the educational regulations and examination became more structured as from 1928, the word "student" could now apply. "Student" being "a person engaged in (nursing) especially one under instruction at a university or institution giving professional or technical training" according to the Oxford dictionary. The block system instituted in 1945, the collegiate system instituted in 1949, and the institution of the professional body, provided a formal educational use of the word "student nurse". Thus national concern was now evident, conditions improved, the system of education and licensing improved, more structured selection criteria developed, status improved, practice was still, by and large, curative; student nurses came to be regarded as precious commodities. Student nurses were now clearly seen as future professional nurses who would transmit the professional culture. Education was closer to secondary education than tertiary education systems. University courses for nurses developed and added to the use of "student" nomenclature.
Late period: 1976: "Students"

By now, highly structured nursing educational systems had developed in scope, depth of curricula, examinations, and practice. Nurses were familiar with the content and structure of general university courses at basic degree level, and compared them with their own professional courses—favourably. There was no reason for nursing students not being called "students" albeit they were not so full time, but full time equivalent students (FTE). The establishment of FTEs by the S.A.P.S.E., assisted the development of the nomenclature. In 1976, the College expressly formulated the policy henceforth to use the term "student".

University courses for nurses flourished and they also spread the use of the term. The institution of the enrolled course in 1975 introduced the term "pupil" and a distinction was necessary. The S.A.N.C. communications referred increasingly to students.

The 1984 association with universities reinforced the use of the term "student". The H.S.R.C. in the 1985 research by Stoker, on differential admission requirements to tertiary education, classified "nursing" as a tertiary educational system, confirming student status. By 1987 the term is firmly established, though "student nurse" and "nurse", as well as "nursing student", are often used.

Today there is constant debate on standards of health care service and students' roles therein; improving conditions of service; highly structured educational systems and selection criteria; improving student status; community oriented practice; and full recognition of the worth and value of the student.

What is lacking is public awareness of the status of the student and the practice within which she is involved. Many still see nurses only as persons trained for the care of sick. But although the nurse does care for the sick, the nurse is also a preserver of life and a promoter of health. These concepts are foreign to many. Probably the less affluent in a community do see the nurse in her preventive and promotive role, as primary health care contacts with the nurse in such a community is more
frequent than in the affluent sectors of society. In the future, when independent nurse practice should come into its own once more, (as discussed in Chapter 4) public awareness will change.

Students are placed into posts at various hospitals. The establishment of affiliated hospitals during critical periods is reflected in Table 6.4.7 for 1949, 1960, 1978, and 1987. The drastic decrease in student numbers can be noted. Figure 6.4.1 demonstrates the decline in student numbers from 1978-1986. Table 6.4.7 reflects student and pupil annual attendance (1947-1987), which is a reflection of the student and pupil annual turnover as they attended college from their hospitals. Figure 6.4.2 contains the same information in graph form. During this turnover, students are appointed, some resign and some complete their courses and this is reflected in Table 6.4.8. During the period at college they write examinations and a research as reflected in Table 6.4.9 is presented.

The aim of the following section is to compare the Carinus Nursing College final examination with the Republic of South Africa final examination results to determine the success of the Carinus College.

Rationale: By comparing Carinus Nursing College results with South African Nursing Council results after 1969 (when Standard 10 became a compulsory admission criterion) it can be inferred that if Carinus Nursing College results were now better than those of the Republic of South Africa, it is a measure of efficacy of the collegiate system, since previous results may have been distorted by the numbers that did not have a senior certificate.

The data was obtained from Carinus Nursing College annual reports, 1949-1987; S.A.N.C. examination results as published after each examination and the respective five-yearly reports of S.A.N.C. during the terms of office of the Council. The results of the final examination papers reflect the year's, honours, passes, failures, total numbers and percentage passes including honours, in the Carinus Nursing College and the Republic.

Results: The results are reflected in Table 6.4.9. For the sake of completion, S.A.N.C. results covering the entire period of the College's existence is given.
Conclusion: During the existence of the College the final results, as compared with the Republic's final results, are consistently higher and the system thus effective according to the criteria set in the aim.

It was also found that during the period 1977-1984, the most outstanding results were obtained in the history of the College, as judged by the percentage (more than 30% honours) (reflected in Table 6.4.10), mainly in the courses Social Sciences and Preventive and Promotive Health. Fewer honours are obtained in G.N.S.A. III in this college and in the Republic, it being a 'major' and a course III, more difficult and with a wider scope and depth of content, than S.S.S.C. and P.P.H.

Further comment on the research on results

1. The results are a rich resource of data, able to support much future research.

2. The 1985 H.S.R.C. analysis by Stoker was borne out even in the early years, as discussed in that section in Resources (that the most important predictors of successful study in nursing, in rank order, are the examining body, home language performance, school grand total, training institution and examining body).

3. Since there are many other than non-academic factors affecting success, and these must be borne in mind when results are interpreted. Thus it is not claimed that the aim as stated is the only measure of success - only the one chosen to answer a specific question here.
### Table 6.4.6


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Carinus School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>530</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groote Schuur Hospital</td>
<td>503</td>
<td>500</td>
<td>354</td>
<td>28</td>
<td>382</td>
</tr>
<tr>
<td>Victoria</td>
<td>82</td>
<td>132</td>
<td>122</td>
<td>1</td>
<td>145</td>
</tr>
<tr>
<td>Woodstock</td>
<td>59</td>
<td>60</td>
<td>36</td>
<td>14</td>
<td>50</td>
</tr>
<tr>
<td>Rondebosch</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karl Bremer</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paarl</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somerset</td>
<td>175</td>
<td></td>
<td>130</td>
<td>21</td>
<td>151</td>
</tr>
<tr>
<td>Conradie</td>
<td>44</td>
<td></td>
<td>17</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>Die Volks</td>
<td>57</td>
<td></td>
<td>29</td>
<td>29</td>
<td>58</td>
</tr>
<tr>
<td>Red Cross</td>
<td>10</td>
<td></td>
<td>1</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>False Bay</td>
<td></td>
<td>17</td>
<td></td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Totals</td>
<td>530</td>
<td>711</td>
<td>978 + 17</td>
<td>689</td>
<td>833</td>
</tr>
</tbody>
</table>

= 995

Resource: Monthly reports from hospitals to Advisory Committee
Figure 6.4.1

CARINUS NURSING COLLEGE

1986

Authorised posts: student nurses
Authorised posts: pupil nurses
Posts filled by student nurses
Posts filled by pupil nurses
**STUDENT AND PUPIL NURSES ANNUAL ATTENDANCE**

**TABLE 6.4.7: CARINUS SCHOOL AND COLLEGE OF NURSING:**

**1947 - 1987**

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**Com- No. of Blocks**

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**Class 4 increased from 1 month to 2 months**

**Educational requirements for student general nurses raised to Std 10**

**Integrated general nursing and midwifery course commenced:**

Class 1 now 3 months
Class 2 now 1 month

(1) 1985 - 1987 all students are accompanied in health units which raise figure by 300, 400, 400 respectively

(2) Commencement of R425

**** Increase due to training for Karl Bremer hospital and Swartland prior to their opening
Figure 6.4.2
Annual attendance and turnover of students and pupils at
the Carthusian Nursing College 1949-1967.
## TABLE 6.4.8 CARINUS COLLEGE AND SCHOOL

APPOINTMENTS, COMPLETIONS AND RESIGNATIONS OF STUDENTS/PUPILS 1949 - 1989

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*Paarl Hospital
**Swartland Hospital
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** March 1949 Final - No School of Nursing entries

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* Examination results classified - Honours Passes Failures only
### Table 6.4.9 (continued)

#### Annual summary of final examination results

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A, B, C, D reflect the 4 terms of office of respective heads of college.

I, II, III, IV reflect changes in the curriculum affecting the final result 3/4 years later.

The typing of the foregoing tables is in two different planes because the headings are different since the examination system changed.
The following table reflects the years and subjects in which more than 30% of Carinus Nursing College students achieved honours.

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Legend:  
GNSA III General Nursing Science and Art  
GEN = general  
INT = Integrated (Gen. & Midwifery Nurse  
PPH & FP = Preventive and Promotive Health Care and Family Planning  
(Community Nursing Science)  
SSSC = Sociology & Psychology and Social and Mental Health Care
How students go through the system

1. Students and pupils enter the system once they have successfully fulfilled the respective selection criteria.

2. As an input into the system, students hold a series of dual functional roles within the components of the system.

   2.1 They are registered with the S.A.N.C. as students/pupils; and become civil servants upon appointment.

   2.2 They are appointed at present on the hospital establishment, but are registered with SANC by the College. The College is a school approved by SANC. It is envisaged that, in the near future, the student establishment (or part thereof) will either be transferred to the College, or that posts will be created at College according to the Memorandum of Agreement UCT/CPA and the relevant statutory regulations.

   2.3 They hold dual loyalties: the traditional loyalties to both the training hospital and the training college, as well as to different regions.

   2.4 They are students but receive salaries (students allowance) for the work they do.

   2.5 They are professionals and bureaucrats. Students are being educated to assume full professional responsibility and in the expression thereof come across certain contradictions.

   2.6 They are subject to dual management systems with differing philosophies and differing throughput loyalties, namely, the hospital and the college. It requires time and energy and skill on the part of the student to find the right way through the hierarchical mazes of both.
2.7 They are at present subject to dual recording and processing functions in the two systems of the hospital and college. For instance, the selection processing is done by the hospital and the selection procedure is undertaken by a selection committee. This requires urgent reconciliation, woman-power permitting.

2.8 The conflict between achieving supernumerary status or not is related to economics and available learning experience. Were students to be entirely supernumerary, other categories would be appointed in their place to do the work (to give patient care) and the students would not be able to benefit from the full spectrum of patient input into their training system. When other categories are appointed in students' posts, insufficient student nurse numbers lead to insufficient professional nurse numbers, a reality in 1986. If students hold supernumerary status, service needs and claims must be considered, because the question of "Who must nurse the patient" is the crux of the matter. Service needs are such that a student establishment in excess of the hospital needs for students are calculated and expressed as a fraction. From 1945-1984, the establishments were permitted to increase by 1/11. When the basic course changed in 1985 a new formula was not calculated. At the same time the Commission for Administration defined staffing norms in conflict with the role of the sub-professional groups (enrolled and assistant nurse practitioners) as stipulated by S.A.N.C. As a reaction to these factors, student establishments were decreased by about 50%, nationally, which is well-documented in current literature on nursing.

This conflict is compounded nationally by strategic trends of dwindling numbers of white students and the needs of increasing numbers of black students, and by political policies relating to segregation.

"The political unrest over the past years has had a marked effect on the secondary education of coloured and black students and, as a consequence, they may enter tertiary education with an even greater disadvantage than in the past. The need for both academic support

According to the de Villiers Committee of Enquiry it is of the utmost importance that the matter of decreased numbers of students (and thus registered nurses) be addressed immediately; that strategic (and not the usual incremental) planning be entered into to prevent a loss of students to the profession.

2.9 Students attend college for certain periods of the year and work in health units in general, psychiatric, community health and midwifery hospitals and clinics for the remainder of the time. Historically, the time at college for the theoretical portion of the curriculum has not been long enough. Consequently methods of education were utilised that would permit large volumes of work to be done in short periods of time with a negative effect in the throughput on the quality of education. Since 1985 a more realistic time schedule for the theory has been planned, but it is not yet ideal owing to tutor shortages and time constraints.

2.10 An adapted modular system is used wherein theory and practica on similar subjects follow within short periods.

2.11 In "systems thinking", historically it seems as if a certain amount of duality is necessary for the maintenance of equilibrium in the system. [Sommerhof in Emery: 1981: 196: Volume One] Historically the college was a late input in the health service system, and "equilibrium-seeking processes of all kinds are essential ingredients of the characteristic goal-seeking quality of vital activities" of the various systems. [Heider in Emery: 1981: 109: Volume Two] Power sharing was one such activity. Conditions seem tolerable if adaptation takes place as in an ecosystem's symbiosis.

In the following section, in Part IV, the Throughput or processing is discussed.
PART IV

CHAPTER 7

THE THROUGHPUT OR PROCESSING

Introduction

The supersystems and resources discussed form the inputs, which in the throughput process are transformed, resulting in the product. In the throughput the processing takes place in respect of application of values and setting goals within the four subsystems (psycho-social, technical, structural and managerial). Education and administration/management are the processes that take place in the throughput in a college organisation.

The chapters in the throughput are on a continuum. The chapters are concerned with philosophy and goals, curriculum changes, teaching and learning and measuring instruments, and scope of practice.

The continuity develops as follows: (a simplistic version)

The philosophy of the college is dependent upon certain governing constructs influencing pedagogic acts. All acts are goal oriented and the full educational process has a special aim and goal. There is a supportive enabling process, the management process with structural-functional components to assist in reaching the special goal. (This structural function was described in Chapter VI.)

The tutor and student in the educational situation are in a relationship of trust, understanding and authority. In the given course of education (pedagogical effort) the tutor brings the student and health consumer together by means of the curriculum through adult andragogic development and professional socialization during teaching and learning (pedagogical activity). Teaching and learning have to be measured and instruments are designed to achieve this. (Thus results are obtained that can be compared with criteria to evaluate their significance. These results were reflected in Chapter VI - Section 6.4 where student resources were
presented.) Finally the student is a professional nurse governed by a scope of practice.

In order to facilitate orientation the main tenets of nursing education need to be mentioned briefly.

Each science has an object, process and content. Nursing education as a process is based on general education. The object of nursing is caring for the human's health, and the preservation of life - this forming the basis of the content of nursing. Thus the philosophical sub-system in nursing education expresses beliefs directed at four elements: the health care system; the student and tutor in the andragogic process; and the receiver of the health care - the client. Nursing education is recognised as an independent science with its own field of study, its own methods, history, aims, literature, technology and practitioners.

Pedagogics is the science of education - a scientific study of the phenomena of educating. Education, in its research into educating and teaching, has various aspects to which different part disciplines apply themselves. These are:

**Fundamental pedagogics:** the philosophical considerations of the phenomenon of education.

**Empirical education:** A study which focuses attention on knowledge of the human in education, eg the development of the teenager, young adult with needs, possibilities and limitations in a milieu in which she is constantly being called upon to face concrete situations which are a part of her personal and her professional life.

**History of education:** A study which fathoms the meaning of historical development of the theory and practice of educating and teaching, and giving meaning to the past and the present in its looking forward to the future.
Didactic education: refers to the art of teaching aspects of education which include methods and media employed to reach educational goals. Didactics can be general or specific as in the scientific nursing process.

Contemporary or comparative education or educational administration refers to the pedagogically sound structure within a specific country. [Griessel: 1987: 1-7]

PHILOSOPHY - Goals and values

For the reason that nursing, "that noblest of professions" as often it is called, is based on a philosophy, particularly in respect of its ethos and professional practice, only a brief discussion will be engaged in, in this work.

In general, in basic models of nursing, the relationship of the beliefs about nursing interacts with the Theory, Research and Practice components of nursing. The philosophy is a motivating force that leads to goal directed behaviour, and directs its modus operandi, to enable the reaching of a goal. This is not intended to reflect a mechanical analogy but to refer to distinct forms of motivation described in recent psychological literature. [Entwistle: 1984: 7] The philosophy inspires activities in an institution and gives direction to practice. [Elias and Merriam: 1980: 5]

The aspects that will be discussed are:

1. Main pedagogical approaches to nursing education in South Africa

2. Teaching code/educational philosophy

3. Carinus Nursing College philosophy on nursing

1. Main pedagogical approaches to nursing education in South Africa

According to Searle, Brink and Beukes, [1983] the two main approaches are Behaviouristic and Humanistic.
The behaviourists believe that learning is a change in verbal and non-verbal behaviour as a result of repeated associations between a stimulus and a particular response to it. Learning material is broken into small units of information; through repetition and reinforcement, students have learnt correct answers to questions concerning small units, which together constitute a subject. This approach is teacher-centered. Students are evaluated through frequent quizzes and one/more major test(s). The tests are objective. Knopke and Diekelman [1978: 10] refer further to concepts from Skinner's Technology of Teaching.

In the humanistic approach a more phenomenologically oriented approach is used, centered on the development of the human being who is a freely choosing human being with responsibility for that action and accountability for that action. This is a student-centered approach where the professional student nurse becomes accountable for her own learning and for her professional practice in that she must be able to "identify problems, identify and analyse the reasons for the existence of the problem, plan a course of action to resolve the problem, determine priorities in contemplated action and have the knowledge, ability, attitude and drive to resolve the problem with the client." Knopke [1978] This is a highly individualised self-directed activity. Only the student can learn. Carl Rogers expresses the belief that no one can teach anyone else anything. In this approach active student participation in the learning-teaching process is essential. Clear learning guidelines, learning objectives, provision of learning resources are important aspects. Teacher guidance is of paramount importance, not teacher telling. Project work, elementary research skills, organisational skills are learnt. Examinations are problem oriented. [Rogers: 1961: 297-313]

However I believe that an eclectic approach be held to selection of methods and techniques for various teaching strategies to provide variety. It is, nevertheless, unpardonable that a teacher should always employ the same method for all teaching situations. [du Plessis: 1986: 6] Millar (1988), on adult education practice, discussed a theoretical framework, listing the Technological,
Humanist, Liberal and Radical discourses, with the first two typical in nursing education. His dialectic treatment of change includes examining existent and future systems. Fresh approaches to nursing education have been instituted in the College's educational system, including some liberal and some radical elements. In view though of the political and economic crises, the involvement in community and psychiatric nursing science to address social and psychological problems demands more practical and sustained input. Students' perceptions of their roles and function stem from curriculum content and implementation, and they need to be stimulated to perceive their routes with greater clarity. Miller asks: "Why should education for social transformation not then offer a powerful call to nurse educators?" He tentatively suggests it would involve consideration of boundaries within which the professional operates, "the powerful emphasis on curative and hospital based practice, the subordinate status of the profession relative to that of medicine, the vulnerability of nurses as state employees, the social class background of nurses, cultural stereotypes of appropriate roles for women and, in particular for women committed to service, and, of course, the organisation of the profession itself." [Millar: 1988]

Strategies are given life through various philosophies. An educational institution consists of a number of sub-systems and each sub-system should be governed by a philosophy. Ralph W. Tyler [in Griffin: 1983: 13-14] states: "Since the real purpose of education is to bring about a change in students' pattern of behaviour, it becomes important to recognise that any statement of the objectives of the school should be a statement of changes to take place in students. For this reason, this college philosophy concerning teaching and learning embraces both the educational philosophy and self-directed learning."

The earlier approaches at this College tended to lean towards the behaviouristic, interspersed with the humanistic approach. The swing towards the humanistic approach influenced by Carl Rogers was instituted to implement the persons-centred approach, at first in
administration only. This came to fruition in 1985 when student-centred pro-active methods of education were introduced.

Although earlier philosophies were not as well documented as they are today, they existed and were applicable to the life and times and educational premises of the day.

Is philosophy well documented?

A tentative supposition concerning philosophy is that it is a recurrent problem in nursing practice and education that the relevance of a philosophy is more talked about than that the content is written down and practised and that the content is thus not well documented. In its teaching function the professional bodies controlling nursing now insist that this be done. As this has long been a problem, it should be urgently addressed in regard to the expected development of education in the future. The exception is the burgeoning planning and commissioning science in health service where each module has a philosophy. The bureaucracy of the health service has technostructure characteristics "exerting its pull for centralization, notably for that of work processes, the tightest form - because the design for standards is its raison d'être. [Mintzberg: 1979: 301] Thus the policy and protocol and directive documents abound and partially explain the dearth of documentation on philosophy. Having examined organizational documents, I believe it could be a research project in the future to determine if health service organizations serve the organisation more than they serve the practice and education relevant to the primary aim (of the organization) which is health care ie a confusion between means and ends.

2. The educational philosophy/teaching code

Using Apps’ model to construct a teaching code (a working educational philosophy) [Apps: 1973: 11-12] the four categories in the framework are: 1) The learner - beliefs about the learner are analysed and, if necessary, developed; 2) The aim of education - what must be
achieved and why must it be achieved?; 3) Learning content - what must the learner learn, what are the resources for the learning content?; 4) Learning - method of learning and studying. How does the learner learn? Which learning experiences and opportunities must be provided? What is the role of instructional objectives?

2.1 The learner: beliefs held about learners are based on Apps' (1963), Elias and Merriam (1980) and Knowles (1975) who reviewed several educational philosophies that have been developed. Undoubtedly these are subject to the three psychotherapeutic methodologies holding current sway - the psycho-analytic, behaviouristic and humanistic models.

Modern nursing education believes that the context of which a student is part must be taken cognisance of. This is difficult in the South African context with the diverse ethnic groups that are initiated into the profession. Students should be empowered to participate in all activities in the environment, and have a say in affairs affecting them. It is wished they be liberated people, responsible for their own pro-active learning.

2.2 The aim of education is based on the current philosophies governing the shifts of emphasis in health care, and is in a state of dynamic change as a result of contemporary South African scenarios. "The main purpose of education must now be to develop skills of enquiry." [Knowles: 1975: 15] These skills enable learning from all life experiences and situations.

2.3 Learning content: This vast subject is a research project in its own right. Currently the challenges within teaching and learning are enormous - the educators' task is, inter alia, one of conscientisation and examining the form that practice should rest on - a bio-psycho-social issue. Learning content is, to a large extent, supersystem-directed. Some challenges are: incorporating the medical into the nursing model; using the scientific (process) of nursing and interweaving all the
vertical and horizontal strands of programme and stage objectives; dealing with the entrenched views held by each of the four disciplines (Midwifery, General, Psychiatric and Community N.Sc.) as to the importance of their discipline is a challenge as each discipline is convinced that its field is most important; dealing with comprehensiveness of four disciplines, each taught over a period of four years; the room that traditional subjects like Anatomy, Physiology, occupy in the curriculum; the room that must be found to incorporate new needs. These conflicting demands are not easily reconciled. A principle that has been proven over the past four years is that course objectives should lead to a nursing action. There is now some considerable flux in determining what a nursing action is, for it transcends the bio-psycho-social boundaries and the traditional taxonomies. The question of teaching the ideal and persevering (sometimes at great cost) in the implementation is another challenge. It is often easier to use shortcuts. Yet, shortcuts must be examined for their reliability and validity.

In all major subjects that have a nursing dimension, the traditional components are taught in macro-units with knowledge applicable to micro-units or subsystems. Teaching in principles is thus significant.

Bewildering arrays of resources are available in terms of content. It is often a feast or famine, and judicious decision based on accepted tenets should be developed. All future resource planning should be governed by philosophies held. Many problems need to be solved concerning student resources, as indicated in that section.

2.4 Learning: That studying and learning should be productive continues to be a concern in education. Diagnostic tools and programmes for studying should be alive and well. Turner [1980: 1] says that: "an education system which does not develop and experiment is doomed to failure." "Inertia or adaptation can operate in four areas: organisation, curriculum, teaching
methods and material." About self-directed learning [Knowles: 1975: 14-15] holds: "It is a tragic fact that most of us only know how to be taught, we haven't learnt how to learn." Activity should be directed to the convincing evidence that people who take initiative in learning do well. The (pro-active) learners learn more, learn faster and better, and remember more than re-active learners.

2.4.1 The teacher: there has been the change from behaviourist to humanistic models - changing from teacher to facilitator, as co-learner, resource person who can create a rich environment to maximise student learning. The philosophies at college owe much to phenomenology and current general education. Malcolm Knowles [1975: 34-37] discusses how seven elements of an andragogical process design are used to define the new roles. (This theme is enlarged upon by the researcher in the article on contemporary educational strategies).

The overall philosophy is presented last to complete and round off the discussion.
3. **CNC/UCT/HOSPITALS**

**GOVERNING SYSTEMS**

- **Legal Systems**

  - Religious, Moral, ethical, professional norms and values

- **S.A.N.C. All Schools:** 1. Policy regarding the Educational task of the S.A.N.C.

  - Comprehensive care (Health Act 63 of 1977) Nursing as a Science
  - Socio-cultural implications, minimal educational standards to ensure adequate and safe nursing, innovation and research, factual evidence for amending programmes, distinguishable knowledge and skills for post-basic (specialisation) courses, personal and professional development of nurse leading to behavioural change; analytical, critical, constructive evaluation; nurse as member of health team; variety of learning experiences, the order in which concepts are taught in successive stages.
  1. Program and stage objectives
  2. Regulations, Directives
  3. Nursing Act

**GENERAL CONTENT**

- **World Health (Organization)**

  - Health in S.A.; Health Act 63 of 1977

  - Nursing in Health Systems
    - Nursing Process
    - The Nurse Practitioner
    - Man's needs in developmental span

- **Profession as whole:** Phenomenological → Existential views are held

- **Nursing Education**
  - Professional Development/Autonomy
  - S.A.N.C. Objectives
  - Autonomy: S.A.N.C. approval of schools (conditions)

- **Employing body:** C.P.A. philosophy reflected in Ordinances, Services regulations, Personnel memoranda, merit ratings

- **Carinus Nursing College:** History and traditions present special commitments

**PHILOSOPHY OF CARINUS' NURSING COLLEGE**

We are committed to the following beliefs:

- that each individual has the right to develop to his fullest and enjoy the highest attainable standard of health;
- that each individual must have an opportunity to learn and to understand his responsibilities towards society;
- that nursing is a service rendered by one human being for another (or for a group);
- that nursing is concerned with man as a total being;
- that nursing has as its goal, the conservation of life, the promotion of health and the alleviation of suffering;
- that each client (patient) is entitled to comprehensive, quality nursing care which considers the physical, the emotional, the social and the spiritual needs of the individual;
- that all nursing care shall be health (and not disease) orientated, and shall extend beyond the client (patient) to encompass his family and the community in which he lives;
- that to provide this care it is essential that nursing education has a sound foundation in the physical, biological and social sciences;
- that upon this base, educational experiences are built which help the nursing student to acquire knowledge, skills and understanding necessary to function as a member of the health team and to care for people of all ages, in various stages of health and ill health;
- that, because nursing is a caring profession, caring constitutes the core of nursing education;
- that, despite the necessary scientific foundation (and the present electronic age) the art of human understanding, compassion and perception shall never be underestimated;
- that the acquisition of knowledge without personal growth is meaningless;
- that nursing, like religion, is a way of life;
- that the development and quality of nursing education is dependent upon the commitment of the personnel involved in this tertiary educational system;
- that such personnel accept the collective responsibility to inspire the nursing students with whom they are involved, to:-
  - observe ethical norms;
  - respect and honour the Christian creed (as well as the religious beliefs of others);
  - be concerned with the needs of fellow man;
  - exercise consideration and cooperation, ............
  - and at all times, to strive for excellence.

**VALUE STATEMENTS**

We are committed to:-

- the inclusion of all race groups in our educational offerings
- a person-centered approach in our human relationship
- accompaniment of students in health units
- in didactics to independent student centered study methods
In this chapter the most pertinent function of the operational core of the system is discussed; that of teaching and learning; study, and study habit (which is a subsystem of learning). The resources of the system, the tutors and students, interact as stated in the introduction to Part IV. Teaching and learning is also a part output of the philosophical input as discussed in Chapter 7 but forms a continuous flow of exchange:

![Input process output feedback diagram]

The vast subject of teaching and learning will be dealt with in this chapter by focussing on aspects of productivity in teaching and learning according to certain criteria. In simplistic terms, increased productivity is an increased output over a constant input. This is an important concept as it relates to organizational effectiveness and its relationship with managerial skills. The criteria that will be used to gauge productivity are academic productivity, teaching productivity, research on teaching and learning, curriculum innovation as a measure of productivity, critical thinking, adult education, and attitudes to studying.

As outlined in Resources, the time taken to establish nursing education at universities was long and hard, but this did not deter nursing colleges from developing as the fourth arm of tertiary education, the other three being Universities, Technikons and Teacher Training Colleges. What is the status now? Issues/concerns are to find the fulcrum moment (relationship) between the components to balance the seesaw between education and service needs and supersystem components as outlined in Chapter 5, and to find a new system for colleges to operate in the future.
Academic productivity

In developing as tertiary academic institutions the status of teaching and learning at the college should always be dynamic if it is to be productive. The productivity of all tertiary educational systems is being questioned internationally against greater accountability. [Dickinson: 1985: 16] and [Slaughter: 1986: 4] Nearly every university publication issued in South Africa at present deals with this aspect. Since 1986, the South African governmental supersystem has directed memoranda on productivity, and nearly every embargo speech contains reference to this issue. With the current political and economic South African scenario, productivity needs are expressed hoping in part to reach a solution for the future. The annual SAPSE and Department of Finance cuts are further reasons why more must be done with fewer resources, Dickinson [1985] and a number of administrative and systems resources define increased productivity in a simplistic way as an increased output over a constant input. Havenga [1987: 62] sees productivity as doing the "right thing at the right time."

Academic productivity is still not well defined and the traditional view of measuring this according to research output is a premise that presupposes the tutor has no other output of note. It is a purely quantitative measure. Against this criterion, nursing colleges, and the profession at large by its own admission, are significantly at a disadvantage. Introducing to students research projects at 4th year level should assist in rectifying the position in the future. Research output in nursing has certainly blossomed since the nineteen seventies. It is precisely the other outputs of note that often deter tutors from research.

The three functions generally accepted as common to a university are teaching, research and community service. Measured against the first and the third criteria, nursing colleges have distinct advantages. Particularly in the Department of Nursing that manages both the Carinus and Nico Malan Colleges, the community service is an excellent indicator of productivity. In view of the reconciliation of all educational functions and structures of the two colleges and the combined power of output functions that now accrue, that input is empowered.
The subsidy formulae at universities and affiliated institutions now provide (better) qualitative guidelines. The output of research/publications is subsidised according to the number of published articles in approved (listed) journals and the teaching output is measured in terms of credits obtained by students. Although an improvement over the quantitative guidelines, the inherent problems reflect upon the measurement of qualitative teaching and a lack of reward for productivity in this sphere. At most the ‘good, productive’ teacher will be promoted and such opportunities are rare. There is no difference in salary reward between the good and the indifferent tutor. There are many pitfalls concerning a high passmark and student credits, e.g. an over-concern with material in examination papers, easier papers, over-generous allocation of marks, shorter curricula, correction factors applied to marks, less depth in learning content. [du Plessis: 1985: 15] There is also a counter reaction to this to consider: teaching in one style and asking examination questions related to another style, over-difficult papers, stringent allocation of marks and moderating procedures, extending curricula to meet all eventualities including unequal application to scope and depth of learning content. A high or low passmark is not, per se, evidence of productive (effective) teaching or unproductive, ineffective teaching.

What is teaching productivity?

The nursing student has to make the art and science of nursing her own as part of her fundamental professional maturation and socialisation. She should be able to fulfil the programme objectives to manage problems independently and autonomously in terms of assessment (identification), analysis, and solving, and must be equipped to manage lifelong learning. The measuring instruments (assessment tools) designed to test this, though still in the pilot state, have demonstrated success in the first final-year group of the comprehensive course, and would be a measure of productivity in teaching because productivity is also about effectiveness by which the goal is achieved.

Teaching is seen by tutors as a primary task at college and is well documented, e.g. by Brink (1988). As stated previously, and in Brink’s
work, the "enactment of the scholarly role" is allocated little time in a high workload, double role (at home) situation. The anomalous existent reward systems should be reviewed to include "good" teachers and to distinguish them from the indifferent ones. How would this be achieved?

By evaluating:

- Teachers who stimulate self-achievement of knowledge in students; whose teaching is centred on development of thinking and problem solving; who are concerned with deeper levels of cognitive, affective and psychomotor taxonomies (as demonstrated in papers, in teaching, in discussion).

- Tutors who are concerned with human development in education; who are alive to contemporary challenges; who stimulate global thinking; the complexity of trade-offs; equitable distribution of wealth and resources, population density and the needs that accrue owing to this.

- Teachers who identify and implement developmental dimensions of intellectual competence, moral and ethical development, interpersonal competence, integrity, the sense of independence. Also those able to handle the information explosion. "There is a short supply of people who can look at problems as a whole." [Sanford in Chickering: 1985: 1-11]

How well is teaching and learning researched in South Africa?

According to Havenga [1987: 67] teaching and learning are not well researched at universities in South Africa due to manpower problems, solving more pressing day-to-day problems, spending time on "out of context to research-awards problems." This is also the case in nursing colleges and an endictment as regards productivity. Research of the ilk of the Lancaster research, the work of Entwistle, Biggs, Marton and Pask and others have, insofar as I was able to determine, not been done, with the exception of Meyer at UCT and at this college. In The Awareness of
Context (AOC) of Learning Studies 1986, 1987 and 1988, Meyer looked at approaches to how students learn and process information, and at also at course evaluation. Although Entwistle [1986: 243] agrees that evidence of styles of learning and thinking can be based on both empirical evidence from quantitative experiments, and surveys and accounts of observation and speculative ideas, the former provides the building blocks from which an argument can be sustained more fully. As a result of forming a teaching and learning committee of the College Senate with Professor E. Meyer of Teaching Methods Unit, UCT, as chairman (and Senate representative) with student and tutor representation, research, problem solving and remediation is ongoing. Researching teaching and learning is thus seen as a measurement of productivity, as it supports the rationale of the processes in the educational system and prunes the redundant, obsolete or unacceptable. The AOC is based on a systems approach, extending beyond current context of meaning research. Thus the college’s productivity in this sphere is growing.

Curriculum innovation as a measure of productivity

The curriculum consists of objectives, content, learning experiences and evaluation (according to one definition in) [Quinn: 1980: 74]. It is influenced by the philosophy of the school and shaped by the learner, teacher, examination systems, supersystems like statutory bodies, patients, society, media and other factors. Curriculum development, as a scientific concept, came to colleges in the period later. In the early and middle periods of the College’s existence, the syllabus and then the curriculum was provided by the SA Nursing Council in a regulation and a directive as a macro-unit, with schools providing micro-content.

Millar, 1981, reflects on the need for curriculum reform or innovation and the need for a wider concept of community or citizenship. Morphet at the same series of conferences examines pressure points at which the world of work meets the curriculum designer. The curriculum is a focal point at which educational theories, traditions and practices encounter influences, pressure and purposes of the non-educational world... it also requires a fully informed and accurate understanding of the real conditions in which it is required to produce active educational practice. The general tone
in "Education curriculum and development" stresses empirical research on the terrain of these complex structures. Course evaluation approaches and instruments, or direct curriculum measuring instruments, are thus zones for future research. The state of this art is in general not well defined.

It is tentatively concluded: that the college is relatively productive in terms of the curriculum process. As demonstrated by its historical dimension, a concrete pedagogic and productivity problem is the inadequate and incomplete dedication of curriculum users to the focal points of the curriculum implementation. These focal points relate to the of community and the contemporary, as well as strategic national and South African conditions. (Gunther’s objective, inevitable, universal essential relations between things - their continuous interaction - connections and events (processes) with education, e.g. society, economy, the philosophy).

[Gunther in Venter and Verster: 1986: 38] There is a need that nursing education specialists be developed in this terrain; that where curriculum development is not a significant input in diploma/degree education courses, its inclusion be considered.

At Lancaster University, Keith Percy interviewed lecturers to examine education objectives in higher education. The unifying theme of lecturers’ views about the main purpose was summarised by the term ‘critical thinking’. There was substantial consensus about the importance of critical thinking, but it was far from clear how this was expected to be achieved. There was a profound contradiction between lecturers’ intentions and what students achieved. [Marton, Hounsell and Entwistle: 1984: 2-5]

**Critical thinking as a component of productivity in teaching and learning**

**Critical thinking**

Tutors often comment on the inability of students to think and blame the school system for this. Tertiary educational institutions are directly responsible for this facet of teaching and learning according to Tucker and Mantz [1984] who investigated the same criticism against the quality
of American school teaching. The school teacher and nurse tutor are products of the university and should have acquired critical thinking there, so that input-output deficits are located in the university preparation. [Young: 1986: 2,5 and 12] and [Entwistle: 1981: 152-160] investigated different aspects of the problem.

What is critical thinking?

Richard Paul in 1985 examined 894 publications on critical thinking during the period 1978-1985. Problem-solving is often erroneously seen as a synonym of critical thinking, whereas it is but a part thereof. A number of researchers have since clarified the concept. [Havenga: 1987: 69] in Excellence in Teaching and Learning.

Critical thinkers have certain attitudes and characteristics - a critical spirit or critical attitude, scepticism of givens of existing norms and ‘ways of doing’. Such scepticism is not applied continuously nor unjustifiably to every argument or situation. Students, according to Furedey and Furedey [1985] in Havenga are not the tutors’ disciples. They must be encouraged to and be prepared to question and confront. A critical ability to identify when questioning is necessary, the ability to collect relevant data, to analyse it in a rational and accountable manner and to evaluate the data. [McDeck, Seigel and Morris [Havenga: 1987: 71-72])

There is evidence that critical thinking is a learnt process; there are programmes designed for this purpose. Researchers do not entirely agree on teaching it as a separate component or within the course programme as an integral part in all content. As critical thinking does not exist in a vacuum it should be handled as an integral part of the course and as an integral part of nursing practice itself if students are to survive as effective health givers in the future.

Does the College fulfill this need? All educators are well aware of how thinking can be dampened in the workplace. Long entrenched practices could sabotage the neophytes' effectiveness were they not schooled in critical thinking and able to maintain it. Although every attempt is made to nurture critical thinking at the College, it is questioned if it is always possible to accompany students so that they can think critically. Teaching and learning strategies should be consciously focused on this aspect. Research is essential to provide answers to the questions surrounding the issue.

Pedagogic criteria in connection with the theme identified (other than those already mentioned):

- Therapeutic milieu between tutor and student identifying trust, rapport, bonding, climate setting, assertiveness, etc.

- Teaching style includes independent growth practices, student responsibility for learning, individual progress, support, facilitation, journeys of exploration, adult education, etc.

- The dedication of the strategic apex to the same goals as the tutor and the student are essential.

Adult education as a measure of productivity in teaching and learning

Studies on adult education have recently increased dramatically, but there are as yet few South African studies, according to Havenga [1987]. Why did it take so long for the concepts of adult education to take root? The answer can in part be found in:

Developmental psychology which is closely related to education. In comparison with the various stages of development according to age, studies on adulthood and middle age are sparse, even in Erickson and Piaget, much vaunted researchers. Furthermore, of the three current models of psychological theories and psychotherapeutic methodologies holding sway, Carl Rogers' humanistic model, with the most pertinent data applicable to adult education, was ever controversial and a thorn in the
flesh of psycho-analytic and behaviouristic models, and took time to become recognised. [Elias and Meriam: 1980: 135] "One of the reasons for the popularity of humanistic adult education is humanism's compatibility with democratic values..." leading to "better individuals who will then promote a better life for all humanity."

In most of the tertiary education centres in South Africa only the first-years really qualify as adolescents as being within that age group. Since the greatest loss of students also occurs in the first year, the majority of remaining students are adults. (Van der Watt, 1987 in Havenga) It is surprising how few South African studies exist on adult education as compared to the marked increase in overseas literature. The views of a writer like Mezirow (1984) enjoy hardly any attention with the exception of the experiment by Millar et al. at UCT in 1986 in Havenga. Adolescence continues to lionize the research and curricula of teachers.

Traditional views on "who owns the course", "whose responsibility is learning", teacher roles, student roles, control and discipline hold sway and support pedagogics rather than andragogics.

Curriculum negotiation in professional adult education research

Millar, Morphet and Saddington [1986: 2] mention that the strength of the hidden curriculum in adult education is the sustained student dependence on staff, for knowledge, for course design, for validation of achievement and for leadership, which limits many potential values. It becomes a barrier to full engagement in adult learning and teaching, ie andragogics. The theoretical position assumed by Millar et al. is:

- That adults take responsibility for their own learning to prevent latent processes of dependency.

- That placement of control be located within the learning group.

- That the relationship of dependence can be negated by freedom to control one's own learning programme and this stops students' collusion in dependence.
That the collusion "erodes the seriousness and the quality of the enterprise of learning."

That control is a shared staff and student responsibility.

That the continuous negotiation in shaping the curriculum, including control and responsibility must themselves be visible aspects of the curriculum.

Millar and Havenga refer to Mezirow's work.

Mezirow [1984: 137-138] 'Charter for Andragogy' was constructed to further adult education by developing and enhancing functioning in self-directional learners. Some aspects in accompanying adults are:

- Progressive decrease of the learner's dependency on the educator.
- Assisting the learner to understand how to use resources - especially the experience of others - and how to engage in reciprocal learning relationships.
- Assist the learner to define own learning needs.
- Assist the learners to assume increasing responsibility for their own learning, planning within the learning programme and evaluating thereof.
- Learning material should relate to present problems and levels of understanding:
  - developing decision taking
  - striving for self-corrective reflective approaches to learning
  - enhancing problem identification and solving ability
developing self-concept as a learner through increasingly mastering work and through experiencing a supportive climate that provides for feedback and encouragement

- using experiential and participating educational methodology

- developing insight into the full range of devices in the teaching/learning situation; the making of appropriate choices

Miller et al. [1981] describe the prevention, resistance, counter-resistance and orthodoxies (opposing theoretical positions) in their research group. In striving to introduce adult learning and teaching concepts at the College, similar circumstances prevail and some staff and pupils remained alienated. Nursing colleges remain by and large more dedicated to the product of student achievement at the cost of the process whereby the product is obtained and in general pay lip service to the principles of adult education.

Attitudes to studying as a dimension of a measure of productivity in teaching and learning (a concern for teachers and students)

1. The historical attitudes to studying

Attitudes to students' study are culturally founded.

South Africans regard academic achievement highly and the common belief is that this is achieved through study. In the section on historical aspects of the supersystem, the university, Louw notes that higher educational qualifications were not available in South Africa in the nineteen twenties, a mere 60 years ago. Consequently people who were educated at this level were the community status referants, e.g. the doctor, lawyer, lecturer, teacher, etc. who wielded considerable power and influence and were respected. (An interesting hypothesis for nursing is that this probably gave great impetus to the doctor's position of power). It became a culturally internalised value that education was a most desirable cultural item.
This was extended to nursing — to obtain qualifications that could be registered was also desirable. The Christian Calvanistic ethic virtually canonised the work ethic as a route to individual freedom and independence and the glorification of a responsibility to God. The punitive view the Freudians held of man, reinforced the need to force man to better him/herself. A new college would have to prove itself, and what better way than by means of superior examination results obtained through study. Study was seen as a responsibility that the teachers had to enforce on the students.

During the existence of the College, some considerable control was exercised over study time as it also related to "hours of duty". It occupied an important place in collegiate life. Study was also used as a punishment. In 1976 experimentation was done on several forms of study periods with such diverse results that it could at long last be abandoned with much relief. As the concern with quantitative compulsory study decreased, so the interest in the quality aspects increased and, together with the student-centred didactics, shifted the locus of responsibility to the student. Tutors have always assisted students with study problems, but it was not until the 1980s that it came to be seen as a structured system and an integral part of productive teaching and learning.

2. Literature study on study habits

In South African nursing education, there has been little if any research, whereas at universities study methods have been well-researched recently, e.g. at Stellenbosch, The University of the Witwatersrand and the University of Durban-Westville, involving thousands of students. A Stellenbosch study in 1986, involving 3065 respondents, indicated the following problems in percentage and rank order: 45 - poor concentration; 28 - study slowly; 22 - poor memory; 18 - ineffective study; 12 - poor motivation. These secondary problems can be eliminated by means of study programmes.

"There is no significant difference between students on study programmes and other students — not in respect of academic achievement, intelligence or any other psychological test result. Students with higher intellectual
abilities can under-utilise their intellectual abilities, even students with an A matric symbol may require assistance." [van Niekerk: 1987: 217]

Considerable research has been carried out by Behr at Durban-Westville and later Fullard and Beerlall, 1985, on the Wrenn Study Habits Inventory (WSHI). (1)

Thus research has demonstrated that a major cause of failure at colleges and universities is inadequate or faulty study habits.

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(1) A similar study was carried out by the researcher on 246 students of Carinus Nursing College and Nico Malan College and compared with the Durban-Westville findings. The results are available from the researcher.
CHAPTER 9

STATUTORY CHANGES IN THE CURRICULUM DURING THE PERIOD 1949-1987

INTRODUCTION

In this chapter the objective will be managed by examining first the changes that the college system adapted to in Student education, and later to Pupil education.

The statutory changes in the curriculum relate to changed health care and changed educational needs of the community. The SA Nursing Council promulgates regulations for nursing education to create a product, an appropriately qualified professional nurse. The needs of the community change and regulations in education encompass these changing needs in order to render effective care. Through the Nursing Council the nurse has a contract with the public to render the kind of care it requires.

Students: Conceptual frameworks or tables will be used to depict the changes according to educational standard; the three major changes in health care; progression of qualifications; nature and number of qualifications; emphasis on health state; the structure of model of treatment.

Concerns in using a nursing model in respect of implementing the nursing diagnosis are given. Hereafter an interpretive discussion on the evolution of change in the content of the curriculum during critical periods 1949-1953, 1969, 1975 and 1984 is discussed, using the early, middle and late period classification in respect of theoretical and practica content; also the examination system and time allowed for practica components in health units.

Pupils: An orientation to the introduction of the course is given as well as (aspects of) the reasons why it was introduced and how the rolls developed. (The SANC as registering body licenses nurses to practice by placing students and professional nurses names in a register, and those of the category enrolled nurses on a roll.) The minimal periods of
instruction of enrolled pupils are noted as well as the percentage increase (by the schools) in lectures that led to subsequent problems of over-education and the development of an artificial market. How the enrolled course kept pace with contemporary health needs through elective courses is outlined briefly. The chapter ends with regional and national problems caused by an irrational increase in enrolled nurses which by 1987, led to changed tendencies in the nursing profession. There is a correlating relation between the irrational increase in enrolled nurses and disciplinaries, and the decreased professional nurse number, which is discussed because it results in an undesirable ratio. This grave disequilibrium to which the health system can scarcely adapt, provided valuable lessons for the future, and led to the planned end of this category of enrolled training. It also provided the necessary stimulus to the nursing system to institute further measures in other subsystems. Thus the 2-year bridging course will be instituted to upgrade suitable enrolled nurses to the professional nurse category, making some of the deficit good, and providing more posts for students. This arrangement would at least permit of more adaptive responses. However, the stimulus of irrational increases of enrolled nurses was a drastic stimulus and return to optimal conditions will be slow/retarded.

STUDENT EDUCATION

Conceptual frameworks

An analysis of the changes in the basic nursing curriculum will be depicted by conceptual models to assist in the orientation to the changes. Prior to presenting the conceptual models it would be helpful to 'recap' earlier periods in nursing described in previous chapters. From 1928 the South African Medical and Dental Council promulgated nursing education regulations; from 1949 this became an SANC function. Although the first SANC educational regulations were promulgated in 1953, it is documented in the Archives document A1292, that the SANC Circular, MS4, was issued on 17.11.49 and signed by L A Hove, Acting SANC registrar. This circular contained the new combined regulations for the training and examination of medical and surgical nurses, (including the preliminary and final examinations.) Attached to the Principal’s report to the College Advisory
Board on 8.7.49 was a document from the College to the DNS outlining the new procedure in nursing education, date 11.7.49.

The three major changes in the basic nursing course in terms of the nature of health care

The single qualification concept

<table>
<thead>
<tr>
<th>Year</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953</td>
<td>Certificate: Medical and Surgical Nurse</td>
</tr>
<tr>
<td>1960</td>
<td>General Nurse Certificate</td>
</tr>
<tr>
<td>1969</td>
<td>Diploma in General Nursing, R.3792 of 28.11.1969</td>
</tr>
</tbody>
</table>

Science and Arts concepts
Science well differentiated
Science and Art of Nursing not well differentiated

The Integrated-double or triple qualification concept

<table>
<thead>
<tr>
<th>Year</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>Diploma in General Nursing, R.879 of 2.5.1975</td>
</tr>
<tr>
<td></td>
<td>Diploma in General Nursing and Midwifery, R.881</td>
</tr>
<tr>
<td></td>
<td>Diploma in General Nursing and Psychiatry, R.882</td>
</tr>
</tbody>
</table>

Middle period
of 2.5.1975 - Option of qualification open to student's choice
Full courses in Social Science and Preventive and Promotive Health. Nursing Science courses well differentiated. Half courses introduced

The Comprehensive, quadruple qualification concept

<table>
<thead>
<tr>
<th>Year</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>Diploma in Nursing (General, Community, Psychiatric) and Midwifery Nursing Science R.2218 of 30.9.83 and R. 425 of 22.2.1985</td>
</tr>
<tr>
<td>Late period</td>
<td>The four main disciplines and Ethics and Professional Practice as majors and eight ancillaries. Students could not exercise a choice in qualifications</td>
</tr>
</tbody>
</table>
CURRICULUM CHANGES:
Curricular changes took place as follows:

1. According to progression of qualifications:
   - 1949 - 1968 early period: Certificate
   - 1969 - 1987 middle and late period: Diploma

2. According to the nature of qualification:
   - 1949: Medical Surgical Nurse
   - 1960: General Nurse
   - 1969: General Nursing
   - 1975: General Nursing / Midwifery / Psychiatry
     optional choices
   - 1984: Nursing: General, Psychiatry, Community and Midwifery
   Nursing Science compulsory course or 4-year course

3. According to number of qualifications:
   - 1949: Single
   - 1975: Double or Triple: General and Midwifery/Psychiatric Nursing Science
   - 1984: Quadruple: General, Psychiatric, Community, Midwifery Nursing Science

4. According to model of treatment of health conditions on page 235

5. Changes according to course structure and content:
   These changes lead to four periods:

   5.1 In 1949 the twofold structure was based on a preliminary (basic) elementary component of the course of approximately 15 months, and a final advanced component of the course, also of 15 months.
5.2 In 1969 a three-fold scientific and arts structure emerged

![Diagram of three-fold structure]

5.3 In 1975 the integrated, a three and a half year structure differentiated from the above

<table>
<thead>
<tr>
<th>YEAR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GENERAL</td>
<td>NURSING</td>
<td>DGHH or</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>common</td>
<td>SCIENCE</td>
<td>DGNN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>component</td>
<td>General or</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Psychiatry</td>
<td>Midwifery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DGNN - Diploma in General Nursing & Midwifery
DGHP - Diploma in General Nursing & Psychiatry

5.4 In 1984 the comprehensive course was introduced with four disciplines interdigitated over a period of 4 years consisting of General, Psychiatric, Community and Midwifery Nursing Science Ethos and professional practice; four majors and eight ancillaries all taught over a period of four years
6. According to educational standard:

<table>
<thead>
<tr>
<th>Period</th>
<th>Length in Years</th>
<th>Educational standard upon entry to course</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949</td>
<td>3½</td>
<td>Std. VIII Junior Cert. (JC)</td>
<td>Certificate in Medical</td>
</tr>
<tr>
<td>1960</td>
<td>3yr</td>
<td>SC. preferred, but JC accepted</td>
<td>Certificate General Nursing</td>
</tr>
<tr>
<td>1969</td>
<td>3yr</td>
<td>SC Certificate</td>
<td>Diploma General Nursing</td>
</tr>
<tr>
<td>1975</td>
<td>3½yr</td>
<td></td>
<td>Diploma General Nursing/Midwifery/Psychiatry</td>
</tr>
<tr>
<td>1984</td>
<td>4yr</td>
<td></td>
<td>Diploma General Nursing/Psychiatry Community/Midwifery Nursing Science</td>
</tr>
</tbody>
</table>

The senior certificate as the standard of education for entry into Generic courses, according to Brownlee and Thompson (1988) was as a result of:

1. The poor general education and economic stringency, and competition for those suitably educated.
2. Shortage of teachers of mathematics, science and biology.
3. Failure on the part of educators and parents to recognise the need to educate girls to at least matriculation level.
4.

A. According to model of treatment/interventions of health condition

Early period 1949 - Medical model predominated nursing interventions

Medical Model eg.

ETIOLOGY

CLINICAL PICTURE

TREATMENT

COMPLICATION

NURSING INTERVENTIONS

B. Transition period in the late sixties and during the seventies wherein nursing theory with incorporation of Psycho-social aspects, the scientific process and the medical model, developed.

NURSING PLAN

NURSING PROCESS

Bedrest Nursing Diet Plan medications procedures/investigations Progress & audit

Scientific process Assessment Planning

Implementation Evaluation

Medical model

C. Present period in the eighties

The concerns and difficulties of using nursing models is a national problem

Nursing models developed, sometimes incorporating medical models
The difficulties in using the nursing model in respect of implementing the nursing diagnosis

1. Reconciliation: the medical model is used in health units and forms the basis of the health care profession's language. It cannot be ignored if future professional nurses are to understand and participate in communication. Interweaving the nursing model with the medical model poses constraints and detracts from the nursing model.

2. Nursing models are not well known to the majority of professional nurses in South Africa and students cannot be assisted when they experience a need for help. What is known about the nursing model is interpreted in a variety of ways, leading to confusion.

3. Using nursing models is new to the College, and the knowledge is also internalised differently by various members of staff.

4. The expression 'nursing diagnosis' is sometimes not welcomed by medical staff. Nursing diagnosis models have not been used extensively, and few are available. The American Nursing Diagnosis Association Model (1982) is probably the best known.

The evolution of the theoretical content: an interpretive discussion of the curriculum


1. 1949/1953/1960: Early period

1.1 Basic portion of course: Preliminary studies on which preliminary examination was based. Approximately 1.5 years long.
### Basic course content

<table>
<thead>
<tr>
<th>Subject</th>
<th>No. of lecture hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of Nursing and Ethics</td>
<td>6</td>
</tr>
<tr>
<td>Elementary Theory and Practice of Nursing</td>
<td>100</td>
</tr>
<tr>
<td>Anatomy and Physiology</td>
<td>40</td>
</tr>
<tr>
<td>First Aid: 8 hrs lect. and 8 hrs pract.</td>
<td>16</td>
</tr>
<tr>
<td>Hygiene</td>
<td>15</td>
</tr>
<tr>
<td>Elementary Dietetics and Cookery</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>189</strong></td>
</tr>
</tbody>
</table>

1.2 Advanced portion of course: Finalist studies on which final examination was based. Approximately 2 years long.

<table>
<thead>
<tr>
<th>Subject</th>
<th>No. of lecture hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory and Practice of Nursing</td>
<td>100</td>
</tr>
<tr>
<td>Bacteriology</td>
<td>8</td>
</tr>
<tr>
<td>Medical Nursing including Pediatrics</td>
<td>80</td>
</tr>
<tr>
<td>Special diets</td>
<td>12</td>
</tr>
<tr>
<td>Materia Medica and Therapeutics</td>
<td>10</td>
</tr>
<tr>
<td>Surgical Nursing incl. Pediatrics</td>
<td>45</td>
</tr>
<tr>
<td>Anaesthetics</td>
<td>3</td>
</tr>
<tr>
<td>Special subjects: Ophthalmological N. )</td>
<td></td>
</tr>
<tr>
<td>Otorhinolaryngological</td>
<td>8</td>
</tr>
<tr>
<td>Gynaecological N.</td>
<td>12</td>
</tr>
<tr>
<td>Nursing male and female genito-urinary conditions</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>282</strong></td>
</tr>
</tbody>
</table>

**Implications**

SANC regulation No. 1961 of 4.9.1953 promulgated detailed regulations concerning approval of colleges, approval of hospitals as forming part of school, conditions of service, all curricular activities.
- The college appointed as school in collegiate education commenced in Southern Africa
- Professional self-governance: the SA Nursing Council controlled the practice of nursing, instead of the SA Medical Council
- Colleges took over the responsibility for nursing education from hospitals
- Although a medical and surgical nurse education stressing curative health conditions, the special psychological, social and physical relationships in disease were to be emphasised
- Examiners and moderators were appointed by the SANC
- Schools, to suit local needs, increased the minimum SANC lectures prescribed
- The first 1953 SANC basic course regulations continued in the SA Medical Council tradition by creating regulations for the training and examination of medical and surgical nurses and a certificate was issued upon completion. Commensurate with the philosophy and practice of health at the time, nursing training was largely concerned with curative aspects of sickness and hospital-centred and the professional nurse seen as one who could nurse patients with medical and surgical conditions.


- Numbers of lectures were not published in the regulation, but in a Directive 24/61 of 26.5.1961 - the first one: Henceforth a regulation would be accompanied by a directive - a guide, which included philosophy, numbers of lectures, categories of persons who could give the lectures, examinations, etc.
- Psychology was introduced as the subject "human relations". 15 hours on this subject was included in Theory of Nursing. This
move was the forerunner of the 1975 full course on Social Sciences. Nursing practice was now directed to encompass wider concepts of human needs, and reflected a broader concept of nursing.

- Periods required in history, ethics and conduct of nurses, increased from 6 hours to 8 hours, interpreted as a move to the later half, and full courses on the subjects. Professional practice development became ongoing, by inclusion of conduct of nurses.

- Physical Science (10 hours) (15 by Circular 33/63) was introduced officially, although tutors had found it necessary to introduce Physical Science to explain inorganic phenomena in the course. A beginning was thus made towards later introducing half courses in this subject. It was thus ensured that nursing courses included each of the major science fields.

- The Anatomy and Physiology were increased to 60 hours. In time these subjects grew and occupied so large a portion of the curriculum that essential inclusion of other subjects and courses was hampered. However, for a long period these two subjects formed a scientific bulwark in both medical and nursing curricula. A question that is often discussed by nursing and medical lecturers at symposia since 1984 is the minimal scope and depth these subjects should occupy. The question of including other sciences, the ever-increasing body of knowledge that must be mastered, and newly developed specialities that must be taught required, space in the curriculum. The Anatomy and Physiology curriculum was revised.

- There was a return to increasing the number of medical practitioners' lectures. Universities did not always provide the necessary courses for nurse educators, nor had all schools access to tutors. It is probable that the above reasons, and the need for medical input, arose as a result of keeping up to date with contemporary medical practice and teaching in medical
faculties. It was not always possible to obtain appropriate members in this category. The required lectures by medical practitioners were: 20 in Anatomy, 4 in Microbiology practica, 20 in Medical Nursing, 20 in Surgical Nursing and 6 in Anaesthetics (increase of 2)

- The number of lectures was increased to accommodate change that was accruing. Neurology was introduced as "Care of the unconscious patient"

- Nurses had to gain experience in the preparation of prescribed diets. Students called the cookery lectures "bak and brou sessies" and welcomed the light relief from other college work, except when the "cookery" mistress made them eat and drink their own culinary efforts. These lectures were later discontinued

- The word "Geriatric Nursing" was introduced - testimony to the foresight of the SANC, as "care of the elderly" will be of major concern at the turn of the century

- The sad part for the Carinus School was that hospitals were approved in 1960 as training centres in association with colleges - with a return to the hospital school system

- R.103 referred to Government Notice No. 1128 of 8.8.1958 in terms of which no person under 21 years of age may be registered as a nurse. The nurses who had qualified for registration while under age were known as the "badge nurse" or "blue belt". The badge or blue belt was worn until eligible for registration which was usually about 6 months

- Intention of increasing the Standard 8 entry to Standard 10 was given, by stating that Standard 10 was desirable, but that a Standard 8 was acceptable

- The course shortened to 3 years to support the philosophy that it was not the quantity but the quality of learning experiences
that counted. In 1949 the 9 months Midwifery course had changed to one year in length; post basic courses were developing, and thus the period of 5 and a half years to obtain basic qualifications was long, considering that many nurses were thereafter engaged on studying for the speciality of their choice. It should not be forgotten that a basic qualification in 4 disciplines had been envisaged in 1949, and subsequent regulations were steps towards a time in the future when that ideal could become a reality.

- Alternate routes of entry to the course became available; the maximum exemption being 1 year if qualified as a psychiatric nurse or midwife; and 6 months if qualified as an enrolled auxiliary nurse.

- The syllabus was prescribed in detail.

- It was stated that 3 months' experience in a Psychiatric ward was desirable, indicative of the early and future interest in developing this discipline. Community involvement in the form of visits to social agencies relates to the growing involvement in that science.

- The Elementary and Advanced Theory and Practice of Nursing, consisting of 100 hours tuition in each, was to develop later into Nursing Science and Art I, II, III and IV and Clinical Practica I, II, III and IV in the future.

2. 1969: The Middle Period

The Diploma in General Nursing upgraded the course from a certificate to a diploma and introduced the science and art concept in nursing curricula. The syllabus was arranged as follows:

1. Basic Sciences: a) Social Sciences; b) Natural Sciences; c) Biological Sciences. The content of the course now contained
diverse sciences, and scope covered a wider range, and both were upgraded

2. The Science and Art of Nursing now included a larger component of Preventive and Promotive Health, and reflects the growing community health orientation

3. Including a larger component of the Principles of Professional Practice is indicative of the growing body of knowledge in this field

4. "Ward Management" and "Teaching Needs" were placed on a scientific basis. In earlier basic curricula it had been included in Theory of Nursing in the basic course. A post-registration course had been instituted on the subject, and was now discontinued as it was realised that the knowledge had to be included at generic level

- Disaster Nursing was introduced - a sign of the need within the community

The 1975 Diploma Course expanded the Integrated approach which led to single, dual or triple registration in General Nursing, Midwifery and Psychiatry with the choice of option open to the student in the first semester of the fourth year. "This approach allowed each student to be developed maximally." [Thompson in White: 1988: 179] It was also economical in time and expenditure. To date this course reflected the most change in terms of scope and depth of the syllabus. Full courses were now introduced. General Nursing Science and Art (GNSA) I, II, III and Clinical Practica I, II, II, the two majors, were well differentiated. Professional Practice, Ward Administration and Clinical Instruction, included in GNSA III, increased. Applied Medical Biophysics and Applied Chemistry were half courses. The Anatomy and Physiology were separated. Preventive and Promotive Health and Family Planning became a full course in its own right. Social Science, Sociology and Social Health Care, and Psychology and Mental Health Care became full courses. Microbiology and
Parasitology, together with Pathology and Pharmacology, formed half courses. Introductory Midwifery, and Introductory Psychology were pre-course requirements for Psychiatry and Midwifery. Over and above this, 60 periods of instruction in Psychiatry and Midwifery had to be given before the end of the third year. For the first time school examinations could be conducted in certain half courses.

3. The Late Period

An entirely new concept in Nursing Education now developed. A minimal guide was available from the SANC, dealing with vertical/horizontal strands of a curriculum set in four stages: year 1, 2, 3, 4. The strands were developed according to increasing demands of skills and human social aggregates. The macro/global objectives were set and schools had to generate courses and content and construct evaluations for the micro objectives within the course. Curriculum became a new word and a new host of educational terms developed. An agreement was reached between CPA/UCT, and a new nursing educational ordinance passed.

A national curriculum association under the auspices of the SA Nursing Association developed, to assist in and share solutions nationally. This course was organised as follows:

The College once more taught practica, and a department was created from scratch in terms of material and human resources.

Of great historical significance was the development of the measuring tools. Each nursing intervention is described by means of a learning tool. The content of the learning tool has to be researched in the light of the newest scientific and technical data, to prevent stagnation and outmoded concepts. Much research was done. Hereafter the critical factors in an intervention are noted, i.e. those that, if omitted, could be harmful to the client, and are scored higher than other steps in an intervention. The SCAT (Structured Clinical Assessment Tools) as they were named, are based on: (1) "Did the nurse do (X, Y and Z)?" and (2) "How was it done?" The respective
steps are arranged according to the nursing process headings: assessment, planning, implementation, and evaluation.

A very high workload resulted in the constructing of assessments and evaluations for all courses in four disciplines. The greatest advantages were that the Colleges and hospitals were working together on formulating the system. In addition to this the Nico Malan and Carinus Colleges both use the same tools and these could be used for all categories of nurses in the Peninsula. They were also taken in use by other educational centres in the country. The most important result was that they served as learning tools, and evaluators could learn from them. The tools also served ward sisters as orientation and learning tools. The university and college senate approved instruments prior to use. Many of the pilot "runs" are now concluded, but to keep a system dynamic requires constant input.

In the nineteen eighties, the OSCE, Objective Structured Clinical Examination, method began to be used widely, but there were no ready-made instruments available and these too were developed in all four disciplines. Particularly the Psychiatric and Community Nursing Science tools were of immeasurable value as they had not been developed before. Up to this time student nurses had been little exposed to these two fields. Liaising with, orienting and involving the nursing personnel of these services has required, and continues to require, a significant time investment. [C.N.C.N.M.C. Memorandum 4]

The nature of Psychiatric Nursing Clinical practica interventions prescribed by the SANC in the Directive, also served the community well. Henceforth the Psychiatric patient, and public can only benefit from the new skills that a great number of students (and staff) have learnt.

This course is not easy to teach nor easy to administer. Nor is it easy for the University to give the sterling input they do give. Neither is it easy for hospitals to provide diverse learning experiences. It is difficult to allocate students to the many
institutions offering the four disciplines. It is not an easy course to study. But what is easy, (to judge from evaluations) is to appreciate the the difference these students are making to comprehensive health care.

Examination sub-system

Early period 1949-1974 followed, with few exceptions, the following pattern:

1. Preliminary examination after 15-18 months of training in Anatomy and Physiology, and Hygiene. In 1960 Microbiology was added as well as Nutrition. In 1953 a Part 1 was a written portion and Part 2 a basic nursing practica exam, including First Aid which was a school examination. In 1960 Part 2 fell away, replaced by the Intermediate examination (not conducted in wards) on First Aid and basic nursing. Later fell away by 1965.

2. The final examination consisted of three 3-hour papers on Medical Nursing, Surgical Nursing, Theory and Practica of Nursing. It included a practical and oral examination conducted by an SANC examiner. The last of the preliminary examinations were written at Carinus Nursing College in October 1975.
The middle period, 1975

This period introduced innovative changes. The examinations were divided into three components:

### Year I II III IV

#### Component 1: Written examination: set by SA Nursing Council

<table>
<thead>
<tr>
<th></th>
<th>GNSA I 1 x 3 hr</th>
<th>GNSA II: 2 x 3 hrs</th>
<th>GNSA III 3 x 3 hrs</th>
<th>Final Midwifery N.Sc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td></td>
<td>(Medical Surgical)</td>
<td>On specialties</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>content below</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anatomy 2 x 2 hrs</td>
<td>Physiology 2 x 2 hrs</td>
<td>SSSC 3 hrs PPM 3 hrs</td>
<td>+ Oral</td>
</tr>
<tr>
<td>Number of papers</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>or</td>
</tr>
</tbody>
</table>

#### Component 2: College Internal examinations

Pass these + oral + practica before entry to written component

<table>
<thead>
<tr>
<th></th>
<th>Ethos</th>
<th>Biophysics</th>
<th>Applied chemistry</th>
<th>Introductory Midwifery/ Psychiatry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passmark</td>
<td>40%</td>
<td></td>
<td></td>
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</tbody>
</table>

#### Component 3: School: hospital examinations

50% passmark on continuous assessment

<table>
<thead>
<tr>
<th></th>
<th>Oral and Clinical Practica I II III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above contributes to GNSA</td>
<td>I: 50%</td>
</tr>
<tr>
<td>Pass clinical practica on Midwifery/ Psychiatry before end of third year</td>
<td></td>
</tr>
</tbody>
</table>

Legend: GNSA: General Nursing Science and Art. N Sc: Nursing Science

Content of GNSA II

Paper 1: Gynaecology, Ear Nose and Throat, Ophthalmology, Endocrinology, Metabolic conditions, Central nervous system condition, Neurology and Neurosurgery.

Paper 2: Orthopaedics, Dermatology, Auto-immune disease, Oncology, Infectious diseases, Geriatrics

Paper 3: Operating theatre and Anaesthetics, Ward administration, Clinical Instruction, Recording, Professional practice, Disaster Nursing Science.
The later period, 1984

The examination subsystem was not prescribed by the Nursing Council. The college proposal was approved by the University and the SANC.

The following Carinus College system evolved:

<table>
<thead>
<tr>
<th>Year</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Fundamental N.Sc. or Nursing I</td>
<td>Nursing II</td>
<td>Nursing III or Final Primary</td>
<td>Nursing IV</td>
</tr>
<tr>
<td></td>
<td>Anatomy &amp; Physics</td>
<td>Medical &amp; Surgical Nursing Science according to body, including specialities</td>
<td>Secondary Tertiary Health Care of four disciplines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychology &amp; Chemistry</td>
<td>Social Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinical Practica I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<td>III</td>
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<tr>
<td>IV</td>
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</tbody>
</table>

Nutrition, Microbiology and Parasitology, and Pharmacology were included in all disciplines over 4 years.
Changes in Practica components time.

These are periods of time, prescribed by the SA Nursing College, which a student shall spend in a particular health unit.

**Middle period**

The 1975 Integrated courses provide a departure norm for discussion. It was required to spend in units of one month as follows: Medical - 4; Surgical - 4; Gynaecological - 1; Paediatric 3; Casualty and Outpatients 1; Preventive and promotive health in community 1; 6-8 months in Psychiatry and/or Midwifery. The latter are further sub-divided to cover necessary learning experience. Night duty period not less than one twelfth and not more than one quarter of the course. The rest of the time is spent "upon discretion of the Institution".

**Early period**

In the 1953 regulations periods were not prescribed, with the exceptions of "shall spend at least three weeks in the operating theatre" and that "30 demonstrations (shall) be given in the ward, at least 10 before entering the preliminary examination part 1". In 1960 the structure of the practica subsystem was much like the middle period. Of interest was the 6 month spent nursing patients with communicative diseases. Hence the nurses of that time obtained a "Certificate in Fever Nursing".

In 1963 the annexures of the 1953 regulations were omitted. A 40-hour week, (1 day off per week) and a 10-month period at college was determined. A scheme for correlating theory and practice was required. Although Ethics had been a subject since 1953, it was now linked to Conduct of Nursing Practice.

**Late period, 1984**

The first regulation (2118) promulgated determined practica periods, but this was repealed by R425 which merely gives broad indication of time to be spent on disciplines. Most planning had been done on R2118 and the
majority of schools follow that pattern, broadly speaking. With the University affiliation, approval is made of curricula by them, as well as by the SA nursing Council, so that the system remains more or less intact; (given in hours): General N. Sc. 2840; Psychiatric N. Sc. 800; Midwifery N. Sc. 800; Community N. Sc. 320. The general components approximated the middle period. Midwifery, Psychiatry and Community Nursing Science practica periods were specified in small components according to essential learning experiences.

ENROLLED PUPILS

The course for enrollment as an auxiliary nurse, known as the E.A.N. course, commenced on 2.5.1970 according to the SANC Regulation No. 45 of the January 1970 – SANC Circular 34/70. No. R959 of 28.6.1963 regulations for the training of auxiliary nurses (males) and R No. 958 of 28.6.11963 regulations for training of auxiliary nurses was the forerunner of the 2.5.1970 R45. This 2-year certificate for Standard 8 candidates enabling them to become staff nurses was promulgated as a result of:

1. The need for an auxiliary category in the health service, particularly in the then homelands and independent states.

2. Standard 10 had become a minimal admission criteria for students. Nurses with Standard 8 and 9 school leaving certificates, especially black and coloured South Africans, would be excluded and an alternative route of nursing education was required so as not to lose this source of manpower.

3. By 1969 it was evident that the revision of basic and post-registration courses would continue and that difficulty levels were increasing. Inevitably not all students would be able to meet basic course needs and so as not to lose candidates to nursing, an alternative and easier route of study was welcomed. Upon completion, enrolled nurses became staff nurses, but the latter word has another meaning.
4. The staff nurse route: Historically, upon completion of the basic course for registration as a professional nurse, the incumbent became a staff nurse for about 2 years before 'taking the veil' i.e. applying for a sisters post. In the latter sixties, this practice was discontinued and all registered nurses automatically became sisters. A void was evident, and it was thought it could be filled by the enrolled staff nurse. This reasoning on the part of professional nurses was not entirely watertight and it led to problems.

The rolls  According to the (SANC) Fifth Council report, rolls were first established in 1958 in terms of the Nursing Act No. 69 of 1957. "The original admissions to the rolls were persons who held provincial nursing assistant certificates, provincial midwifery assistant certificates, and persons who were admitted on certificates of competency under the provisions of Section 44 of the Act". [Fifth Council report: 1.4.1965-31.3.1970 : 43]

The first syllabus in 1970 encompassed the following minimal 40-minute periods of education. Ethical foundations of nursing 5, Hygiene 20, Anatomy and Physiology 30, First Aid 16, Nutrition and Cookery 12 and Nursing 100. This resembled the very early student nurse courses. Most schools increase the SANC minimums according to their interpretation of the health needs to be met by the pupil or student. In the case of the EAN courses, unfortunately, vastly inflated numbers of lectures, increases of 50%, 60% and even a nearly 300% increase in the courses on nursing led to an overeducated product engendering further problems.

R 253 of 14.2.1975 and the Directive 14.2.1975 led to: 1) SANC increases in lectures - Ethical foundations of nursing; 2) A common course part and five elective parts: Nursing 10; Preventive and promotive health 60; Anatomy and Physiology 60; First Aid 16; Nutrition and Dietetics 15, The Nursing process 120.

Other than the increases stated, the preventive and promotive aspects of health were emphasised, Human Relations was introduced, as was Medico-Legal Risks and Disaster Nursing. The greatest change was that nursing
would be carried out according to the scientific process. Once more schools increased SANC numbers

Common and elective parts

This regulation related to the 1975 Diploma course changes reflecting the different and changing health needs of the time. A common basic compulsory course known as Part A had to be followed by all pupils, and of the elective courses B, C, D, E, F, one chosen course had to be followed. The elective courses were Part B: elective general nursing, C: elective care of the aged, D: elective nursing care of mentally retarded persons, E: elective community health nursing, F: elective psychiatric nursing. The Carinus Nursing College and its affiliated hospitals offered Part B.

The elective general course was most frequently offered nationally, as the employment opportunities with such a qualification were greater.

The College offered the theoretical content of the course over a 6-month period, spread over 2 years, and the hospitals did the practical training. For the College, the provision of tutors for this course at a time of tutor shortage was difficult. A relentless conveyor belt scheme was instituted whereby the entire curriculum was repeated in 4-month periods, three times per annum, with pupils rotating through the system in various sets. This led to an easy access system whereby numbers far in excess of the requirement could be trained.

Regional and National problems with reference to enrolled nurses

1. Regional

The staff nurse position in the ward hierarchy created confusion. The supposed void (the absence of the staff (registered) nurse) was never there, since the old staff-nurse posts had, by and large, been changed to sisters posts, occupied by sisters, and the junior sister was in fact the "old" staff nurse. Often an enrolled person with a 2-year training was placed in the position of ‘sister’s assistant’, and
it was not justified as there were third year students with 1 year more education to fit into the hierarchical position. To date this is still a problem.

2. National

Gradually an artificial market was created for this sub-professional group of staff nurses. In several matrons/‘principals’ meetings the need for posts for staff nurses was discussed and more posts were created by manipulating establishments(1) to the disadvantage of the professional student group.

3. Increasingly, more enrolled nurse were trained, particularly in times of student shortage and also as a result of the longer period students were away from wards, until enrolled nurses became the most stable, and thus the most readily available group for giving service, and an artificially created backbone of patient care.

4. Students have a more demanding and thus a longer course and are more often absent from hospital. The enrolled nurses were used to fill the gaps of the students’ absence. Pupils could be appointed in student posts as they (the pupils) were of lower rank position in the establishment, as discussed in Section 9.1.

5. The increased number of lectures at college, and the overtraining in practica at the hospital, led to the overeducated staff nurse. (‘Overeducation’ means that excessive width, and not so much scope and depth, increase in insight took place). She was thus prepared to, and was used to, carrying out traditional professional nurse functions actually forbidden in the regulations controlling the scope and practice of enrolled and registered practitioners. Literature of recent years reflects the questioning of standards of care of sub-professional groups, increased litigation as a result of acts and omissions, the abuse of the sub-professional group, the vastly

(1) Establishment means the number of staff posts (of certain categories of staff) in an institution.
Registered medical practitioners and interns
Supplementary health personnel

Figure 9.1: The RSA's professional health workers distribution, 1987

Table 9.1: Growth of qualified nursing force in RSA 1960-1986

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>GEREG. VERP.</td>
<td>24 096</td>
<td>30 864</td>
<td>38 203</td>
<td>43 521</td>
<td>53 528</td>
<td>63 345</td>
<td>64 917</td>
</tr>
<tr>
<td>ING. VERP.</td>
<td>3 101</td>
<td>5 949</td>
<td>8 355</td>
<td>14 403</td>
<td>19 430</td>
<td>21 094</td>
<td>23 924</td>
</tr>
<tr>
<td>RATIO</td>
<td>1:5158</td>
<td>1:1791</td>
<td>1:1791</td>
<td>1:1791</td>
<td>1:1307</td>
<td>1:1791</td>
<td>1:220</td>
</tr>
<tr>
<td>ING. V. ASST.</td>
<td>—</td>
<td>—</td>
<td>26 313</td>
<td>35 951</td>
<td>39 056</td>
<td>42 155</td>
<td></td>
</tr>
<tr>
<td>RATIO</td>
<td>—</td>
<td>—</td>
<td>1:960</td>
<td>1:960</td>
<td>1:960</td>
<td>1:960</td>
<td></td>
</tr>
<tr>
<td>TOTAAL</td>
<td>27 197</td>
<td>36 813</td>
<td>46 558</td>
<td>84 237</td>
<td>108 909</td>
<td>122 495</td>
<td>130 996</td>
</tr>
<tr>
<td>RATIO</td>
<td>1:310</td>
<td>1:310</td>
<td>1:310</td>
<td>1:310</td>
<td>1:310</td>
<td>1:310</td>
<td>1:310</td>
</tr>
</tbody>
</table>

Gereg. Verp. = Registered nurses
Ing. Verp. = Enrolled nurses
Ing. V. Asst. = Enrolled nursing ratio
Jaar = Year

Figure 9.2: Comparisons in ratio tendencies in qualified nursing force

Source: Kotze, W.J., pp.4 & 5 Curationis, Vol. 10 No. 4

Figure 9.2: Comparisons in ratio tendencies in qualified nursing force
decreased numbers of the professional group - a national state of affairs, of critical proportion.

**National problems and consequences: changed tendencies in the nursing profession by 1987**

Statistical analyses of the structure of the nursing force by Kotze (1987) indicate:

1. Undesirable ratio of professional and enrolled nurses
2. According to the RSA professional health workers percentage distribution, nurses are the majority care-givers with a growing enrolled nurses' manpower
3. Sharp decrease in student numbers
4. Irrational increase in enrolled nurse senior certificate holders
5. Disciplinary hearings involving enrolled nurses on the increase
6. The responsibility of the profession in respect of disciplinary hearings

The difference in numbers of registered nurses and the enrolled categories has narrowed drastically over the past 15 years. A ratio of 0.98 : 1 was reached at the end of 1986, as compared with the ratio in Britain of 4 professional nurses to 1 sub-professional category. [SANA : 1987 : 4]

The RSA’s professional health workers distribution as in 1987 is reflected in figure 9.1:

Nurses are clearly the majority of health care givers and have a vital contribution to make in the RSA as 55% of the total health manpower force are professional nurses and 17.4% are enrolled and assistant nurses, making a total of 72.5% nursing manpower. However the South African professional nurse faces a serious crisis in the standard and nature of health care given, since, of the total qualified nursing manpower, shown in Figure 2, 20% are professional nurses, 18% are enrolled nurses and 32% are assistant nurses, leading to undesirable ratios mentioned in paragraph 1.
The sharp decrease in student numbers and the corresponding increase in pupil numbers since 1981 "will aggravate the structural imbalance for at least the following half decade". [Kotze: 1987: 4] This perpetuates a professional nurse deficit, has negative consequences on professional development and healthy growth rates (from 12% in 1969 to 8% in 1980 as reflected in Table 9 and Fig. 9), as well as affecting the public image of nurses and standards of care. The latter is demonstrated by the analysis of the disciplinary statistics of the SA Nursing Council since 1965. The notable tendency since 1979 toward civil and criminal convictions is, in the main, attributable to the increased convictions of enrolled categories according to Kotze [1987].

From 1971-1986 the student numbers decreased from 80.1% in 1981 to 70.6% in 1986.

Increase in enrolled nurse senior certificate holders:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of enrolled nurses with a senior certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>26</td>
</tr>
<tr>
<td>1983</td>
<td>39.3</td>
</tr>
<tr>
<td>1984</td>
<td>52</td>
</tr>
<tr>
<td>1985</td>
<td>67.5</td>
</tr>
<tr>
<td>1986</td>
<td>78</td>
</tr>
</tbody>
</table>

The irrational increase in enrolled senior certificate holders points to a deliberate withholding of students from the 4-year comprehensive course.

An analysis of the statistics of disciplinary hearings held by the SANC, 1965-1987. [Kotze: 1987: 6] reflects the following:

Facts that are related to the changed structure of the profession are evident:

1. Registered nurses investigations decreased during the past twenty two years calculated according to 5 year periods (which are the terms of office of the Council) from 84%-77%; 55%; 48% and 45%. 
2. Enrolled category investigations increased from 16% to 23%, 45%, 52%, 55% during the same period. (EAN on rolls since 1958 and pupil and assistants since 1973. A significant increase is found in respect of criminal and civil guilt, and a shift in emphasis from professional transgressions is noticeable.

The analyses of professional disciplinary cases serve as potential learning experiences for the responsible professional group. Remediation affects all systems of nursing such as nursing management, nursing education and in-service education. The effectiveness of personnel management in respect of selection and human resources development, the effectiveness of curricular content and development, and the internalisation of learning and of professional practice, are relevant to this problem.

The experience of the nursing profession in the United Kingdom in this respect is pertinent. R.M. Pyne, deputy director of the General Nursing Council of England and Wales 1981, mentioned in Kotze, emphasises the importance of disciplinary hearings as learning experiences. The disciplinaries are symptomatic of voids, samples of which come to the council's attention, and conclusions are:

1. "That we fail to educate nurses to understand what it means to be members of a profession so that they see their role only in terms of job rewards, rather than as professional employment with its large responsibilities.

2. We often fail to educate nurses to understand professional responsibility."

Responsible management has a role in preventing disciplinary cases by:

1. Maintenance of a setting, assisting growth, and improvement, and the right attitudes.

2. The responsibility to the public to ensure that appropriate checks of employees are carried out.
3. The provisions of adequate settings in which patients are cared for where nurses are not rendered vulnerable by excessive pressure

What lessons emerge?

1. That we are party to a system that fails to prepare enrolled nurses for their role, and using them in ways for which their training was neither designed nor intended to prepare them

2. That we are training two categories according to very different training and examination systems and then using them interchangeably

3. That we are abrogating professional responsibility by seeking short-term solutions with little thought for long-term consequences

4. Failure to recognise stress engendered in all parties concerned

In the final analysis, the quality and content of educational programs for basic, post-basic and personnel development education is necessary to solve problems regarding the following concerns in the profession by:

1. Re-organisation of basic courses, determination of student manpower at a national level

2. Redesigning post-basic courses to inter alia to counteract the drop in the growth rates of these courses, to ensure future leadership and effective course specialisation and the determination of post-registration course needs at a national level

3. Effective personnel and human resources development

The end of the enrolled category

By 1987, the intention of the SANC to withdraw enrolled training regulations was published so that the last intake would be 1989. The date has been withdrawn, and no final date has as yet been set.
Since the increased demands on the college by the comprehensive course, in the face of an acute tutor shortage coincided with the council's announcement. It was decided that the hospitals would continue with the enrolled course until its cessation. The college would complete the course for existent pupils in their circuit, with the last qualifying by May 1989. Enrolled nurses are not within the college-University agreement.

The bridging course

Many enrolled nurses have a senior certificate. In view of the large numbers of enrolled nurses, and the critical shortage of professional nurses, an additional 2-year period of training can be undergone by staff nurses in the future, enabling them to become professional nurses. Whenever the SANC promulgates regulations that permit a course upgrade, holders of qualifications of the course being upgraded are always protected.

Of importance in the bridging course are:

1. The successful candidates will be singly registered in General Nursing or in Psychiatry

2. Such candidates would be able to obtain additional (to General Nursing) qualifications, as the route to post-registration courses is open to such candidates. It is the policy of the SANC that professional nurses be at least doubly qualified - Midwifery Nursing Science being the essential second choice.

3. As compared with the present comprehensive course, the "bridging upgrade" is not ideal, but with the post-registration avenues available, in time, the differences could be eliminated, but not the costs. Once the proposed post-registration course's redevelopment is promulgated, it may make a difference, as more qualifications could be obtained in a shorter period. The need for a comprehensive health nursing practice is not just an ideal, but a very real need to meet the health needs of the respective communities.
4. Only enrolled general and psychiatric nurses qualify for the bridging course. Rightly, the Department of National Health and Population Development are not supporting the Psychiatric bridging course, as too great a number already hold only the single Psychiatric qualification. It follows by implication that the singly qualified registered psychiatric nurse is now encouraged, (more than before), to become qualified in General Nursing, and this is permissible by general nursing course regulations for an 18-month short course.

5. Only enrolled nurses with a Standard 10 educational qualification may apply for the bridging course. It follows that those without a Standard 10 are now encouraged to matriculate in order to further their career development.

6. Commission for administration norms for promotion are now such that, without the necessary qualifications, promotion is not possible.

7. Finally, in summary, the bridging course is about improving general educational standards, improving professional qualifications, creating avenues for further development, and increasing professional nurse numbers. All these have as aim an improved product able to give more appropriate care.

In the next and last chapter the scope of practice of South African nurses is discussed. There is a correlating relation between the scope of practice and all the subsystems described.
At the end of the throughput, the product of the system, having complied with course requirements, becomes the professional nurse ready to practise her calling within set parameters according to the scope of practice regulations for professional nurses, midwives and the enrolled nurse. In South African nursing legislation, the student nurse during her educational period is treated as a would-be professional nurse and nearly all legislation pertaining to professional nurses is thus also applicable at student level. This ensures that the student is being prepared for her professional nurse's role while she is a student professional nurse.

This chapter describes how the development and implementation of a nursing scope of practice influences the nursing system, so that it adapts to the milieu and motivation provided by the scope of practice in order to conduct practice.

The chapter commences with why a "scope of practice" is essential for nursing practice. Two schematic figures are given to demonstrate that the scope of practice consists of elements of the professional practice system; and demonstrating that a scope of practice defines eight elements of practice according to both Searle [1986] and McCloskey and Grace [1985]. In analysing documentation i.e. regulations promulgated by the SA Nursing Council (SANC), three periods emerge, demonstrating changes in the content of meaning in the historical progression of this system during 1949-1984. It also became evident that there is a correlating relation between scope of practice and curriculum development. Thereafter the general position of SA nurses in relation to the scope of practice is noted. The role of the SANC in defining the scope of practice as a part of its regulatory function is outlined. The nursing system is a cooperative system, and this is discussed by comparing Parsons' imperatives on structural-functional organisation of systems, and imperatives of the scope of practice. This is followed by an interpretative discussion on the necessity to define a scope of practice in broad terms. Thereafter the historical evolution of the scope of practice is dealt with by
examining the earlier legislation on conduct, and acts and omissions and prescriptions. Historically, certain elements of nursing behaviour were addressed by the aforesaid legislation, and these are isolated. The chapter ends with an analysis of the four chapters of the scope of practice according to a personal systems interpretation.

Why is a scope of practice essential in nursing practice?

All registered professions define their scope of practice. This is essential, as only persons registered in a particular profession may perform acts pertaining to the profession. Practice of a profession thus "requires knowledge of its scope of practice and rules or conditions under which a person may practise." [Searle: 1986: 171] In nursing and midwifery practice this scope is defined by regulations promulgated under (section 45(1)(a) of the Nursing Act, 1978 (Act 50 of 1978). This regulation authorises the Minister to define: "the scope of practice and the conditions under which registered or enrolled persons may carry on their profession, the control of which shall be exercised by specified officers of the Department of Health, and of local authorities over the practice of enrolled midwives, and inspections which shall be carried out in connection with enrolled midwives."

The ICN policy statement in 1977 on development of nurses and areas to be attended to, holds that defining the scope of practice was essential for research, imperative for the role and function determined, as well as ethical control of profession and development of the profession. Lack of scope delays professionalism.

The scope of practice is a subsystem of professional practice. In Chapter 2 the parts of a system were noted. The position of the scope of practice in professional practice, as a system, is demonstrated in Figure 10.1 on the next page. Figure 10.2 demonstrates the elements in a scope of practice.

In analysing the conduct regulations that preceded scope of practice documentation (and the content of meaning), the following historical periods emerge:
FIG 10.1: THE SCOPE OF PRACTICE IS A SUBSYSTEM OF PROFESSIONAL PRACTICE. IN CHAPTER 2 THE PARTS OF A SYSTEM WERE NOTED.

FIG 10.2: A SCOPE OF PRACTICE MODEL DEFINES EIGHT ELEMENTS OF PRACTICE
Period | Dates | Content
--- | --- | ---
Early | 1949-1977 | Conduct oriented detailed prohibition of certain acts - narrow, task oriented
Middle | 1978-1983 | Expanded role to practise independently, and to practise under supervision of next higher part (of order) wider and conceptual
Late | 1984 | Broad conceptual independent practice, acknowledging dependent function, comprehensive concept.

Relationship between scope of practice and curriculum. Comparing the above analysis with the analysis of curriculum changes, the relationship is evident. In the early period when the nurse was a medical and surgical practitioner (who had some knowledge of social aspects of care), a conduct sequence that related to tasks of what may or may not be done was commensurate with the philosophy of the time. The 1969, but particularly the 1975, regulations on the "Integrated" course increased the scope of nursing practice, integrated aspects of skills which meant that an expanded role of practice could safely be undertaken and supported. The 1984 curriculum of the "Comprehensive" course broadened and interdigitated skills. Philosophies had changed, professional practice had flourished, roles clarified, more categories of nursing had developed. The balance between the subsystem, professional practice, and environmental influences had been struck, and stability prevailed. Room for flexibility was secured so that the system would suffer limited change without severe disorganisation. There is, thus, the trend that curriculum change, and scope of practice change have strong correlating relations.

General position of South African nurses in the scope of practice

South African nurses, unlike nurses in many other countries, have never had to contend with highly prescriptive regulations in their scope of practice. They are permitted to carry out tasks in the widest sense, but
within the confines of the professional nursing regulations, of the law and legal restraints in allied health professions.

Thus there is no limit to what a nurse may do as a nurse. "Circumstances, social need, the conscience, the knowledge, the skills of the nurse and, above all, the immediate needs of the patient, must decide what she shall do, and where, how and when she must do it." [Strauss: 1982: 3]

South African nurses are held responsible and accountable for their own acts and omissions to the professional regulatory body, the South African Nursing Council, and also to the law of the land. The onus of inculcating the necessary professional attitudes, and reinforcing and maintaining these in the neophytes of the profession, rests not only with the educational system, the college, but also with all the other nurses supervising student activities. This goes deeper. The ethical and moral obligations of "responsible others" such as parents, school and society, have the task of laying the foundation upon which any future profession can build.

In South Africa, in the absence of comprehensive training in the past, the multiple registrations have enabled the health services to acquire much needed personnel. "But there are problems of practice arising out of multiple registration. The registered nurse or midwife who holds multiple registrations must not only know the scope of practice of these registrations but also the scope and practice of enrolled nurses and enrolled nursing assistants because of her supervisory responsibility in their practice and consequent liability." [Searle: 1986: 34]

The liability for the deeds of another

Although "the nursing profession is governed by the Nursing Act 50 of 1978", Strauss [1987: 14] ... "the employer, e.g. the hospital authority is held liable for negligence of an employee." [op cit: 26] The nursing head of a hospital authority involved in a case of negligence would share this liability. So there is a stiff price to pay for the wide scope of practice permitted nurses [and to which there is virtually no limit]. This shared liability then leads to strong measures of control in both the
educational and administrative systems, to ensure that appropriate inputs are made to safeguard the environment, the system, and the patient, and in order to maintain a balance.

Roles and defining scope of practice as a regulatory function of the SA Nursing Council (SANC)

Scope of practice regulations arise from the need to clarify the role of the nurse. Role is a sociological concept formulated (but not exclusively) by Talcott Parsons on his frame of reference of action. The human actor is the smallest unit in society, and in interacting with other actors develops action and a modus operandi, the role, with reciprocal interactional responsibilities developing.

Defining scope of practice is part of the regulatory function of all professional Councils. Since Section 45(a) of the Nursing Act of 1978 contains the most significant proviso and is also an unambiguous indication that only the Council can control matters related to basic education and scope of practice, the Council is the supersystem. Through the scope of practice, agreement of outlook of the system is ensured with respect to meaning and role of action of units in the system.

Imperatives of scope of practice

In discussing the imperatives of the scope of practice in nursing, the imperatives of the scope will be discussed according to the Parsons imperatives, assuming nursing to be a co-operative system.

According to Parsons' 1945, structural-functional analysis, co-operative systems are constituted of individuals interacting as wholes in relation to a formal system of co-ordination. Predicates about the basic need for self-maintenance, and repetitive means of self-defence can be made. The basic need of all empirical systems is, thus, maintenance of the integrity of, and continuity of, the system itself, and can be specified in terms of certain imperatives. [Selznick in Emery: 1981: 309]

Professional practice subsystems, and thus scope of practice and roles of nurses, assist in this maintenance and continuity.
Imperative 1: The security of the system as a whole in relation to forces in the environment.

This requires in nursing continuous attention to encroachment and forestalling consequences from actions of others. Thus a scope of practice sets barriers to the role, and prevents encroachment from allied health professions and also prevents possible subservience to these practitioners. The scope of practice is also part of the ongoing planning to place nursing on an equal footing with other medical related professions.

The scope of practice is not only important for professional status but also important for the status of the profession in society.

Within a scope, standards of practice for each of the elements in the scope should develop. The standards are how well nurses assess, diagnose, prescribe and evaluate care for health problems. The process standards alone do not assure quality of care; the individual practice, for example through peer evaluation, is also vital. Process standards can be met even with inaccurate diagnoses and prescriptions that do not result in desirable outcomes. The scope of practice strives to set the professional nurse as the most significant input in constructing standards of care, and thus assumes desirable outcomes as a natural output. Whereas the legislation is a very well-defined input to bring this about, the system of clinical nursing, with its diverse nursing population in the throughput, struggles with writing standards stated as outcomes. The lack of a clinical nursing practice model, and standardized diagnosis, contributes to this difficulty. Standards and assessment models are necessary nursing tools. The scope of practice guides professional activities, implements processes and activities, so these can evolve continually.

The elements developed enable nurses to improve their communication with one another, and others, concerning what their role is and what nurses do. The nursing diagnosis and nursing prescription indicates the substantive content of nursing regarding concepts describing problems or conditions that nurses are able and licensed to treat.
**Imperative 2**: The maintenance of stability of lines of authority and communication.

The scope of practice in directing practice clarifies the enrolled/professional nurse relationship for nursing and medical practitioners. In reading the scope of practice, together with the Commission for Administration’s functional descriptions of roles of the students, and all categories of nursing, there should be no further conflict. The highest part of the system in clinical nursing is the professional nurse, who directs nursing.

Historically, both the Nursing Act and the conduct/scope of practice, experienced opposition. Certain medical practitioners and allied health professionals acted as pressure groups to withstand and eliminate such legislation. Had success resulted, the stability of lines of authority and communication for self-governance would have blurred. The system of nursing would then be ready for take-over into another system.

**Imperative 3**: Stable roots relate to the continuity of policy (of a system) of the sources of its determinants.

For nursing it is necessary that there be a sense that action taken in the light of a given policy will not be placed in continuous jeopardy. There needs to be a sense of the permanency and legitimacy of acts which is achieved by seeking stable roots.

Thus it was a prerequisite for defining the scope of practice that the profession first had to obtain legislation to legalise the profession (as the most stable root) and thereafter to outline the scope.

The scope of practice forms a baseline for the practice, education, administration, and research. [Pera, Searle, du Toit: Unisa: 1988] The scope of practice is also a growth point for extension of nursing practice.

It is also a referral document of the nursing role, nursing functions and nursing accountability can be determined in legal and ethical disputes.
Imperative 4: There must be general agreement with respect to the meaning and role of the system, i.e. what the characteristics of the system are meant to be.

The scope defines terms, elements of the system are thus clarified, and the scope of practice of respective categories is outlined. The premise on which the content of the scope is based, can be deduced.

The content is based on contemporary health care, and the concurrent philosophy. The scope outlines a healthy system, with the ability to orient new members effectively (and slough of those who cannot adapt to established outlook).

The nursing regimen or nursing core delivery system establishes:

1. the primary or core concepts for delivering care through personal authority and accountability

2. the collective responsibility and authority that is established

Searle [1986] lists the premises on which the substantive (separate and independent existence) content of scope, R2598, is based: that nursing is practised within parameters - ethical and legal; personal accountability; professional right to own judgement; holistic bio-psychosocial care; comprehensive care; concern with total development life span; consideration of entire spectrum of aspects of health; relationship of care concerning dignity, rights and vulnerability of client, and position of trust occupied; validation of knowledge for nursing practice and maintenance thereof; the knowledge base of natural, biologic social-science intermeshed with arts.

Nursing "is not a series of procedures but an individualized form of treatment, care and support unique to each person in health care relationship..." [Searle: 1986: 175]

Registered nurses and midwives may take orders from a registered nurse, midwife, doctor or dentist, only.
An interpretive discussion on the necessity to define a scope of practice in broad terms

The broader the principle, the higher the accountability and responsibility of the practitioners. The narrower, and thus more prescriptive the scope, the easier it would be to overstep the factors that control nursing acts; if anything is left out, it falls outside the profession and could be claimed by other professions.

Expressing the role of the nurse through related scope of practice legislation, means that medical and other health professionals, and the public at large, through parliamentary representation, have accepted the nursing role as the statutory mechanism of passing legislation which includes laws being circulated through all relevant channels.

A scope of practice should not stand in the way of the responsibility that is incurred by nurses in health care. As new science and technology develops, new nursing acts develop and were the scope narrow, the acts might be outside the nurses’ scope. Thus open-ended and flexible regulation is essential. Furthermore, some nursing acts are compound, consisting of a number of elements. These could never be covered were the scope narrow, task-listed and procedure-based.

Were a highly restrictive and detailed set of regulations drafted, the police could charge any number of people for carrying out nursing acts, handicapping not only the nursing profession but the public itself.

The flexibility of the scope must be such that its utilisation is flexible within the knowledge and skill of the users universally.

There must be freedom to make changes, especially in technological aspects and range of responsibility, evolving within the ever changing situation of nursing. Many Southern African institutions practise nursing and use their own methodologies, and there would be interference were the scope narrow. In drafting laws, the scope for the profession should be interpretable by all in all roles, as nurses in the Southern African continent work in many places, and nursing practice takes place in many
situations. As an element of interaction in dynamics in a system, the system is dynamic, i.e. dependent on others and interactive.

One way of coping with increased costs of health care in the future is by means of self-care. The parameters of medical and nursing scopes of practice hold complex relationships in self-care. Flexible scopes would enhance self-care.

The historical evolution of the scope of practice

The first regulation on scope of practice of persons registered or enrolled in terms of the Nursing Act, 1978 (Act 50 of 1978), was promulgated on 30.11.84. Earlier the regulations published to deal with misconduct and the conduct of enquiries, as well as section 45(1)(a), indicated that the profession was well aware of its regulatory function.

Since 1963, conduct which shall constitute improper or disgraceful conduct, and the conditions under which all categories of nurses may carry on their profession, evolved by successive replacements. These regulations culminated in acts or omissions in respect of which the council may take disciplinary steps; furthermore, these regulations referred to the keeping, supply or prescription of medication, and the scope of practice. (1984)

As stated, there is now no limit to what a nurse may do as a nurse. This position has not always prevailed, as the 1978 amendment of major importance was replaced by the following:

"The registered nurse shall carry out such diagnostic and therapeutic activities as the profession admits either as an independent function, or, when applicable, under the direct or indirect supervision of a medical practitioner or dentist, or on his direction or verbal prescription." [Strauss: 1982: 3] - Derived from R481 of 10.3.78

This amended the 1973 regulation on the conduct of registered nurses (and also enrolled nurses), as to what shall constitute improper or disgraceful conduct. Even as far back as 1973, the nurses "could carry out such
therapeutic activities as knowledge and proficiency admits" with each category supervised by a higher part. Even after the introduction of this new ethical provision, there remained severe restrictions upon "the rights of registered nurses to perform acts amounting to what used to be regarded traditionally as medical acts" [Thompson in White (ed): 1988: 178]. These "medical acts" were: examining patients, diagnosing illness, dispensing medicine, and the promotion of family planning.

Regulation 38A, inserted in the Nursing Act No. 50, 1978 in 1981, gives the nurse the right, in special circumstances, to perform certain functions traditionally medical in nature. Now statutory provision was made for the expanded nursing role, "essential for effective health service in the country with a scarcity of doctors, particularly in rural areas." [Thompson: 1986] "The demands of health care in South Africa require a level of responsibility from the registered nurse which far exceeds that of her Western European counterpart." [Ibid: 178]

It is possible to trace the history of the concept "conduct" through the regulations that have been promulgated down the years.

Behaviour units that were included were limitations of practice, administration of anaesthetic under supervision in unusual circumstances, rulings on injections and blood sampling, suturing (as in anaesthetics), restrictions on advertising, breach of contract, the protection of professional reputations of others including holding council in contempt, professional secrecy (1963-1968). The 1973-1978 regulations withdrew limitation of practice, and permitted performing acts as far as knowledge and skill permits (1973), and included data on anaesthetics and injections.

The R387 of 15.2.85, to date is the longest document on "acts and omissions". Chapter 1, concerns definitions. Chapter 2 deals with items on wilful or negligent omission of aspects of practice; acts and omissions re advertising; name plate data; conditions under which financial remuneration is received or given; ruling on communication and illness certification; standards of medicines, apparatus and processes; acts and exhibition of certificates; partnership data; tendering
supersession in taking over clients; delay in obtaining medical assistance; professional reputation of others; exploitation detrimental to public or profession. R1650 of 14.9.73 and 481 of 10.3.78 repealed.

THE SCOPE OF PRACTICE

An analysis of the four chapters according to a systems approach

The scope consists of four chapters: A, B, C and D

A. Chapter 1 : Definitions
B. Chapter 2 : The scope of practice of registered nurses
C. Chapter 3 : The scope of practice of registered midwives
D. Chapter 4 : The scope of practice of registered enrolled nurses, enrolled nursing assistants and enrolled midwives

A. Chapter 1 : Seven elements of the subsystem are identified to clarify their meaning in nursing: co-ordination, diagnosing, health needs, nursing and midwifery, regimen, prescribing, registered person, and treatment.

The point of input is that registered nurses (according to Nursing and Medical Acts) bring together the actions of resources (health care members and client) in the system. They identify physical, social, psychological health needs (diagnosis). In processing the throughput, the prescribing of therapy, including patient advocacy, takes place. This is implemented by a nursing regimen considering preventive, promotive, curative and rehabilitative aspects. A systems approach of assessment, planning (including care plans), implementation and evaluation of outcome, goals, is ongoing. The output is a change in the health status.
B. Chapter 2: The scope of practice of registered nurses.

Herein, functional actions are broadly conceptualised. The nurse uses all the elements in part 1 to meet needs, and to refer to the next higher part in the system. The respective health aspects/processes are enumerated (prevention, promotion, etc.) including medication, monitoring, reactions, counselling, family planning, advocacy and teaching. The basic needs of the client that requires input are hygiene, comfort, exercise, rest and sleep to heal, body mechanics, oxygen, nutrition, fluid and electrolyte balance, all regulatory mechanisms, elimination, communication, optimal therapeutic environment, facilitating healing of wounds, protection of skin, maintenance of sensory function. More advanced needs of the client like operative procedures, as well as health care of other resources are noted. Finally inputs concerning death and dying are made.

All these are aimed at stability of the nursing health system and how to maintain equilibrium. It demonstrates that the interdependent, interrelated aspects of human development, including the child and the unborn child, are incorporated.

C. Chapter 3: The scope and practice of registered midwives.

The same elements are identified as in A. Chapter 1, but amended to deal with the child and unborn child (in the age developmental spectrum) and midwifery regimen instead of the nursing regimen.

Although the aim of midwifery practice is to ensure the optimum health of the unborn child, child and mother, the system as noted for general nurses in also applicable.

The course of pregnancy, the labour, the puerperium and the mother and child are managed in the throughput. The aspects of health are: prevention of disease related to pregnancy, labour, and puerperium by monitoring and preventing complications in these elements, including episiotomy, suturing and administration of local anaesthetic. The fulfilment of basic needs are the same, but specifically applied to the mother and child - breast
Figure 10.3: Nursing Regimen (as interpreted from the SANC Scope of Practice (of SA nurses))
feeding is included. Figure 10.3 on the next page demonstrates the application of the scope of practice in a systems approach.

The scope and practice of enrolled nurses, enrolled nursing assistants and enrolled midwives.

These regulations are not as yet promulgated and would embody Chapters 4 and 5 of the 'scope series'. The categories under discussion are "...nursing extenders, that is, they provide certain levels of nursing care under the direct or indirect supervision of a registered nurse or midwife." [Searle: 1986: 1] Since they function under delegated authority the registered nurses are accountable for the fact that they allow enrolled nurses to act beyond their scope or practice, as they are doing.

The enrolled nurse scope of practice encompasses certain acts and procedures initiated and planned by a registered nurse or midwife and which are carried out under her direct or indirect supervision as part of the nursing regimen. Thus enrolled nurses do not carry out professional functions; their functions relate to 'care' and not 'treatment' functions. The "enrolled" category carries out care, executes a programme of treatment, provides information, but does not prepare patient-teaching programmes. She does this in relation to aspects noted under the registered nurses scope in nursing regimen and basic needs, e.g. monitoring, hygiene, exercise, etc.

D. Chapter 4 : The scope and practice of the enrolled nursing assistant will be extremely limited, according to Searle [1986], and will be restricted to: 1) assisting the other categories of nurse in the nursing regimen initiated by the registered nurse/midwife; 2) performing procedures concerned with hygiene and comfort of a patient under supervision of the registered nurse or midwife. All categories of nurse are accountable for their own acts and omissions.

The scope of practice of the enrolled midwife will be limited to normal delivery; she can practice privately under supervision of a local authority. The need for this category in the rural areas is acute, as clients need care. The position must be legalised and supervised.
McCloskey and Grace [1985: 61] suggest that professional practice and use of the nursing diagnosis are best approached in "concert". Through the scope of practice, South African nurses are statutorily bound to value "diagnosing" to mean "identification of, and discriminating between, physical, psychological and social signs and symptoms in the human." Registered nurses make a nursing, and not a medical, diagnosis for the purpose of: i) identifying nursing needs to plan nursing care or action; ii) identifying a medical need, and hence the need for referral to a doctor or hospital; or iii) identifying a medical need, for emergency action by the nurse in terms of Rule 22 of R387 of 15.2.1985, according to [Searle: 1986: 176]

In analysing the elements in the scope of practice it can be said that the nursing diagnosis is the central input in all nursing. Not only is this so, as defined in the previous paragraph, but also in its widest sense, i.e. in identifying (diagnostically) input in all and every situation. For nurses it is a general state of awareness of the context of meaning of all inputs, in relation to their profession. As nurses mature professionally, they internalise professionalism to the degree their personal and professional lives become inseparable to a greater or lesser extent.

The systems approach is cyclical in nature. The chapter on the scope of practice provides the last piece to close the cycle within the parameters defined in this work. The conclusion forms the remaining chapter. By using a systems approach, new ways of perceiving people and the world are set in motion.

Nursing has a long established concern with human beings and their world. Nurses have developed practice mechanisms to support this concern.

The systems theory focuses primarily on holism, inter-dependence, control processes, information feedback, and the highly complex nature of all life forms.
During its history, the College continuously adapted to changes occurring in its environment. These adaptations occurred simultaneously, and influenced teaching students in how to channel their concern into the maintenance of health and the preservation of life. These key points have been discussed in preceding chapters.
In this concluding chapter the discourse will be presented in two parts. The first part covers the systems approach in general and the identification of relations. It also includes some rules of interaction because the larger society is visualised as a galaxy consisting of a myriad parts all of which interact in some way with some or all other parts.

In the second part, recommendations are summarised, trends are identified, and further research indicated, according to parts of the system and the chapters of this work.

A. Conclusions on the systems approach in general and the identification of relations:

Using a systems approach:

Using a systems approach has assisted in identifying the many interdependent elements in nursing. I believe the conceptual framework of the systems approach can be applied to any life experience, including discourses on past, present and future events. Some may see the approach as mechanistic, but all users have the freedom of personal choice. The frame of reference determines the observer's unit of perception.

"The holistic concept of a system, the manner in which systems interlink to form larger and more complex wholes, and the encapsulating nature of these progressively more complex systems, are central to the conceptual methodology of the General Systems Theory." [Meyer: 1987: 1]

The perception of what constitutes a system, and the selection of an appropriate level of analysis to study its behaviour, are dependent on the observer's frame of reference. The frame of reference determines the observer's perception, as reflected by this researcher and as perceived in participants.
The Carinus Nursing College is a system with many subsystems; it is itself a subsystem of a larger suprasystem. In turn, these large suprasystems are subsystems of the international supersystems of the world, which are subsystems of the universe as a suprasystem. Although the college system has boundaries which separate it from its environment, it does not exist in isolation, owing to the constant flow of material and information and other inputs which react with resources and are processed and converted to outputs in the throughput. In turn, the output interacts with suprasystems and resources, maintaining the typical cyclical feedback characteristics of the general systems theory. Thus an ongoing process is created and the system legitimises and justifies its existence. The system's continued existence is further justified if it continues to be negentropic - open and subject to dynamic differentiation. It is self-regulatory - controlled by feedback of information from the environment and from within the system itself.

Having used Feibleman & Friend precedents to systems theory in Emery [1981: 41-67], the elements of relations, rules of interaction, and kinds of interaction were researched and applied in this work. By studying the college system, past, present, and future interactional relationships with its environment can be understood and the influence of participants defined - demonstrating its ongoing place in the environment. It also demonstrates how new input is generated through its output - of relevance to the future. Pathways for new goals, values and philosophies are created. In examining the resources, the relationship of finances to suprasystems and to the system itself, is clarified. The historical constraints and progress factors that influence the human resources were identified - the tutors and students - their learning and management needs, utilisation and interactions differentiated. The buildings wherein the system operated historically developed relations and rules of interaction requiring adjustment.

In the throughput, understanding is facilitated as to how, during the process of conversion, the educational and administrative subsystems interact to create the product - the professional nurse who provides health care to the environment. The goals, values and philosophies interact in education with psycho-social, technical, structural and
managerial subsystems. This takes place in the form of productive teaching, learning and studying subsystems that utilise changes in curricula and also create inputs that change curricula. Further interaction is evidenced by the relationship of the scope of practice of the output with the said subsystems.

Nursing education is a rich field for further study, and only certain aspects could be researched in this work. Recommendations and avenues for further research were outlined throughout the work and reflect routes for future investigation - towards co-operation as a mechanism of adjustment of absorbing new elements as a means of averting threat and ensuring stability in the nursing educational system.

Having stated that the observer's frame of reference determines the perception, it can be said that health systems currently base practice on holism in health as a central theme.

Considering the bio-psycho-social aspects of human health has been a firmly established trend since 1982. The perception of community health involvement is a poor law nurse heritage, and it was lost for generations. Although now perceived as important, there are limits, as only the most visible categories of functional relationship are a reality. Some perceptions of reality in the case of these health trends are conflicting with reality. Currently, nurses' actual involvement with psycho-social aspects is insignificant in comparison with the physical biological input. However, contemporary nursing education stresses to students the totality of bio-psycho-social aspects. Students are elements, and interact with other elements in the system, and resultant behaviour is modified relative to the perceptions of both sets of elements. The possibility of the loss of, or the contagion of, the new trend exists.

The extent to which a nurse can participate actively to make a significant difference to the social environment of health, needs to be enlarged upon. There are powerful constraints mitigating against this, for example the strong role identities of other health professionals.
It is quite appropriate to investigate and describe complex systems in terms of attributes that constitute them, rather than in terms of the constituents. Collections of attributes have developed and have within them sufficient momentum to continue growing. Health systems continue to decentralise to form smaller subsystems to manage health on local levels and attend to local needs, but maintain a central overall control and planning of functional systems. These smaller decentralised subsystems will address health at primary health care levels, and health should become more appropriate and available to a wider spectrum. Structure of the health care system is fragmented and when political stability is achieved the fragmentation could be addressed and a unified system (or whole) could be restored.

The influence of supersystems create factors that bring about change in policy and practice which have been identified in this work as significant stimuli.

Policy and practice elements of interaction are largely generated in the environment and to a lesser extent in the system. The elements in the system are products of the environment and though individually display different perceptions, are in turn creating the environment through inputs so that action-reaction dynamic elements exist.

Social change as a supersystem input from the environment has a powerful effect on policy and practice in nursing education. Alvin Toffler likens the social perspectives of change to a collision of waves causing successive changes.

During these collisions, adaptation occurred. Even though all organisations as systems strive toward equilibrium they have flexibility and thus adaptability as a condition of growth. This is significant in the future in that the knowledge of the reaction of a system in the past is a good indication of its behaviour in the future, eg. if an institution survives setbacks it will do so again.
B. A summary of aspects of recommendations made and trends that are relevant:

1. Part I, Chapter 4, structural-functional organisation.

Section 4.1. Consequent to colleges developing as fully functioning tertiary educational bodies, more diversified forms of structural-functional organisation can be employed without necessarily sacrificing eclectic approaches. Systems should be designed according to contemporary practice, for example, in consultation with graduate schools of business of Universities, to which colleges are affiliated. Colleges could reorganise their new approaches in terms of structural configuration, prime co-ordinating mechanism, and key part of organisation, to encompass growth and decentralisation, and to gain equilibrium. Adhocracy should be included with its prime co-ordinating mechanism of mutual adjustment. It would be advantageous to utilise SAPSE programme classification structure, (PCS), and to utilise the five subdivisions of the programme which express educational norms, through definitions and codes which permit of a common language and understanding. Employment of the linking-pin concept assists in strategic planning of (especially) resources.

Information processing from the environment and within the organisation is of increasing significance. For example, in development of computer systems; employment of uniform methods of data collection; setting up standards for structure, process, and outcome; researching, monitoring and evaluating standards of quality of nursing care. Greater dedication to evaluation of all activities has become essential.

Section 4.2. Committees, boards, Senate and Council.

Re-negotiation of the memorandum of agreement with the University and the CPA, to include student representation on college committees, Senate and Council; representation of all affiliated hospitals on Senate and Council. At present these hospitals are represented by the academic hospital; availability of more university facilities to nursing students, negotiable on individual basis with a numbers restriction. All nursing academic programs, including year courses and post basic courses to be affiliated to colleges to be governed by Senate and Council for enhanced support and
exposure to tertiary education as well as a wider spectrum of skills and more external influence.

Whether or not the Hospital Board system justifies continued existence could be researched. Many changes and adaptations have occurred in the midst of contemporary management practice, and the newly created health systems' functions could be renegotiated.

In view of the new educational dispensation, urgent rationalization of the position of college systems within regions, is necessary. These concern: powers and functions of College Council and College Senate; necessary clerical/administrative staffing; legal powers; appropriate infrastructure, and the newly created communication routes to Provincial Administration via regional structures.

Rationalisation of many committee structures which presently strains resources is a matter of urgency.

2. Part II, Chapter 5, supersystems: socio-politic changes.

In the specific;

Section 5.1. Socio-political changes indicate the need to provide more assistance to maintain good human relations coping with complex South African cultural, social, political and economic effects which cause considerable dis-equilibrium. Many students have unresolved problems and if these are not resolved they can cause resignation and could be a deterrent to recruiting, and keeping, staff and require research.

To promote a clearer understanding of the role system in nursing based, on the independent nurse practitioner.

To further independence in nursing students, who, as independent nurse practitioners, can assist to make the deficit of medical practitioners in the future good.
to ensure that the vital statistics of the population are the indicators of health care,

to do everything possible to end professional isolation,

to gain the support of the medical fraternity for the nursing cause, and, as their opinion of nursing is probably based on experiences at the bedside, the state of the art of clinical nursing is thus vital.

The tendency of an accelerating tempo of change is evident world-wide. A multiplicity of changes are occurring simultaneously within the profession and the environment. Although adjustment to change can be problematic, the 'change' leads to growth and development. Worldwide, people are moving away from autocratic and constricting regimes, and it is unlikely that totalitarian and discriminating political systems will hold sway by the mid-1990s. This will make a difference to educational expectations, and in the final analysis, change physical, psychological and sociological aspects of the health of man. Health is not a goal, nor a final outcome, because it is a process of growing and learning. [Rodd. 1989: 18 Study Visit Report]

Section 5.2. Health systems, national health.
The provision of more information concerning governmental philosophy and subdivision of health care. South African nursing education as part of the health systems is at present at risk and going into dis-equilibrium, because it teaches health care that is not implemented, due to lack of information. It is essential to ensure that the principles of the National Health Services Facilities Plan and health care philosophy are known and implemented by all, in order to render appropriate care. It is essential to institute programmes to upgrade deficits in skills as a result of the institution of new programmes. The elimination of discrepancies in nursing conditions, ranks, and salaries, is a matter that must be urgently resolved to prevent a crisis from developing, which may lead to collapse in the provision of health care. The crisis in nursing in South Africa came to a head in 1990. The shortage of nurses in hospitals and in other areas requires urgent attention. The nurse's image, the nursing salaries that are not market-related, the population growth, and
the discrepancies in health status of various groups are some of the contemporary issues requiring urgent resolution.

Amongst the many challenges South Africa faces, particularly in view of its complex demographic structure, the teaching and implementation of essential health care is an urgent need.

Section 5.3. Statutory bodies: The trend to encompass socio-political needs including collective bargaining and worker activism.

5.3.1. SA Nursing Association: In the face of changing political philosophies and values, there has been the elimination of racial selectivism clauses from the nursing association constitution. There is a need for the inclusion of collective bargaining in the powers of the Association. It could be necessary to prepare the profession as the Nursing Association may need to become unionised (as did the Royal College) in order that professional input be protected. In order to further the professional association, consideration could be given to a credit system, that would guarantee proven responsibility to activities of professional bodies. For example: voting, attendance at branch meetings when members are selected for jobs, promotion, increments, study leave, bursary applications, and financial sponsorship. The improvement of salary structures and the continuing furtherance of the acquisition of degree and post-degree qualifications is vital to professional growth.

5.3.2. SA Nursing Council: The trend to continue focusing all activities and all decisions on the health need of the South African population according to national realities.

To achieve the above, unnecessary prescription is avoided in order to fulfil long-term needs, and to avoid the pitfalls of short-term fluctuations in the nursing and political systems.

The tendency of growth and progress, and developing as a community institution, has become evident during the forty-five years of the SA Nursing Council’s existence. The Council controls a profession whose delivery of service is essential and vital to health. Through statutory regulation the State ensures minimal professional standards, and a
disciplinary system in the interest of community safety. There is self-regulation and thus autonomy, and accountability within the ordered institutions of the community.

As a result of changes in basic courses and community needs, it is essential to re-organise post-basic courses to provide a central and a compulsory core curriculum, plus 3 specialist pathways with elective courses within each speciality. In Australia and the USA, well-developed master's programmes, based on what is studied in South Africa at post-basic diploma level, flourish. The continued furtherance of South Africanism in nursing education means that nursing is organised according to typical national, regional and local needs. The institution of part-time courses in Community Nursing Science components would fulfill a dire need.

5.6. The University: Affiliation reflects the tendency for academic development.

The consideration of the growth and development of the department of Nursing to fulfill the burgeoning need of offering post-basic nursing specialist courses at clinical and non-clinical level. There is a pressing need for more graduates and post-graduates at honours, masters and doctoral level. The academic investments made in the development of the programme of the medical (and other schools) should also be directed to nursing.

5.5. In the hospital school system: The trend to centralise academic nursing education at colleges, developed.

The transfer of post-basic courses to colleges; avoidance of the dichotomy, between service and education needs, between academic and clinical expertise. The institution of new national and regional manpower need studies should be ongoing. The conflicts between the professional nurse and student on one side, and the enrolled nurse and pupil on the other side must be resolved as it is part of a looming crisis on a national professional nurse power (and thus health care) shortages.
3. Part III, Chapter 6.1, Resources: Improved development of resources is essential for future development of colleges.

Financial planning for colleges and nursing education in general, have (to date) not been defined, nor quantified. Information on the cost of all structures and functions is essential for day to day, and long term financial (fiscal) management. Present methods of allocation/control of funds should be researched. The financial costs of training enrolled categories should not be the primary consideration in the provision of nursing staff.

6.2. The physical resources.
Colleges were established at a later period than hospitals in South Africa, and as a result several trends developed. Existing buildings were converted to colleges. Dis-equilibrium had to be avoided. As the colleges were far from the hospitals, and students were resident in the hospital premises, colleges had to cater for this need. Geographical isolation followed, and the hotel functions became a heavy burden.

Geographical and functional isolation of colleges from health centres, where students do clinical nursing should be avoided at all costs. The application of planning and commissioning scientific principles in new ventures is essential. The necessary infra-structure should be created to cope with residential (hotel) needs of colleges. The inordinately high percentage of time spent on hotel function instead of education should not be allowed.

6.3. Tutor resources.
Improvement in infra-structure of posts in colleges that are at a grave disadvantage in comparison with administrative and clinical components. The CFA has approved the upgrading of the post of head of college. Several urgent appeals to the authorities to heed this have been made, to no avail. The reasons why such a state of affairs persists, is surely long overdue. The CFA establishment of realistic student/staff ratios consequent to appropriate development of establishments has become vitally important. The continued development of tutors at graduate and post-graduate level should be encouraged. Double standards need to be
eliminated e.g. tutors must obtain higher qualifications than the incumbents of other nursing components, but are paid less. The rank of principal at colleges should be retained owing to their linking-pin function with strategic apex, middle line, and operating core.

6.4. The international tendency of nursing shortages is also evident in South Africa.

There is an urgent need for remediation of the low student number to prevent breakdown in service as a result of the dearth that will develop in professional nurse ranks. This, as mentioned, is related to the need for national manpower planning, in view of projected needs. More vigorous research on selection criteria, and profiles on successful candidates is needed. Essential is the resolution of the conflicts within, in the status of students, as many have not internalised their comprehensive role. Greater student participation in health and professional systems has yielded dividends, and requires investments.

Urgent rationalisation of the establishments of General, Midwifery, Psychiatry, and Community Health units in view of the comprehensive course or 4-year course students who now work in all four of these disciplines/areas. Thus rationalising the establishment would make provision for more "training posts" and increasing student numbers. Furthermore, all efforts must be made to ensure optimal student numbers in all race groups. The newly instituted universal method of the SANC keeping statistics on student populations should be supported. Academic support programmes need to be instituted to assist students and to decrease losses. It is advantageous to support continued research and development on accompaniment of students in wards and to invest in staff so to do. It would also be wise to be alert to resolving conflicts in the double roles students must play as they proceed through the system.
4. Part IV, Chapter 7, Throughput.

The need for a working educational philosophy in the form of a teaching code wherein beliefs about the learner, the aim of education, learning content, and process of learning, as well as method of teaching, learning and studying, are outlined. Without this goal, it would be even harder to strive for excellence.

8. Teaching and learning, including study habits.

The insistence upon academic productivity as measured by research input and publication, is an element in which South African nursing education is by and large at a singular disadvantage.

The anomalous existent reward systems for nurse teachers should be reviewed urgently to include "good teachers" and to distinguish them from indifferent ones.

The state of the art of the curriculum development process is only relatively productive and demands remediation; the users are not entirely dedicated to focal points in curriculum development; there is an urgent need to develop curriculum specialists at master and doctoral level.

There is a need for critical thinking, as the Lancaster research indicated a profound contradiction between lecturers' intentions and what students achieved; critical thinking should be an integral part of nursing courses.

In this decade it is unthinkable to neglect the inclusion of the premises of adult education. The sustained student dependence on staff for knowledge should be cancelled. There should be constant course validation of achievement, and validation of learning.

Vigorous attention should be given to the fact that people are taught to learn but not to study. Most of us know how to be taught, we haven't learnt how to learn. The institution of study programmes is thus essential; study inventories are particularly helpful in making students think of study habits in a specific rather than in a general sense and for motivating them to "attack specific habits for development" [WSH I: 2]
Skilled assistance is required by students to remedy their habits of work, once they discover which habits are faulty.

9. Curriculum changes.
Regular changes should be instituted as this research indicated that educational standards, changes in health care needs, progression in nature and number of qualifications to give holistic care, changes of emphasis in health care philosophy, curriculum content and nature of examination, interact when providing pertinent education for health care givers.

Alternatives to the requirement of the senior certificate as a condition of entry to basic nursing courses should receive consideration.

Greater numbers of degreed qualifying candidates are needed in nursing. The majority of nurses should be degreed and not follow a diploma as now.

Limitation of registration.
The consideration, in the case of the comprehensive course student, to be registered in general nursing and such other sections of the 3 remaining components as would be desirable. The motivation is that students, for a number of reasons, may not be able (or it may not be desirable to attach all the necessary qualifications) to practise the full spectrum of the existing course.

The Bridging Course for admission to the register should be supported in order that the number of enrolled nurses decrease and the number of professional nurses increase. This should be subject to the inclusion of content and philosophy of the comprehensive course elements wherever possible.

Although some considerable opposition is experienced concerning the future training of only one sub-category of nurse (i.e., the withdrawal of the enrolled course), such a move by the professional body, the SANC, richly deserves support. The practical reasons furthered concerning the rural needs are based, as outlined in the relevant chapter, on the ease of training a pair of "enrolled hands" syndrome. This is dangerous,
particularly in view of the increased litigation the enrolled nurses are experiencing as a result of transgressions in nursing patients.

The pooling of educational resources on a national and a regional basis could be productive e.g. preventing course duplication, sharing expertise and resources.

It is essential to explore alternative methods of education, particularly based on student-centred (humanistic) and adult education philosophy. The employment of more innovative, creative didactics is an enriching human and organisational experience.

Research on, and greater dedication to the implementation of the nursing diagnosis, and the concommitant relationship it holds with the clinical core, can no longer be relegated to the future, if systems are to be in equilibrium.

The trends in contemporary nursing educational programmes and credentials.

In Britain, the Project 2000 programme was launched on a pilot basis in 1989, and was preceded by some considerable upheaval. Project 2000 resembles the 1984 South African Comprehensive course. In Britain, the General Nursing Diploma course continues and, as in South Africa, the intention is to discontinue the (2 year long) enrolled course. In both countries, only the one sub-professional groups - the assistant nurse - will form the auxiliary category. Education in Britain takes place in nursing colleges and polytechnics.

In the early eighties, rationalisation of the education system, including the nursing education system, in Australia took place. This led to the merging of various types of colleges into tertiary education colleges, called Advanced Colleges, similar to Technikons in South Africa. The tertiary or post-secondary formal education in Australia is graded into:
UG1 Undergraduate degree
UG2 Undergraduate 3-year diploma
PG1 Post-graduate diploma level
PG2 Masters degree

Nursing auxiliaries are also educated. The enrolled nurse training is of one year's duration, and nursing assistants do not hold a qualification. "Bridging" courses are available for auxiliary categories.

Trade unions have an active role in nursing education in Australia. [Source: Report to the SANC on a study visit to some states in Australia and Hong Kong by C. Searle and V. Woodward, 1989]

In the USA, the educational programmes and credentials obtained are:

<table>
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<tr>
<th>Educational programme</th>
<th>Credential</th>
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<tr>
<td>Registered nurses</td>
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<tr>
<td>4 year college or university</td>
<td>Bachelor</td>
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<td>(+ year post-degree speciality)</td>
<td>Master</td>
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<tr>
<td>3 year hospital school</td>
<td>Diploma</td>
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<tr>
<td>2 year community college</td>
<td>Associate degree</td>
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<tr>
<td>1 year licensed practical nurse</td>
<td>Certificate</td>
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<td>Nurse aide, orderly attendant on the job weeks/months</td>
<td>None</td>
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10. Scope of practice.
Dedication to the value that the scope of practice continues to be responsible for the maintenance of integrity, and also the continuity of the nursing system itself.

There should, within the greater society, be an increasing awareness of the stiff price attached to the wide scope of acts permitted nurses which are compounded by the increasingly diverse values of the various population groups. The dynamics of professional growth demand increasing excellence in teaching and learning, if the role is to be fulfilled, (as spelt out in the scope of practice legislation.)
Lastly, altered conceptual frameworks of reference must be reflected in post-basic education of nursing personnel.

For example:
- altered didactics where the tutor is a facilitator in health care teaching
- management skills upgrading
- competencies required
- able to respond to: health needs and demands of community; manpower development; development of information systems, participation in changed educational and health policies, crash courses; small corps of national leaders to further needs, continued review of syllabuses and new competencies and using problem solving approaches to student learning and so on.

Many more challenges face nursing education and administration in the future, and to judge by the achievement in the past, it should be possible to continue to assist in the maintenance of and the preservation of Mankind’s greatest gifts - HEALTH AND LIFE.
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B Comm (Registrar). The Nursing Council - its constitution and functions, 12 (3)

Nursing Inspectors, 12 (9)

Amendments to Nursing Act, 12 (9)

South African Nursing Council Notice of Election (and display of SANC badge for the first time), 12 (10)

Minutes of Committee of Nursing College Heads, Pretoria

The Expanding Role of the Nurse: Its Legal Base
S.A. Practice Management, 3 (21)

To-day's Nursing for Tomorrow's Health: Text of Inaugural Address, University of Cape Town
Cape Town: Curationis, 9 (4)

Nursing: The Challenges
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Manual of Directions of Study Habits Inventory
Standard University Press
3. ARCHIVAL SOURCES:

3.1 CAPE HOSPITAL BOARD (HBC)

1913- 1949
Treasurers Report of C H B:
4/6:  4/6/1 - 4/6/10
Minutes, Committee of Management
of Somerset Hospital

1929
HBC Volume No 70:
1929/01/07 - 1930/07/07

1930
HBC Volume No 71:
1930/08/01 - 1931/07/06

1944
HBC Volume No 144 33/3A Training
of Sister Tutor:
1936/09/01 - 1944/01/24

1944
HBC Volume No 145 33/4 Nursing
Staff, General
1932/01/06 - 1944/01/27

1944
HBC Volume No 146 33/8A Training
of Non-European Nurses and Midwives
1932/08/18 - 1944/01/05

1938
HBC Volume No 147 33/15 Hours of
Duty of Nurses
1918/09/17 - 1938/12/05

1947
HBC Volume No 170 A/66 Student
Nurses Training
1945/07/09 - 1947/07/12

1949
HBC Volume No 176 A/106C Nurses
Training and Block System
1944/06/21 - 1949/12/30

3.1.1 CARINUS NURSING COLLEGE
A 1291, Volume 1, 2, 3
A 1292. Volume 4, 5, 6, 7, 8, 9,
10, 11, 12

3.2 CARINUS NURSING COLLEGE ARCHIVES

1949- 1985 Minutes of the Advisory
1985 Committee

1970 Minutes of Meeting held re Enrolled
Nurses:  1970/03/24

1985- 1989 Minutes of the College Council
1985- 1989 Minutes of College Senate
### Annual Reports of Carinus Nursing College

<table>
<thead>
<tr>
<th>Year</th>
<th>To the Director of Hospital and Health Services</th>
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<tbody>
<tr>
<td>1949-1988</td>
<td>To the Advisory Committee</td>
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<td>1972-1988</td>
<td>To the Regional Medical Superintendent</td>
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<td>1985-1989</td>
<td>To the College Council and Senate: Semester Reports</td>
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<td>1949-1989</td>
<td>Monthly Reports</td>
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<td>1949-1987</td>
<td>January – December</td>
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### Personal Files

- Carinus Nursing College Personnel:
  - Miss C M Loopuyt
  - Mrs M M Gordon
  - Mrs B Goodchild-Brown
  - Miss P Harrison
  - Mrs P T Kingma

### Diverse

<table>
<thead>
<tr>
<th>Year</th>
<th>Carinus Nursing College Reports on Finances</th>
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<td>1949-1971</td>
<td>Carinus Nursing College Diverse Bookkeeping Records</td>
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<td>1949-1987</td>
<td>Comparative Summaries of Estimates and Expenditure: Carinus Nursing College</td>
</tr>
<tr>
<td>1949-1987</td>
<td>Carinus Nursing College and Carinus School of Nursing: Tutor Establishment Files and Returns of Teaching Staff to Cape Provincial Administration, and to South African Nursing Council and South African Nursing Association</td>
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<td>1952-1987</td>
<td>Programme Allocation of Students</td>
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<td>1953-1987</td>
<td>Plan of Teaching and Relevant Regulations</td>
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### 3.2 SOUTH AFRICA PROVINCE OF THE CAPE OF GOOD HOPE: HOSPITALS DEPARTMENT

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<th>Year</th>
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<td>1957-1966</td>
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4. MISCELLANEOUS

4.1 THESIS AND UNPUBLISHED MATERIAL

<table>
<thead>
<tr>
<th>Author/Material</th>
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<tbody>
<tr>
<td>Kotze, W.J.</td>
<td>1979</td>
<td>Thesis: Begeleiding in die Verpleegkunde. PhD - University of Pretoria</td>
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</table>
Styrbicki, E.L. 1986 Thesis: Begeleiding van Verpleegkundiges in die Ontwikkeling van Interpersoonlike Vaardighede R A U November

Thompson, R.A.E. 1980 Thesis: Nursing Personnel Administration within a Hospital University of Cape Town, October

University of Natal 1990 1990/02/01 Nursing in Crisis: Problems, Solutions, Unpublished Conference Material

4.2 ACTS, CIRCULARS, CONFERENCES AND MEETINGS

ACTS

Black Communities Development Act 1984 Act No 4 of 1984

Black (Urban Areas) Consolidation Act 1945 Act No 25 of 1945 repealed in 1985

Exchequer and Audit Act 1975 Act No 66 of 1975

Health Act 1977 Act No 63 of 1977

Nursing Act 1978 Act No 50 of 1978 as amended by Act No 71 of 1981

Provincial Finance and Audit Act 1972 Act No 18 of 1972

CIRCULARS

Cape Provincial Administration 1968 HS 2/301/6/1 of 1968/11/04: Additional Month for Class 4

1970 Circular H 4/0/2/10/4 of 1970/04/17

1971 Circular HS 2/0/6/7 of 1971/04/01 Lecture Fees

1971 Conference of Matrons: 22–24/1/71

1975 Hospitals Department: Circular Minute M 19/1975 of 1975/02/11

1982 Circular Minute No M 138/1982

1984 Circular Minute No M 112/M 85 of 1984/08/10

1985 Memorandum of Agreement: University of Cape Town and Cape Provincial Administration
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<td>1950-1986</td>
<td>Report of the Director</td>
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<td>1987</td>
<td>Memorandum on Carinus Nursing College/Nico Malan Nursing College for College Councils on 1987/11/25</td>
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<td>1971</td>
<td>Affiliated Hospitals Matrons/Principals Conference: 1971/02/22 to 1971/02/24 Theatre Technique and Ward Management</td>
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<td>1990</td>
<td>February: Heads of Services and Education Workshop on Manpower Planning, Cape Town, Unpublished Workshop Material</td>
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4.3 SPEECHES, LETTERS AND NEWSPAPER ARTICLES

SPEECHES

<table>
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<tr>
<th>Year</th>
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<tbody>
<tr>
<td>1987</td>
<td>Goodchild-Brown, B. Contemporary Educational Strategy: Didactic and Pedagogic Aspects of an Educational Philosophy and Selfdirected Learning Unpublished article in Carinus Nursing College Learning Resources Centre</td>
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<tr>
<td>1989</td>
<td>Kotze, W. J. Opening Speech by President, South African Nursing Council, 19 September 1989</td>
</tr>
<tr>
<td>1984-1989</td>
<td>Röscher, C. I. Review of South African Nursing Council Activities April 1984 - March 1989. Extract of Speech by President of Council Published by Nursing Education Association</td>
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<td>1968</td>
<td>Searle, C. A South African Nursing Credo: Text of Inaugural Address University of Pretoria Pretoria: South African Nursing Association</td>
</tr>
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</table>
SPEECHES

Slabbert, J.N. 1988 Speech at Western Province Regional South African Nursing Association Meeting on Phasing out Enrolled Course.


van Niekerk, W.A. 1987 'n Toekomsblik op Gesondheidsdienste van die RSA (met spesifieke verwysing na die voltydse geneeshber) Toespraak, Fakulteit van Geneeskunde, Tygerberg-kampus.

Wessman, J. 1988 University of Cape Town Department of Nursing: Workshop on Research and Theory Models.

LETTERS

South African Nursing Council 1983 Cape Provincial Administration: Director of Hospital Services: Withdrawal of Recognition of Woodstock Hospital as White Training School for Students and Pupils.

Drew, J.D.C. University of Cape Town Archives 1984 Professor R Thompson: 1984/11/12.


Wits Faculty of Medicine, Ameen, R. 1991 Letter dated 1991-07-31; University of Witwatersrand, Johannesburg that DNE commenced at Wits on 1937-02-28.
NEWSPAPER ARTICLES

Nursing News 1987 Leader Article: Administrative Tasks Versus Patient Care October 1987, 11(9)

Uys, L. 1988 The Danger Lies in Changing Without Thinking ...! Nursing News 12 (3)

4.4 SOUTH AFRICAN NURSING COUNCIL REGULATIONS, REPORTS, DIRECTIVES

AND CIRCULARS

REGULATIONS

1983 R2118 of 1983/09/30
1985 R425 of 1985/02/22
1975 R879 of 1975/05/02
1970 R45 of 1970/01/09
Amended by R253 of 1975/02/14 and Directive 37/76 with effect from 1977/01/01
Course Commenced 1970/05/02
1969 R3792 of 1969/11/28
1965 R1302 of 1960/07/08
1963 R959 of 1963/06/28
1960 R1013 of 1960/07/08
1965 R1301 of 1965/09/03
1953 R1916 of 1953/09/03: For Training and Examination of Medical and Surgical Nurses made under section four of Nursing Act No 45 of 1944
1960 R1014 of 1960/08/07
1964 R400 of 1964/03/20
1965 R1219 of 1965/09/03
1975 R253 of 1975/02/14
1985 R387 of 1985/01/15
1978 R481 of 1978/07/10
1973 R1650 of 1973/07/14
1963 R935 of 1963/06/28
### Regulations

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<td>1966</td>
<td>R1022 of 1966/07/01</td>
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<td>1968</td>
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<td>1963</td>
<td>R936 of 1963/06/28</td>
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<td>1965</td>
<td>R170 of 1965/02/05</td>
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<td>1966</td>
<td>R1024 of 1966/07/01</td>
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<td>1968</td>
<td>R1257 of 1968/07/26</td>
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<td>1984</td>
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### Scope of Practice

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<td>1984</td>
<td>Government Notice 2598 of 1984/11/30</td>
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<td>1987</td>
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<td>1987</td>
<td>Government Notice 1469 of 1987/07/10</td>
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### Reports

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<td>1979</td>
<td>Report of the Seventh Council: 1975/04/01 - 1979/03/31</td>
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<td>1984</td>
<td>Report of the Eighth Council: 1979/04/01 - 1984/03/01</td>
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<td>Pretoria: SANC Publications</td>
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<td>Statistical Returns for the Calendar Year</td>
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<tr>
<td>Anne Latsky College</td>
<td>1989</td>
<td>21 - 22 September 1989: Report on Different Perspectives on Adjustments of the Four Year Diploma Course</td>
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### Directives

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<th>Organization</th>
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<tr>
<td>South African Nursing Council</td>
<td>1961</td>
<td>SANC Circular 38/65 amends 24/61 of 1961/06/24</td>
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<td>SANC Guide and Directive on 1960 Regulation 24/6/61 WJVS/FV</td>
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### DIRECTIVES

South African Nursing Council

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<th>Year</th>
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<tr>
<td>1966</td>
<td>SANC Circular 29/66 of 1966/10/03 replaces SANC Circular 24/61 and 33/60</td>
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<td>1970</td>
<td>SANC Guide and Circular 31/70, 1970/05/26 replaces Circular 8/70</td>
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<td>1976</td>
<td>24/76 with effect from 1976/10/22</td>
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<td>1977</td>
<td>37/76 with effect from 1977/01/01</td>
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### CIRCULARS

South African Nursing Council

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<td>24/61</td>
<td>WJVS/FV (Circular and Directive) of 1961/06/05</td>
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<td>33/63, 38/65 of 1965/09/13</td>
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<td>29/66, 7/69</td>
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<td>1/70 of 1970/05/26, 31/70, 34/70, 12/71, 2/75, 24/76, 34/76</td>
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5. INTERVIEWS

<table>
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<tr>
<th>Interviewee</th>
<th>Year</th>
<th>Position</th>
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<tr>
<td>Harrison, P.H.</td>
<td>1985-</td>
<td>Retired first Professor of Nursing at the University of Cape Town.</td>
</tr>
<tr>
<td>Kane-Berman, J.</td>
<td>1987</td>
<td>Chief Medical Superintendent, Groote Schuur Hospital.</td>
</tr>
<tr>
<td>Loopuyt, C.M.</td>
<td>4/7/1978</td>
<td>Recorded on Video. and 1987</td>
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<tr>
<td>Staff members and colleagues</td>
<td></td>
<td>Ex-students or clerks.</td>
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<td>Van Zyl, L.</td>
<td>1987</td>
<td>One of first group of senior students to attend Carinus Nursing College, tape recording.</td>
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<tr>
<td>Cunningham, M.</td>
<td>1987</td>
<td>Head of Nico Malan Nursing College</td>
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<td>Smith, E.</td>
<td>1987</td>
<td>Head of Sharley Cribb Nursing College</td>
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<td>Kingsley, M.</td>
<td>1987</td>
<td>Head of Charlotte Searle Nursing College</td>
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<td>Bennet-Ellis, P.</td>
<td>1987</td>
<td>Head of Frere Hospital Nursing College</td>
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<td>Viljoen, J.</td>
<td>1987</td>
<td>Head of Otto du Plessis Nursing College</td>
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<td>Pletts, M.</td>
<td>1987</td>
<td>Cape Provincial Administration, Nursing Advisory Service</td>
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</table>
DEFINITIONS:

1. **Nursing.** Many definitions of nursing exist. As the concept will be dealt with in detail within the study, the following serves as an introduction to the subject:

   The South African Nursing Council defines nursing as follows from a holistic point of view:

   "Nursing Science is a human, clinical, health science that constitutes the body of knowledge for the practice of persons registered or enrolled under the Nursing Act as nurses or midwives. Within the parameters of nursing philosophy and ethics, it is concerned with the development of knowledge for the nursing diagnosis, treatment and personalized health care of persons exposed to, suffering or recovering from physical or mental ill-health. It encompasses the study of preventive, promotive, curative and rehabilitative health care for individuals, families, groups and communities and covers man's life-span from before birth." [South African Nursing Council Directive 19/86 : 1].

2. **Administration/Management:**
   For the purpose of this study, administration and management are used interchangeably. Management is the preferred version at present as it relates to the post structure of Nursing Managers (Matrons) introduced by the Commission for Administration in 1982. Public administration covers a much wider field and is a more complex system than management since it is complicated by political considerations [Cloete : 1981 : 19].

   **Definition:** Administration is an enabling process which is performed to reach specific objectives. It embraces the generic administrative processes of financing, policy making, programming, organising, personnel and human management resources and control; the functional and the auxiliary processes, according to Cloete [1981 : 1] and Mellish [1985 : 1].

3. **Nursing Education** may be defined as the conscious purposive intervention by an adult (a nurse teacher) in the life of a child (student) with the aim of guiding her to responsible adulthood and responsible professional action. [Adapted from Griessel: 1985 : 2].

4. **Educational/Training Regulations** are promulgated by the South African Nursing Council, the controlling authority of professional nursing. The regulation applicable in 1987 for the basic course is Regulation 425, for the Diploma in Nursing (General, Psychiatry, Community) and Midwifery Nursing Science, and Directive Guide 18/86 of 01.05.1986.
5. Teaching as defined by Gagne is the process of producing learning in the learner. [Gagne : 1964 : 274].

6. Learner [Morgan : 1961 : 187] is one who has a relatively permanent change in behaviour due to past experiences. The concepts Teaching, Learning and Education are broadened in the section on throughput of this study.

7. Accompaniment is for the purpose of nursing student pedagogics defined as 'the presence of appropriate (registered) nurse practitioner to direct, support, assess and evaluate student activities in the health unit; to be available for dynamic interaction.' [Goodchild-Brown : 1986 : 1]. Accompaniment is, for the purpose of the whole nursing andrologic system, seen as the reciprocal dynamic interaction between respective persons in the system in respect of direction, assistance, support, assessment and evaluation of professional nursing and incumbent to nursing learning experiences.

8. A health unit is any government or privately owned licensed institution providing various kinds of health care on a formally organised and controlled basis.

9. Student:

9.1 Nursing Student is a person who, having passed the Senior certificate, after 12 years of schooling, registers with the South African Nursing Council at a nursing college, or university, to undergo a basic education of 4 years to qualify as a registered nurse, known as a "Professional Nurse".

9.2 Student Status. According to South African Post Secondary Education norms, nursing students are "full time equivalent students" only approximately 25% of the time (at Carinus Nursing College) as they are full-time state employees, subject to all Civil Service conditions of service.

9.3 Post-registration courses are study courses undergone by professional nurses at diploma or degree or advanced level to provide specialised skills. The four main speciality divisions in nursing are education; administration; the clinical specialities, like intensive care; and specialities related to the basic qualification, viz. general, psychiatry, midwifery and community nursing science. The Commission for Administration requires that applicants in upward mobility be in possession of specific post-registration courses. Professional development has, as a goal, the acquisition of such skills as would permit of safe practice in specialised areas.

9.4 Basic nursing courses are prescribed and controlled by the South African Nursing Council to permit assistant, enrolled or student nurses to acquire skills that would permit a minimal safe standard of care according to the capacity in which educated. Upon successful completion of the course the holder, of the qualification is enrolled or registered with the South African Nursing Council and may only then be gainfully employed.
9.5 The Bridging Course is a 2 year course prescribed by the South African Nursing Council to permit a suitable enrolled nurse to upgrade her skills to become a registered general or psychiatric nurse.

10. Nursing Pupil is a person who has passed at least the Standard 8 School Certificate after 10 years of schooling, enrolls with the South African Nursing Council, through the hospital that employs her/him, to undergo a basic education of 2 years to qualify as an enrolled nurse, known as a Staff Nurse, and who belongs to the sub-professional group.

10.1 Pupil Nursing assistant is a person who has passed at least the Standard 6 school certificate after 8 years of schooling, enrolls with the South African Nursing Council, through the hospital that employs him/her to undergo a basic education of 1 year to qualify as an enrolled nursing assistant, known as an enrolled nursing assistant, and who belongs to the sub-professional group.

11. The Teaching Staff of a college, responsible for conducting courses and administering education, are the Tutor, the basic teaching staff component of the system; Senior Tutors; Principals; Senior Principals and the Head of College, and these will be defined under "Resources".

12. Non-Teaching Personnel are persons in the administrative and general division of the service, forming the clerical and household infrastructure of a College and will be mentioned in "Resources".

N.B. Persons outside the resources boundary of the College system, such as hospital Nursing Managers, health unit Professional Nurses, hospital Medical and Administrative Managers and personnel, Clinical Educators in the hospital or in the health unit, will not be defined.

Persons concerned with the super-system environment input will be mentioned in the section relevant thereunto.

13. Systems:

13.1 The General Systems Theory Approach: Von Bertalanffy in 1951 defined a system simply as "any arrangement or combination as of parts or elements of a whole." A system consists of interrelated parts and exists in an environment - the super- or supra-system. The parts are divided by boundaries with varying degrees of permeability. The parts can be functional or structural components consisting of interacting elements or variables.

Every system consists of five elements that give it structure, namely, input, processor or throughput, output, controls or feedback. The characteristics of a system include having a purpose, process, content and outcome.

13.2 Robert Buchele's Conceptual-Organizational Model leads to examining the super-systems, resources and processing according to input-output to product model of the General Systems Theory.
Table 2.2: Rules of Interaction

The elements of interactions are discussed, but by themselves they are not adequate for dynamical analysis, and we need, in addition, rules to show how the elements function.

These rules are:

1. Every organization elects some other organization or organizations.

2. In every action there is a sharing and an interchange.

3. All action is occasioned by the available environment.

4. Available environment is limited by interactions with organization.

5. All organizations strive toward equilibrium.

6. Saturated organizations remain unchanged.

7. Insufficient and superfluous organizations tend to change.

8. Flexibility is a condition of growth.

9. Rigidity is a condition of maintenance.

The rules are explained after Figure 2.3. in Annexure 4.

[Feibleman in Emery: 1981: 54]
In Table 2.1 the elements of the whole (system) combined in certain ways with other parts. These, as static structures, were not sufficient to define or determine any given organization. In addition rules were applied in terms of which parts and their relations are constitutive of organizations, according to Table 2.2, rules of interaction. This permitted an approach to be taken to theory of organizations from a dynamic standpoint (ie, when considering functions). Having applied elements and rules of interactions, how the dynamic sequence of stimulus-response-effect operates in relations between organization and environment is shown in Figure 2.4.


In the field of dynamics, interactive functions are considered. The elements of interaction that prevail are those of action and reaction and may be described under the following terms:

1. Organization - environment
2. Action - reaction
3. Availability - virtual indifference
4. Equilibrium - disequilibrium
5. Saturation - insufficiency - superfluity
6. Flexibility - rigidity
7. Stability - instability
Discussion concerning rules of interaction as shown in Annex. 2 & 3 and dynamics above

1. Organisations taken as a whole in an environment when isolated from their normal environment are static. In dynamics the organisation reacts to the environment through reciprocal election, ie reacts selectively with items of mutual concern.

2. Every organization is in constant change or motion. The change of motion is of two sorts. The environment changes the organization and organization changes the environment, thus action and reaction is effective in every instance of change.

3. Availability is a characteristic of a limited part of the environment but which importantly affects and is affected by the organization. Virtual indifference is the effect of that less limited part of the environment or the organization - it scarcely affects either.

4. Equilibrium is the condition in which influence exerted by the organization upon its environment and by the environment upon the organization is in balance. Disequilibrium is the condition in which balance does not exist. A minimum amount of equilibrium is a sine qua non of organizations, thus tension between systems, ie disfunction and relationship problems occurs.

5. Saturation is the condition of an organization in which all parts share and all subparts are shared. In insufficiency all parts share but there are unshared subparts. A saturated organization hardly reacts with environment and is satisfied, inert. It is more or less 'satisfied', and to that extent, inert. Thus there is an optimal pragmatic limit to the parts of the organization. The insufficient organization is to be satisfied or saturated and therefore elective - can only achieve satisfaction by taking parts from the environment - thus interactive (elective). A superfluous organization is over saturated and achieves equilibrium by interacting with the environment to get rid of extra parts.

6. Flexibility is the capacity of the organization to cope with change without severe disorganization. Rigidity is the absence of this capacity. In flexible organizations the relations can be changed by the available environment without destruction of equilibrium (the
parts in the flexible organization are not all complemental although the relations may be complemental).

7. Stability is the capacity of the organization to remain in equilibrium and instability is the absence thereof. Organizations seek a condition where they will be safe from change.

Having set forth the elements and the rules of interaction the kinds of interaction show how elements relate to rules and form specific kinds of interactions, as in Annexure 3, due to stimuli. The environmental stimuli can be negligible, effective or destructive.

- If negligible they are sub-threshold, elicit no response, no specific reaction.
- Should they be effective they are strong enough to elicit a response. Such response is minimal, optimal or drastic depending upon the strength of the command. The response to a strong enough stimulus is if tenacious - it is fended off, a conservative manoeuvre; if self-deterministic, it changes with environment yet remains itself and extensive change results.
- Should they be destructive no specific reaction can follow.

In a later section the term adhocracy and professional bureaucracy is used and the latter applied most pertinently when negligible and minimal stimuli are experienced. The term adhocracy is applied to more drastic stimuli.

The components of systems

1. Sub-systems:

The parts of a system are the components or sub-systems consisting of elements and variables that interact. Elements are more substantive than variables. Variables relate more to conditions (of elements) signifying change that can be measured. Ashby [1952] in [Sharma: 1985: 8] "If a system is to be a system it has well defined variables which are closely interrelated."
Variables necessary for survival of the system are essential variables. Variables within the system are related variables and variables outside the system, but interacting with it, are related parameters. Coordination is achieved through organization of parts through "organizing relations" and makes a system an organization. A part, viewed as a part, is something different from it being seen as a part of a system. Hence the idea that the whole is more than the summation of its component parts, which leads to the concept of synergism, according to Bertalanffy.

Degrees of independence and interdependence exist between sub-systems maintaining the essential wholeness of a sub-system, as the sub-system has a set of variables characteristic of that system. A sub-system is relatively independent if it is not affected by the action of any other sub-system. In interdependence, sub-systems adapt to each other in the process of achieving or maintaining a goal state, whether this be in a one-to-one relationship or through a chain of dependency. The net result for the supra-system will be co-ordination among sub-systems which tend to keep the whole within range of variables appropriate to the goal state. The achievement or maintenance of 'goal state' depends on the functioning of variables. The functioning of variables also enables them to act as 'boundary-makers'.

The boundaries/limits between sub-systems separate one sub-system from another. The function is to filter and select both the type and the speed of the input and output, to and from the system, and is, in the case of organizations, highly permeable. It can be identified by the differences between, relationships between components within the boundary, and relationships across the boundary. A system can exist in different conditions. The condition of a system depends upon the relationships between components and the specific filtration condition of the boundary.

[Sharma: 1985: 9-11]
2. Environment of a system

A system operates in an environment. The environment is that which lies outside the system and is known as the supersystem. The environment determines in part how the system operates, influencing the 'requirement
schedule' of the system through related parameters (variables). However, systems influence the larger systems in which they exist and since the college system is part of a larger system, there is an interdependence between the college system and its supersystems. The environment of a system is a set of elements and their relevant properties, which are not part of the system, but a change in any of them may produce a change in the state of the system.

3. The goal-state

Figure 2.8: Achieving goal state
Every system/sub-system/element has specific goals or functions open to precise and specific measures of the performance of the overall system, as in Figure 2.9.

These tasks/objectives or performance measures are known as the goal-state. A common fallacy in stating objectives is to emphasize the obvious, often approved, goals. The importance of the objectives does not lie in the desired (the obvious), but in the concrete outcome. The goal-state is the state towards which a system tends to move. "The degree to which a system is directed toward attaining a goal state is the probability statement." [Ashby: 1952] The performance of the system for the attainment and maintenance of the goal-state depends upon the comparability of goal-states among sub-systems, between sub-systems and the total system, as well as the supersystem. Churchman in 1986 emphasized the importance of applying criteria to evaluate the task execution of the total system. For example, the College task can be described as education and administration, when in fact it is to provide registerable nurse practitioners as the givers of health care to the community.

Somewhat simpler is the concept 'process'. Process is the means by which the system works to achieve a pre-planned purpose. A process is a series of actions or operations that lead to a goal (Oxford Dictionary).

Feedback is the control of the input as a function of the output. Negative feedback is aimed at maintaining stability. Positive feedback increases the deviation in the output(s) of the system.

Homeostasis refers to the autocorrective capacity to maintain homeostatic balance. Cannon was the first to stress the homeostatic aspect of living action. It is also applicable to "ecological communities and cultural configurations since both seem able to initiate compensatory action as soon as certain entities that are part of them assume magnitudes above and/or below prescribed levels." [Jordan in Emery: 1981: 287]
Feedback and its application to systems

Common among authors on the systems approach is the tendency to define 'feedback' to ensure equilibrium as a monitoring system. This means that control in the form of evaluation has to be applied to determine whether a goal-state has been achieved or not. A control function is, therefore, a correcting function known as 'feedback'. Feedback permits the introduction of changes at the right point, following on which changes in the interdependent variables occur in the form of a chain to direct the system to the goal-state.

'Control' is expressed in different terms, viz., feedback, servomechanism, circular systems or circular processes. The classical example of self-regulation is the 'Governor' designed by Watts in 1784 [Sharma: 1985: 47] to keep his engine running at a constant speed (goal-state) irrespective of the changes in boiler pressure or variations in load. Von Bertalanffy, in 1951, schematized the simple feedback arrangement as follows:

![Simple feedback arrangement](image)

**Figure 2.9: Simple feedback arrangement**
1. Chapter I - Introduction

2. Chapter II - Sources of data, basic principles of education, and sources of evidence

3. Chapter III - The elaboration of basic principles and recommendations

4. Chapter IV - Survey of existing training of Medical and Surgical nurses

5. Chapter V - Quantitative considerations in relation to the training of nurses. Matters such as: school-leavers, wastage, existing number of nurses in training, future number needed, recommended numbers

6. Chapter VI - Reorganization of training of nurses and the system of nursing education

7. Chapter VII - Financial considerations in respect of the reorganization of the training of nurses

8. Chapter VIII - General and concluding matters: the South African Nursing Council; co-operation with the administration, and recommendations made in respect of co-operation
The College was named after Mr J G Carinus
OBITUARY

MR. J. G. CARINUS
(Administrator of the Cape Province, 1946-1951)

It is with deep regret that the staff and student nurses of the Carinus Nursing College learnt of the death of Mr. J. G. Carinus on 27th December, 1968.

Mr. Carinus was administrator of the Cape at the time that the Carinus Nursing College was established in July, 1949.

It has always been considered an honour that Mr. Carinus consented to give his name to this institution, which he opened officially on Wednesday, 2nd February, 1949.

Mr. Carinus always showed an interest in the College even during the years of failing health, and his life of service has been an inspiration to many.

Our thoughts are with his family at this time.

DOODSBERIG

MNR. J. G. CARINUS
(Administrateur van die Kaapprovinsie, 1946-1951)

Dit is met innige leedwese dat die senior prinsipale en studentverpleegsters van die Carinus-verpleegingskollege verneem het van die heengaan van mnr. J. G. Carinus op die 27ste Desember 1968.

Hierdie kollege is in die lewe geroep in Julie 1949 terwyl mnr. Carinus administrateur van die Kaap Provinsie was.

Hy "het self" die kollege amptelik geopen op Woensdag 2 Februarie 1949 en ons het dit nog altyd as 'n groot eer beskou dat hy toestemming verleen het om hierdie inrigting na hom te vernoem.

Mnr. Carinus het altyd sy intense belangstelling getoon in die kollege, selfs nadat sy liggaamskragte hom begin faal het. Dit uitstaande diens wat hy selfs deurgaans gelewer het was 'n aansporing vir ons.

Ons gedagtes gaan uit na mev. Carinus en haar gesin in hierdie tyd van beproewing.

S.A. Nursing Journal 1969.
Dear Madam

On behalf of the Central Board and all the members of this Association I would herewith like to thank you for assisting in the compilation of the biography on yourself.

In order to provide the profession with a foundation on which to build, it is essential to keep a record of the history of nursing in South Africa. Once published, the biographies on our nurse leaders will be an important part of this record.

You received Honorary Life Membership of this Association in recognition of your singular contribution to the nursing profession. The story of your life can serve to teach and inspire new generations of nurses.

It is envisaged to publish the biography and we would very much like to obtain your opinion on its contents. It would be appreciated if you could complete and return the enclosed form and, if possible, provide us with a photo of yourself for publication.

Please do not pay any attention to any grammatical or other language errors as the biography will be edited before publication.

Thank you in anticipation of your assistance in this project with which we hope to contribute to the record of the history of nursing in South Africa.

Yours sincerely

Signed

Mrs. L. Coetzee
Manager: Research
p/p Mrs. S.J. du Preez
Executive Director

Terwyl van die gesondheid wat geëroeste word – On behalf of health which must be nurtured
MISS C. M. LOOPUYT
1ST HEAD OF CARINUS COLLEGE
1945, S. A. ARMED FORCES
2ND WORLD WAR
Miss Corrie Loopuyt is now 82 years of age in 1987. Because she is revered by the Carinus Nursing College as a beloved person and as their first Head of College, a video about her is in progress. Although her sight is not good and she claims amnesia of recent events, she is her "old self" still. She has never been "in front" of a television camera but takes matters in her stride – as she has on many previous occasions in her life. She laughs and jokes, and even sings a little song "Goodnight, dear Table Mountain" learnt in Sub A and sung in the now called "old spookhouse", Huize Eendracht, Rondebosch, Cape, where she was born on 07.10.1905. It is a problem for her that the beautiful Cape mountains and scenery she loves, are no longer so clear.

There still is about her an air of innocence and purity of soul that glows for all to see – as if it has been possible for her to have escaped internalisation of the negative aspects of life she admits to experiencing. There is an instinctive professional air and manner about her. To her fingertips all she does and says and projects is professional. She does not hesitate in her judgements, but she is full of understanding, care and compassion.
Mathilde, "please note, with an e", says Miss Loopuyt, was the name of her great grandmother. Miss Loopuyt was the 3rd child in a family of 6 children. Her father, Jacob Loopuyt, and later her mother, Elizabeth Maria Cornelia Loopuyt, were both invested by the Queen of Netherlands with the "Order of Oranje-Nassau" for distinguished service in South Africa in 1923. Being brought up in a typical patriarchal diplomat's home probably prepared her well for her subsequent life, as did the Rustenburg Girls' High School, Rondebosch, where she matriculated in December 1922. High expectations were held of her.

On passing "only" Chemistry I, Pure Mathematics I and Physiology as a University student of University of Cape Town in 1925, Miss Loopuyt says: "I was much too busy enjoying other things, like dancing", but she "made up" as nursing student, obtaining Honours in most courses.

It was while a probationer nurse at Somerset Hospital (09.02.1926 - 08.02.1929) and headgirl in her 3rd year, that she was influenced by Miss Florence Goodacre (who married Mr Perry, an architect, in 1935) and shared in the reforms in nursing and nursing education at Somerset Hospital at that time. She was exposed, through Miss Goodacre, to Miss B G Alexander & Mrs Bennie, who were contemporaries of Miss Goodacre.

As theatre staff nurse at Somerset Hospital (December 1928 – December 1929) and later at Volks Hospital, she worked with the doctors of the day. These were Dr Lance Impey, Professor Chrichton, Dr D H Wessels, Dr F K te Water-Naude, Dr Petronella van Heerden, Dr Patricia J H Massy and others [Louw: 250].

Miss Loopuyt's adventuresome and dauntless spirit led her overseas in 1930 to the Juliana Kinderzeekenhuis, The Hague (01.04.1930 – 30.06.1930) as a third year nurse; as a qualified nurse on the gynaecological unit of Gemeente Zeekenhuis, The Hague (01-07 – 15.08.1930) where she saw the Dowayer Queen Emma of the Netherlands, and her grand-daughter, the then Princess Juliana. Queen Emma addressed the staff and patients. Miss Loopuyt was a post-graduate nurse for 1 month at the Von Pirquet Kinder Kliniek in Vienna and was the first nurse from the Southern Hemisphere to visit this clinic, according to the Matron. Miss Loopuyt had been advised to go to Vienna by Dr Bessie Reitz, daughter of President Reitz and particularly enjoyed the opera on Sundays at the Vienna State Opera House.

Hereafter Miss Loopuyt went to St Mary's Hospital, Paddington, London (15.10 – 15.11.1930) Miss Milne was the matron at St Mary's, and as she had been on the teaching staff of the Johannesburg General Hospital, "things were run in much the same way as here". Miss Loopuyt tells delightful stories of her trips: in a cargo ship, journeys on the continental trains and the boat train. On one occasion she was requested to lance an abscess on a septic finger while on board ship, but "as this was beyond our scope of practice" the 1st officer did so under Miss Loopuyt's direction, "but he closed his eyes at the last moment"
Miss Loopuyt was staff nurse in ENT ward "Shipley" with Sr Mott at Somerset Hospital, upon her return from overseas in January/February 1931. At the Volkshospitaal, Cape Town, she was ward staff nurse (01.03 - 01.09.1931) and theatre and X-Ray sister (01.10.1931 - 30.09.1933).

Her quest for knowledge continued and she attended the Royal Sanitary Institute for Sanitary Inspectors' Certificate - obtained at the Technical College, Cape Town, by attending evening classes in 1932. She then studied at Queen Victoria Hospital, Johannesburg (07.10.1933 - 06.04.1934) and obtained the SA Medical Council Midwifery Certificate with distinction. Hereafter she was relieving ward sister at Somerset Hospital (01.05.1934 - 20.09.1934).

Miss Goodacre appointed Miss Marwick, the first tutor in 1928 [Botha:20] at Somerset Hospital and encouraged Miss Loopuyt to follow suit. Within days, the matter was organised and Miss Loopuyt followed the first portion of Sister Tutors' Course at Kings College for Household and Social Sciences, London, obtaining the Sister Tutors' Diploma in 1935. She was chosen from 20 applicants to receive a bursary of £300.00 (R600 as valued against currency of the time), granted by the Cape Provincial Administration in 1935. Her self-discipline was by now marked and she was a strict disciplinarian with an innate sense of what is true, just and right. Her empathy was not far from the surface.
Miss Loopuyt was the first Afrikaans tutor in the Republic of South Africa [Searle:340] at Somerset and Groote Schuur Hospitals under a 5 year contract with the Cape Hospitals Board from 01.08.1935 to 29.02.1940. She describes the humble beginnings in a hut-like structure at Somerset Hospital and the organised chaos of the move to Groote Schuur Hospital. At Somerset Hospital Miss J Monnik and Miss Ackerman and Herholdt were in the first Anatomy and Physiology class. The first two Afrikaans-medium finalists were a Miss Coetzee and Miss Munro who had started their education in the English medium (up to preliminary examination stage).

Miss Loopuyt's contribution to Afrikaans literature has gone unrecognised outside the nursing society. She taught in a period wherein a mere decade had elapsed since Afrikaans was declared an official language. There was a dearth of textbooks in 1945 [Van Binnendyk Report], still evident 10 years later, and none in Afrikaans. Miss Loopuyt and her students translated from books and papers from Holland and England. Dutch terms were incorporated as well as Latin and Science terminology translated, and an Afrikaans nursing language grew. Dr Cole Rause, who learnt to speak Afrikaans during a three month period under the tutorship of Tant Saartie (Sarah Goldblatt, C J Langenhoven's secretary), assisted with Anatomy and Surgery lectures; Dr Marais-Moll gave medical and surgical lectures. Dr Petronella van Heerden was telephoned now and then to assist with translations.

1) Carinus Nursing College Records.

Interview Mrs B Goodchild-Brown with Miss Loopuyt on 04.07.1978.
Outside her own college, Miss Loopuyt's contribution as an author (albeit of unpublished work) is largely unrecognised. She compiled the first "notes" used at Somerset and Groote Schuur Hospitals and planned and organised subsequent issues at Carinus Nursing College. In those early days when typists were unknown luxuries to nurse managers, these notes were handwritten, reviewed and passed down by hand, becoming "precious heirlooms". It was not until 1961 that Marie Vlok and Cloudiva Rykheer published the first South African Nursing Manual in Afrikaans.

When the 2nd World War started in 1939, Miss Loopuyt indicated her willingness to serve in the Military Service but was told that she had to remain on the home front to continue assisting in the provision of essential services. From 01.03.1940 to 30.05.1942 Miss Loopuyt was assistant Matron at Provincial Hospital, Port Elizabeth under Miss S M Marwick, and she was called up from there.

Her sojourn in the S A Military Service as a junior, and later a senior Matron (01.06.1942 – 31.01.1946) led her to share experiences with us, with great sensitivity, about life on the troop ships and nursing at that time. Miss Loopuyt possesses the Africa Service Medal which is an orange, yellow and green ribbon.

She was Matron in Victoria Hospital, Wynberg, from 15.04.1946 and acting Matron at Groote Schuur from 01.05.1948, relieving Miss S Marwick, who was appointed as inspectress, Cape Provincial Administration.
Miss Loopuyt became the first principal of the first nursing college south of the Sahara on 01.07.1948. The Carinus Nursing School opened on 14.01.1949. No nursing practitioner has ever enjoyed the degree of power and autonomy that was hers. It gave meaning to the independent function of the nurse long before "independent function" became a nursing household word. Miss Loopuyt also provided a framework of reference of college organisation applied by subsequent colleges. College correspondence files give witness to numerous assistance-seeking and giving transactions.

Miss Loopuyt struck a blow for the emerging (changing) role of woman, demonstrating ability in so challenging a charge role. For the profession it signified status and for education it meant that the leap forward with the South African Nursing Council, could be taken in the relative secure surroundings of a college.

The school appointed students and controlled all related training and conditions of service activities, including allocation to hospitals. This was a bone of contention and pressure was brought to bear to change this condition. From 01.03.1960 each matron once more became responsible for her own students and Carinus Nursing College remained responsible "for the theoretical training and practica demonstrations and evaluations".

Miss Loopuyt retired soon afterwards, on 31.03.1960.
Miss Loopuyt feels that the services of Miss G M Fries who was her "right hand" should not pass unrecognised. Miss Fries was matrons' clerk at Somerset Hospital, senior clerk at Groote Schuur Hospital; went with Miss Loopuyt to Carinus Nursing College and later returned to Groote Schuur Hospital.

Professional Activities:
Miss Loopuyt was, in 1928, Chairman of the Student Nurses group affiliated to the Trained Nurses Association, forerunner of the South African Nursing Association. She was a committee member of WP, vice-Chairman after the war and the Chairman for 2 years. She served on the Nurses War Memorial Committee.

She was awarded the Associated Royal Red Cross ¹) issued with the New Year honours in 1944 for war service, by King George VI. Issued at Investure at Pretoria by Chief Justice De Wet, as General Smuts was overseas.

The 1953 Queen Elizabeth II Coronation Medal ²), a special award by the Queen to State Servants and others in the Commonwealth, was conferred upon Miss Loopuyt by the Cape Provincial Administration. The Diamond Fields Advertiser of 10 June 1953 states that only 4 500 medals were issued.

Miss Goodacre had discussed the desirability of a Nursing College with Miss Loopuyt earlier in her career and after the Van Binnendyk Report, the time had come for one.

1948: While Miss Loopuyt was acting Matron at Groote Schuur Hospital, Dr Van Binnendyk, Director of Hospital Services (as a result of the Van Binnendyk Report) called a meeting of Matrons (Ms Westbook of Woodstock Hospital, Ms Du Toit of Rondebosch Hospital, Ms Balne of Victoria Hospital and Miss Marwick) Dr Van Binnendyk maintained that matrons had 2 duties:

1) Running the hospital and care of the sick
2) Training of student nurses.

When these "activities clash, training is forfeited" A college at which students could be educated was advocated. "The college would permit relieving matrons of paperwork, they were snowed up in their offices and there was not enough time for the hospital".

- The college would attract more recruits
- Every student would get the same chance
- Bursaries would be available to ward sisters to become tutors as there was a shortage of this category
- A college could meet the need for substantial changes in training instituted by the newly formed South African Nursing Council.

Miss Loopuyt now lives in Clareinch, the War Memorial residence. She has great humility and seems scarcely to believe the vital influence she was.
The Diploma of Nursing Education was obtained by Miss Loopuyt at the University of Cape Town 1938 - 1939. She attended lectures in her off-duty period. Obstetrics, taken with 4th year medical students, was her major subject. She was the first nursing student to qualify from the University of Cape Town. Now, in 1987 "the 50th anniversary of nurses on the UCT campus" is celebrated and she, amongst others, will be honoured by those who reaped the benefit of her innovative approach and work.

Professor Patricia Harrison, retired professor of Department of Nursing, University of Cape Town, and Miss Joan Monnik who sadly died on 15.03.1987, were friends of Miss Loopuyt and the three of them graced many a social-professional evening. The link of the University of Cape Town and the Carinus Nursing College was commenced by Miss Loopuyt, carried through by the many UCT Diploma Nursing Education students who subsequently taught in Carinus Nursing College. The link reached a crescendo in 1985 with the affiliation of Carinus Nursing College with University of Cape Town for the Comprehensive Course, with Professor R A E Thompson as professor since 01.01.1983.
College Records
Interviews
Letters
Records
Louw, J H. 1964. In the Shadow of Table Mountain. Struik Publishers

Van Binnendyk: Enquiry into the Training of Nurses in the Cape of Good Hope, consequent upon Proposals for Reform made by the South African Nursing Council. Published 18.07.1945.


ORDE VAN ORANJE NASSAU MEDAL
"Badge of the Grand Officer.
"This order was established in 1892 by the Queen Regent, Queen Emma, in the name of her daughter, Queen Wilhelmina, for rewarding Netherlanders or foreigners who have deserved exceedingly well of the State or of Society.
"White enamel cross of same shape at other Netherlands medals upon a wreath of laurel in gold.
"Centre: Is a blue enamelled shield with a lion in gold surrounded by a circle of white enamel bearing the word 'Je Maintiendrai'
"Reverse: Initial 'W' surrounded by a crown, surrounded by words 'God Zij met ons' on white enamel.

ROYAL RED CROSS MEDAL
"Founded 1883 by Queen Victoria
"This decoration is in two classes. Those awarded First Class are designated 'members', those awarded Second Class are designated 'associates'
"The post nominal letters are RRC, ARCC respectively.
"The award is confined to ladies in the Nursing Service or ladies who have given outstanding Service in the care of the sick or wounded of the fighting service.
"There is provision for the grant of Second award bars to the First Class for promotion from the Second to the First Class.
"Worn suspended from a bow on the left shoulder.
It has been said that the suggestions for the founding of this decoration was made to Queen Victoria by Miss Florence Nightingale.
British Orders, Decoration and Medals: p 39 - Balfour 1973
-B Goodchild-Brown, 6/87: S A Cultural Historical Museum, Cape Town
Bibliography - continued

19 E II 53 CORONATION MEDAL

*Obverse: Crowned bust of Queen Elizabeth facing right
*Reverse: The Royal cipher with crown above
*Around: On the left - 'Crowned' 2 June 1953

It is suspended by fixing suspender through an oval ring with red corded ribbon edged with white on both sides and two narrow royal blue stripes in centre
*Ribbon is attached to a pin

For women it is worn with a bow unless they have medals on a bar

It is a special award by the Queen to State Servants and others in Commonwealth.

'Diamond Fields Advertiser' of 10 June 1953 states that 4 500 medals issued

Stock Book List.

*Designer: Cecil Thomas

*Commemorative medals of South African interest in the Africana Museum.


-Goodchild-Brown, 6/87: 5 A Cultural Historical Museum, Cape Town.

Graham Botha C. 1950 The Cape Hospital Board with a Survey of Hospital Development in the Cape Peninsula from Early Times.

Signed

B GOODCHILD-BROWN

HEAD OF COLLEGE
CARINUS NURSING COLLEGE
13.10.1987

JULY 1987

/jw
ANNEXURE 10


PARLIAMENT AND CABINET
MINISTER OF HEALTH, WELFARE AND PENSIONS

DEPARTMENT OF HEALTH, WELFARE AND PENSIONS
DIRECTOR-GENERAL, HEALTH, WELFARE AND PENSIONS

DIRECTORATE ADMINISTRATION
CHIEF DIRECTOR ADMINISTRATION

DIRECTORATE HEALTH
ASST. DIRECTOR-GENERAL, HEALTH

DIRECTORATE WELFARE & PENSIONS
ASST. DIRECTOR GENERAL, WELFARE & PENSIONS

BRANCH FINANCE
BRANCH PERSONNEL
BRANCH LOGISTIC SERVICES
BRANCH MANAGEMENT SERVICES

BRANCH MENTAL HEALTH
CHIEF DIRECTOR, ENVIRON HEALTH

BRANCH LABORATORY SERVICES
DIRECTOR, LABORATORY SERVICES

BRANCH HEALTH PROMOTION
CHIEF DIRECTOR, HEALTH PROMOTION

BRANCH HEALTH CARE
CHIEF DIRECTOR, HEALTH CARE

BRANCH AID, HOSPITAL, SOCIAL SERVICES
BRANCH TECHNICAL, WELFARE SERVICES

DIVISION CONSUMER GOODS CONTROL
DIRECTOR

DIVISION AIR POLLUTION
DIRECTOR

DIVISION RADIATION CONTROL
DIRECTOR

DIVISION INDUSTRIAL DISEASES & PUBLIC HEALTH
DIRECTOR

DIVISION WATER HYGIENE DIRECTOR

DIVISION COORDINATING SERVICES
UNDER SECRETARY

DIVISION LABORATORY ADMIN SERVICES
UNDER SECRETARY

DIVISION LABORATORY PATHOLOGY LABORATORIES
DIRECTOR

DIVISION SPECIAL LAB ASSISTANT DIRECTOR

DIVISION LABORATORY ADMIN SERVICES
UNDER SECRETARY

DIVISION MEDICAL ADMINISTRATION
UNDER SECRETARY

DIVISION HEALTH SYSTEM DEVELOPMENT
DIRECTOR

DIVISION NUTRITIONAL SERVICES
ASSISTANT DIRECTOR

DIVISION NUTRITIONAL SERVICES
ASSISTANT DIRECTOR

DIVISION DENTAL SERVICES
DIRECTOR

DIVISION PSYCHIATRIC SERVICES
DIRECTOR

INSTITUTIONS FOR INFECTIOUS DISEASES ESPECIALLY TUBERCULOSIS AND REHABILITATION CENTRES

INSTITUTIONS FOR PSYCHIATRIC PATIENTS
The following three tables demonstrate the equivalent between ranks that developed in nursing service and nursing education:

<table>
<thead>
<tr>
<th>In 1949</th>
<th>Education</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inspectress at Head Office</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principal</td>
<td>Matron in charge</td>
</tr>
<tr>
<td></td>
<td>Sister tutor Grade A</td>
<td>Assistant matron</td>
</tr>
<tr>
<td></td>
<td>Sister tutor Grade B</td>
<td>Matron</td>
</tr>
<tr>
<td></td>
<td>Teaching sisters</td>
<td>Sister (Senior &amp; Junior)</td>
</tr>
<tr>
<td></td>
<td>Student nurses</td>
<td>Student nurses</td>
</tr>
</tbody>
</table>

Table 6.3.1

By 1.7.74

<table>
<thead>
<tr>
<th></th>
<th>Chief nursing officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief matron</td>
<td></td>
</tr>
<tr>
<td>Inspectress of nursing service</td>
<td>Senior principal</td>
</tr>
<tr>
<td>Principal matron</td>
<td></td>
</tr>
<tr>
<td>Assistant inspectress of nursing service</td>
<td>Principal</td>
</tr>
<tr>
<td>Senior matron</td>
<td>Senior tutor</td>
</tr>
<tr>
<td>Head male nurse</td>
<td></td>
</tr>
<tr>
<td>Matron</td>
<td>Tutor</td>
</tr>
<tr>
<td>Senior sister</td>
<td></td>
</tr>
<tr>
<td>Charge male nurse</td>
<td></td>
</tr>
<tr>
<td>Sister</td>
<td>Teaching sister</td>
</tr>
</tbody>
</table>

Table 6.3.2

On the 9th September 1982, previous ranks were abolished by the C.F.A. for the reason that they were "domestic in nature, that revision and
improvement of posts on a differential basis was necessary. The 12 ranks would also be more descriptive of the various levels of the profession."


### 1982 Changes in Nursing Ranks

<table>
<thead>
<tr>
<th>The 12 ranks were:</th>
<th>Professional classes (Beroepklasse)</th>
<th>The discontinued equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director Nursing Services (not in the Cape)</td>
<td>Directorate (Direktoraat)</td>
<td>Chief nursing officer</td>
</tr>
<tr>
<td>Deputy Director: Nursing services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Nursing Service Manager, Senior Nursing Service Manager, Nursing Service Manager</td>
<td>Managerial (Bestuursvlakte)</td>
<td>Chief matron, Senior matron, Principal matron, Senior principal</td>
</tr>
<tr>
<td>Chief Professional Nurse</td>
<td>Professional nurse (Verpleegkundige)</td>
<td>Senior matron, Senior tutor E, Senior sister, Tutor E, Sister, Teaching sister E, E = education</td>
</tr>
<tr>
<td>Senior Professional Nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior staff nurse, Staff nurse, Senior nursing assistant, Nursing assistant (including student nurses)</td>
<td>Sub-professional</td>
<td>Student</td>
</tr>
</tbody>
</table>

Table 6.3.3

Table 6.3.0
NURSING CAREER STRUCTURE – (WHITE PERSONNEL)
PROVINCIAL ADMINISTRATION OF THE CAPE OF GOOD HOPE
HOSPITALS DEPARTMENT
AS AT 1 APRIL, 1980

Legend:
1: ... 1: ...

Ratio of starting salary and maximum salary on the Registered Nurse scale as compared with the starting salary and maximum salary on each of the levels.

Source:
1. South Africa. Commission Correspondence R.A.E. Thompson to the Secretary, for Administration, Pretoria 1980.
Figure 6.3.2

It is evident that the number of levels within each of the three streams vary as demonstrated in Figure 6.3.1 and Figure 6.3.2. [Figure 6.3.1 was constructed by Thompson (1980) and Figure 6.3.2 demonstrates the subsequent changes by 1986.]
The above demonstrates the pathways of college educational and administrative processing system. The College enters via Groote Schuur Hospital region and Nursing Advisory Service but can enter at Director or Inspector levels.

Figure 5.4.1 Functional organization of Department of

Hospital and Health Services (Cape Province)
ORGANOGRAM : NURSING ADVISORY SERVICES - As at 08.07.1987

EXECUTIVE DIRECTOR
HOSPITAL AND HEALTH SERVICES

DEPUTY DIRECTOR : NURSING ADVISORY SERVICES

CHIEF NURSING SERVICE MANAGER
Personnel Management

SENIOR NSM
Planning & Finances

NSM
Information systems and
needs determination

CHIEF PROFESSIONAL NURSE
Recruitment & Design

SENIOR NSM
Personnel Development

NSM
Liaison and personnel

CHIEF PROFESSIONAL NURSE
Perinatology

CHIEF NURSING SERVICE MANAGER
Logistic services

SENIOR NSM
Research

NSM
Statistic

CHIEF NURSING SERVICE MANAGER
Education & Colleges (seconded)

SENIOR NSM
Special services

NSM
Community Health

CHIEF PROFESSIONAL NURSE
Perinatology

SENIOR NSM
Colleges

NSM
General NSc

Figure 54.1
Organogram of Cape Provincial Administration
Nursing Advisory Services

Legend:

□ = Projected Establishment

= Professional Practice eg: medico-legal, quality care, inspection

ANNEXURE 13
CARINUS NURSING COLLEGE

ADMISSION REQUIREMENTS

Diploma in Nursing (General, Psychiatric, Community Nursing and Midwifery)

Minimum Requirements:

1. Senior or equivalent certificate.

2. Two subjects on the higher grade of which one must be an official language.

3. Only subjects on the higher and standard grade will be acceptable.

4. Subjects regarded as important for the abovementioned course are:
   - Mathematics
   - Biology, Physiology
   - Science Subject
   - History
   - Economics/Business Economics
   - Accountancy
   - Languages
   - Geography

Symbols:

5. D for standard grade subjects and E for higher grade subjects, unless the College Senate decides otherwise. Recommended minimum aggregate is D.

6. A copy of the school leaving certificate is to be presented.

7. Proof of citizenship or residence permit.

8. Appropriate referrals from School Principal.


10. Previous work record to be considered.

ACCEPTED BY SENATE AND COUNCIL - OCTOBER 1985