contrast to discipline-based teaching that encourages staff to fight for more time for their disciplines.

9.5   Early community work

The students are exposed to early community work in Phase I, where they are encouraged to be involved in community projects. The climax is in Phase II, where community work is combined with a research project done in the community.

9.6.   Clinical skills laboratory

Learning also happens in the clinical skills laboratory in Phase I. Students are, however, first introduced to general communication skills in English and Xhosa (i.e. the local language), during the first half of Phase 1a, and then to communication skills in clinical medicine during the second half. The language laboratory is used for those students who have not been exposed to the local language. In the skills laboratory, the students learn by examining themselves in addition to the use of mannequins. Students also learn procedural skills including setting up drips, giving injections and cardio-pulmonary resuscitation.

9.6   Early clinical contact

The early exposure to clinical skills in the skills laboratory makes early clinical contact possible. The students touch real patients as early as in Phase 1b, during the community-based education and service course. Examination of patients then continues throughout the programme.

10. EDUCATIONAL STRATEGIES

The educational strategies that are used to implement the curriculum are derived from the "SPICES" model that has been described by Ron Harden at the centre for Medical Education at the University of Dundee (Harden et al 1984). "SPICES" stands for student-centred, problem-based, integrated, community-based, electives and systematic.

10.1 Student-centred learning

In student-centred learning students play an active part in their learning. The programme is however a mixture of student-centred and teacher-centred learning. Staff played a major role in defining critical and specific outcomes for the programme, course content, learning resources, teaching and learning methods, and assessment methods. Students learn in small group tutorials of 8-10 with members of staff being facilitators. Students derive learning needs, learn them, and present to the group what they have learnt in various depths. There are a few scheduled lectures and seminars but students are free to request a teacher to schedule a lecture or seminar for the class on a topic that is difficult to comprehend.

10.2 Problem-based learning

The learning is problem-based in that a clinical problem is used as a springboard from which to explore various topics. The small group tutorials described above are problem-based

10.3 Integrated learning

The curriculum is integrated both horizontally and vertically as already described above. There is full horizontal integration where subjects like anatomy and physiology are taught together through regions of the body. Vertical integration is, however, following the wedge approach, where the clinical science input is small at Phase I but gradually increases, whilst basic science input is big initially but gradually decreased.

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10.4 Community-based learning

Community-based education enables students to see patients away from the main teaching hospital. District hospitals, community health centres, clinics, private general practices, old age homes, hospice, schools and community homes are also used as part of the academic teaching platform at this University. This practice enables students to see patients in their own environment because some of the health problems are not seen at tertiary hospitals. Students also learn how the health services function, the importance of teamwork, the importance of involving the patient, family or community in health care issues, and the importance of health promotion and disease prevention.

10.5 Electives

The medical curriculum at Walter Sisulu University consists of core and electives. The main purpose of this is to reduce information overload. Electives are therefore introduced so as to supplement the core. Students may choose electives in order to fill the gaps in areas or courses where gaps have been identified or to study certain areas of interest in depth. This is another way of making students responsible for their own learning.

10.6. Systematic curriculum design

The students are not just left to wonder in the wards and learn. Planning is done to make sure that learning occurs systematically by scheduling learning activities including tutorials before hand. This makes sure that certain core topics are covered during the clerkship period. There is also what we call "expert resource sessions" where seminars are planned and conducted weekly during the clerkship period. These planned activities are, of course, additional to ward rounds, outpatient care and emergency calls.

11. TEACHING AND LEARNING

The main instructional methods used include small group learning, whole class lectures, seminars, individual learning and one to one teaching, practicals, dissections, computed-based learning and skills training. There is therefore contact time and self-directed learning.

Small group learning is in the form of problem-based learning tutorials of 8-10 students. The students have a "facilitator" rather than a "transmitter" of learning. This is where a clinical problem is used as a trigger for learning and this is where there is horizontal and vertical integration. The problem-based learning tutorials are a strong characteristic of this programme from Phase I to Phase III. Small group learning occurs also outside the formal tutorial groups, where the group meets and learns as a team. During the clinical clerkship, small group learning goes beyond problem-based learning tutorials to include case presentations, bedside sessions, expert resource sessions, ward rounds and journal clubs.

Whole class lectures are used especially during the first semester in Phase I. Seminars are also scheduled for some topics that are difficult to be fitted, or are not understood clearly, during the problem-based learning tutorials.

Individual learning and one to one teaching are also used widely during the implementation of this programme. Individual learning occurs when one has to study as an individual at home, in the library, in the computer room, in the clinical setting, in the skills laboratory or in the community setting. Dissections and practicals fall under both small group learning and individual learning. The one to one teaching in the clinical setting is very useful, where students have to clerk and present patients to doctors for guidance and management. There are times scheduled for self-directed learning, where students have to use the available resources including their lecturers, to learn in depth what has been identified as learning issues during a problem-based learning tutorial session.

Grand rounds are organized around preselected topics by departments. Students work in small groups to prepare for the presentations to the whole clinical staff across departments. These grand rounds are not attended only by medical staff but also other health professions like nurses.

Students are also expected to learn some clinical procedures and keep a logbook. The learning of each procedure must be verified by a signature of a staff member in that unit.

12. INTEGRATED ASSESSMENT

Assessment should be in line with the way students are taught. Assessment should also be in line with the way students will work after completion of the programme.

Methods of assessment that are used in this programme include:
- Tutor assessment
- Modified Essay Question (MEQ)
- Objectives Structured Clinical Examination (OSCE)
- Individual Process Assessment (IPA)

The assessors are both internal and external. External assessors are invited at the end of each Phase. Self-assessment, peer assessment and tutor assessment are all useful in assessing students. Self-assessment is more useful in assessing student insight into their performance.

The timing is both formative (continuous) and summative (end of phase). Students are not allowed to proceed to the next level if they have not passed all the courses that are offered at that level.

Regarding standards, the criterion-referenced assessment is preferred. This helps to determine whether students have achieved a specific standard of competence or not (pass/fail/distinction). Norm-referenced assessment distinguishes between the performance of different individuals, i.e. the candidates are ranked on the basis of their scores in the examination. Most staff members are still comfortable with this method of assessment.

13. STUDENT SUPPORT

The medical curriculum is supported by a formal mentoring programme. Each first year student is paired with a senior student at the beginning of the year and this programme ends with a function at the end of the year. The first year students are often unable to handle the culture shock on their own. They also need life skills and learning skills.

Tutors and peers, especially during the small group discussions are able to pick up problems at an early stage. The groups are small and manageable. Issues are raised and dealt with immediately either at the end of the small group discussion or later.

Problems that cannot be handled by tutors are passed on to the Dean's office. The Dean handles the problem or passes it over to the student support services for counseling.

During the orientation phase of first years, students are taken through common issues including life skills, time management, learning skills, etc.

14. PROCESS MANAGEMENT

The process is managed systematically by the Executive Dean, Deputy Dean, Director of School of Medicine, Faculty Management Committee, Programme Directors, Programme Coordinators and Heads of Departments and staff.

The coordinating committee is the Undergraduate Education and Training Committee with the following subcommittees:

- Curriculum development
- Case development
- Staff development
- Community-based education
- Student orientation

The Resource Development Committee, Student Orientation Committee and Quality Assurance Committee are committees of the Faculty that report to Faculty Board.

SELECTION OF STUDENTS

1. SELECTION OF STUDENTS FROM MATRICULATION AND NEW NATIONAL SENIOR CERTIFICATE IS BASED ON PROGRAMMES IN THE 3 SCHOOLS, namely:

• School of Medicine	:	MBChB Degree Bachelor of Medical Clinical Practice
• School of Nursing Science	:	B Cur (Basic) Degree
• School of Allied Health Sciences	:	B Sc Health Promotion Bachelor of Social Work

1.1 Admission Policy

The intake of students is determined by a structured selection process, whereby academic abilities and personal attributes of the candidates are given equal importance. This is in line with the innovative curriculum which the Faculty is pursuing.

The Faculty has a commitment to recruit students from rural and disadvantaged areas and this is done using the creative and responsive selection process described below. There is involvement of the members of the community and the health professions in the selection process.

The Faculty used to participate in the AARP (Health Placement Tests) but abandoned it because it was found not very helpful.

The Faculty has established a quota system for MB ChB to reflect the demographics of South Africa as follows:

- Black African   -   75%
- Indian   -   15%
- Coloured/White   -   05%
- SADC   -   05%

Unable to recruit qualifying white applicants to meet the demographics of the country – hence the 15% allocation for Indians.

1.2 Applications

    a. Application forms for Faculty of Health Sciences are available from the Admissions and Registration Office from March of each year. To obtain these forms apply to :

        The Registrar
        Walter Sisulu University
        Private Bag X1
        Nelson Mandela Drive
        MTHATHA   5117

    b. Closing date for submission of completed forms :

MBChB	-	30 September
Bachelor of Medical Clinical Practice	-	31 October
B Cur (Basic)	-	31 October
B Sc Health Promotion	-	31 October
B Sc Degrees	-	31 October
Bachelor of Social Work	-	31 October

    c. Late application fee of R120 will be charged. Closing date for late applications as follows :

MBChB	-	31 October
Bachelor of Medical Clinical Practice	-	30 November
B Cur (Basic)	-	30 November
B Sc Health Promotion	-	30 November
B Sc Degrees	-	30 November
Bachelor of Social Work	-	30 November

1.3 Requirements

- Valid National Senior Certificate with appropriate credits
- Results of grade 11 Examinations
- Results of mid- year Grade 12 Exams
- Results of a structured interview

1.4 Scoring System

A point and scoring system based on academic performance and structured interview has been developed and utilized to grade the students for the purpose of selection.

1.5 Short Listing

- After the closing date all applications are sent to the Faculty Selection Committee for screening and for the first round of short listing, based on academic performance. Unsuccessful candidates are informed immediately.
- After the NSC results are published, a second round of short listing for interviews is done. Unsuccessful candidates are informed immediately by correspondence. Shortlisted candidates are informed and invited for interviews.

1.6 Interviews

- Interviews are conducted for students who are short listed on academic merits.
- Interviews are held in November for post and old matrics, and in January for National Senior Certificate
- A scoring system is used to determine the following personal attributes :
  - Critical thinking
  - Logical argument/ thinking
  - Problem solving skills
  - Communication skills
  - Interpersonal relationship and conflict resolution strategies
  - Empathy, friendliness and sensitivity
  - Stress tolerance and resilience
  - Community awareness and
  - Motivation
- The results of the interview are equally weighted with the academic results.
- The outcome of this final process is communicated to all students in writing.

1.7 General Comments

- In keeping with the Policy and the Act for minimum requirements, the Faculty states that meeting the minimum requirements does not guarantee admission.
- Due to the large number of applications for a limited number of placements, a highly competitive selection becomes necessary.
- The assessment by interview is equally weighted with academic results in Matric/NSC.

1.8 Admission from other Institutions

- Applicants who have been excluded from other institutions on academic grounds or unprofessional/unethical behavior will not be considered.
- Transfers from other institutions are not recommended for academic & logistical reasons.
- Students from faculties having similar integrated programmes may be considered under exceptional circumstances, and these students may be placed at levels below their current levels of study as determined by curriculum issues.

1.9 Admission from other Degree & Diploma Programmes

- A limited number of students with appropriate degrees may be considered for admission in Health Sciences Degrees.
- Graduate students are assessed on the basis of their post-matric results without reference to their matriculation results. Applicants are assessed with a scoring system that includes the NQF level of the post-matric qualification, the CESM category of the qualification, and the time taken to complete the course (vis-à-vis the duration of the course).

2. ADMISSION CRITERIA - NSC AND OLD MATRIC

All applicants must pass the National Senior Certificate (NSC) examination as minimum criterion for consideration for admission to University Certificate, Diploma or Degree.

The criteria for each school are outlined in accordance with grouping of subjects as follows:

PROGRAMME	MATRICULATION	REQUIRED NSC SUBJECTS (Compulsory)	RECOMMENDED NSC SUBJECTS (Not Compulsory)	OTHER
MBChB (Medicine)	Applicants must have obtained full Exemption with an overall C aggregate symbol (or higher) at first attempt with : English D(HG) or C (SG) Physical Science D (HG) or C (SG) Mathematics D (HG) or C (SG) Biology D (HG) or C (SG)	NSC achievement rating, at first attempt, of at least : 5 (60-69%) in English at a Home Language or First Additional Language level 5 (60-69%) in Mathematics 5 (60-69%) in Physical Science 5 (60-69%) in Life Sciences	4 (50-59%) in IsiXhosa 4 (50-59%) in Life Orientation	- Minimum statutory NSC requirements for degree entry must be met - All candidates shall be subject to selection process.
B Cur (Nursing)	English E (HG) or D (SG) Biology E (HG) or D (SG) Physical Science E(HG) or D(SG) [E(SG) will be considered if one of the above subjects is D(HG)] Matriculation Exemption Conditional	4 (50-59%) in English at First Additional Language level 5 (60-60%) in isiXhosa at a Home or First Additional Language level 4 (50-59%) in Mathematics Literacy or 3 (40-49%) in	4 (50-59%) in Information Technology 4 (50-59%) in Life Orientation	- Minimum statutory NSC requirements for degree entry must be met - All candidates shall be subjected to selection process.

	Exemption or Mature Age Exemption if the Candidate is 23 years on the year of registration	Mathematics 4 (50-59%) in Life Sciences 4 (50-59%) in Physical Science		
B Sc Health Promotion (Allied Health Professions)	English E (HG) or D (SG) Biology E (HG) or D (SG) Applicable Mathematics is desirable	4 (50-59%) in English at First Additional Language level 4 (50-59%) in IsiXhosa – both at Home Language or First Additional level	4 (50-59%) in Physical Science 4 (50-59%) in Agricultural Science	- Minimum statutory NSC requirements for degree entry must be met
	A person above age 23 with Senior Certificate and Conditional Exemption from SAHE (South African Higher Education)	3 (40-49%) in Mathematics Literacy 4 (50-59%) in Life Sciences 4 (50-59%) in Life Orientation		- All candidates shall be subjected to selection process.
Bachelor of Medical Clinical Practice (Medicine)	Applicants must have obtained full Exemption with an overall C aggregate symbol (or higher) with : English D(HG) or C (SG) Physical Science D (HG) or C (SG) Mathematics D (HG) or C (SG) Biology D (HG) or C (SG)	NSC achievement rating, of at least : 5 (60-69%) in English at a Home Language or First Additional Language level 4 (50-59%) in Mathematics 5 (60-69%) in Physical Science 5 (60-69%) in Life Sciences	4 (50-59%) in IsiXhosa 4 (50-59%) in Life Orientation	- Minimum statutory NSC requirements for degree entry must be met - All candidates shall be subjected to selection process.
Bachelor of Social Work (Allied Health Professions)	Matric Exemption, Conditional Exemption or Mature age	4 (50-59%) in English at Home Language	3 (40-49%) in Mathematical Literacy	- Minimum statutory NSC requirements

	Exemption	or First Additional level 4 (50-59%) in isiXhosa or any other Additional language 4 (50-59%) in Life Orientation 4 (50-59%) in Life Sciences 3 (50-59%) in Physical Science		for degree entry must be met - All candidates shall be subjected to selection process
B Sc Dietetics, awaiting for approval (Allied Health Professions)		4 (50-59%) in English at Home Language or First Additional level 4 (50-59%) in Mathematics Literacy or 3 (40-49%) in Mathematics 4 (50-59%) in Life Sciences 4 (50-59%) in Physical Science	4 (50-59%) in IsiXhosa 4 (50-59%) in Life Orientation	- Minimum statutory NSC requirements for degree entry must be met - All candidates shall be subjected to selection process.
B Sc Speech Pathology and Audiology, awaiting for approval (Allied Health Professions)		4 (50-59%) in English at Home Language or First Additional level 4 (50-59%) in Mathematics Literacy or 3 (40-49%) in Mathematics 4 (50-59%) in Life Sciences 4 (50-59%) in Physical Science	4 (50-59%) in IsiXhosa 4 (50-59%) in Life Orientation	- Minimum statutory NSC requirements for degree entry must be met - All candidates shall be subjected to selection process.

B Sc Prosthetics & Orthotics, awaiting for approval (Allied Health Professions)		4 (50-59%) in English at Home Language or First Additional level 4 (50-59%) in Mathematics Literacy or 3 (40-49%) in Mathematics 4 (50-59%) in Life Sciences 4 (50-59%) in Physical Science	4 (50-59%) in IsiXhosa 4 (50-59%) in Life Orientation	- Minimum statutory NSC requirements for degree entry must be met - All candidates shall be subjected to selection process.

3.   ADMISSION CRITERIA - POST MATRIC

3.1	**QUALIFICATION**	**POINTS**
	Biomedical Science including Nursing	04
	Natural Science : Biology, Zoology, Botany	03
	Physical Science : Physics, Chemistry	
03		
	Mathematical Sciences	02
	Other	01

3.2	**LEVEL OF QUALIFICATION**	
	Ph D	04
	M Sc	04
	Honours	03
	Bachelors	02
	Other : Diploma, Advanced Diploma	01

3.3	**TIME TAKEN TO PASS QUALIFICATION**	
	Regulation time	02
	Regulation +1	01

4. **SADC STUDENTS**

    Presently, a maximum of 5% places are reserved for students from Lesotho as per the allocation for the Faculty.   Screening is done by Lesotho and the final selection is done by the Faculty based on merit.

5. **SELECTION COMMITTEE**

    The selection committee comprises of Faculty members, members of the Health Professions and Community members elected by the Faculty Board.   It is responsible for the final selection of students.   In the final selection, equal weighting is applied to academic abilities and to personal attributes.