SUBJECT REVIEW REPORT

DEPARTMENT OF PROSTHETIC DENTISTRY

FACULTY OF DENTAL SCIENCES
UNIVERSITY OF PERADENIYA

24th to 26th July 2006

Review Team :
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1. SUBJECT REVIEW PROCESS

This review of the performance of the Department of Prosthetic Dentistry (DPD) at the Faculty of Dental Sciences at the University of Peradeniya was done on behalf of the Quality Assurance and Accreditation Council of the UGC.

The review committee consisted of:-

Professor Lalitha Mendis, University of Colombo (Chairperson)
Dr Gamini Kathriarachchi, Dental Institute, Colombo
Dr S Vasantha, Dental Institute, Colombo

The review was conducted between July 24 – 26 2006.

At the onset, the review team wishes to thank the Dean, and staff of the DPD for their extreme courtesy and cooperation during the review process.

The aim of this subject review was to evaluate the quality of student learning in prosthetic dentistry. The process of this evaluation involved the following steps.

1. *Perusal of a Self-Evaluation Report (SER) of the programme in prosthetic dentistry*
2. *Examination of the following Documents*
   Question papers from years 2003 - 2005
   Answer scripts of best, worst, and middle level performers for years 2003 - 2005
   Examination results, years 2003 - 2006
   Handouts given at lectures
   Time table of tutorial topics
   Minutes of departmental meetings
   Faculty Curriculum book
3. *Observation of Teaching*
   Teaching was observed in the following settings.
   Lecture hall
   Clinical setting of the DPD
   Tutorial
4. *Discussions and Meetings with the following*
   Dean
   Academic staff of the DPD
   Technical staff of the DPD
   Nursing staff of the DPD
   Third and Final year students who were following the teaching programme in prosthetic dentistry
   Postgraduate students
   Director, of Faculty Curriculum Development (CUDDE)

2. BRIEF HISTORY OF UNIVERSITY, FACULTY AND THE DEPARTMENT

The University of Peradeniya came into being in 1967 as the University of Ceylon Peradeniya. Its precursor was the University of Ceylon, Peradeniya Campus. At present it has seven faculties – Agriculture, Arts, Dental Sciences, Engineering, Medicine, Science and Veterinary Medicine & Animal Sciences and 64 departments. In addition it has two teaching hospitals and several centers and units. It has a well developed sports complex and is the largest residential campus in Sri Lanka with 10 large and 4 medium sized hostels for student accommodation.

The Dental School was established in 1943 as the department of Dental Surgery in the Faculty of Medicine of the University of Ceylon, but was moved to Augusta Hill Peradeniya in 1954 for lack of space. When the Faculty of Medicine, Peradeniya was established in 1961, the Dental School became a part of it and the BDS degree was awarded by the University of Ceylon, Peradeniya.

In 1974, under the University of Sri Lanka Act No.2 of 1972, the Medical, Dental and Veterinary Schools were amalgamated into the Faculty of Medical, Dental and Veterinary Sciences of the Peradeniya Campus, University of Sri Lanka with a Chairman at each school. The Chairman of the Medical School was also the Dean of the Faculty.

By the university Act No 16 of 1978, constituent Campuses of the University of Sri Lanka received university status but even under this arrangement, the Dental School remained as part of the Medical Faculty. In October 1986, it became an independent faculty. At the time there were five departments in the Dental Faculty. In 1990 the Faculty of Dental Sciences was expanded into six departments – Community Dental Health, Restorative Dentistry, Oral Medicine and Periodontology, Oral Pathology, Oral Surgery and Prosthetic Dentistry. The seventh department, the Department of Basic Sciences comprising the divisions of General Anatomy, Dental Anatomy, Physiology and Biochemistry was established in 1995. These departments conduct a combined study programme which leads to the degree of Bachelor of Dental Surgery (BDS). Such graduates receive the license to practice after they register with the Sri Lanka Medical Council.

In 1997 the Faculty of Dental Sciences received a huge Japanese grant and used it to acquire new premises, a new teaching hospital and modern equipment. With this grant the faculty was able to establish state of the art clinics, laboratories, and facilities for advanced dental treatment, wards, out-patient-department, operating theatre and intensive care unit. The Faculty developed the capability to also treat oral cancers and facial deformities.

Figure 1 shows the present organizational structure of the Dental Faculty.

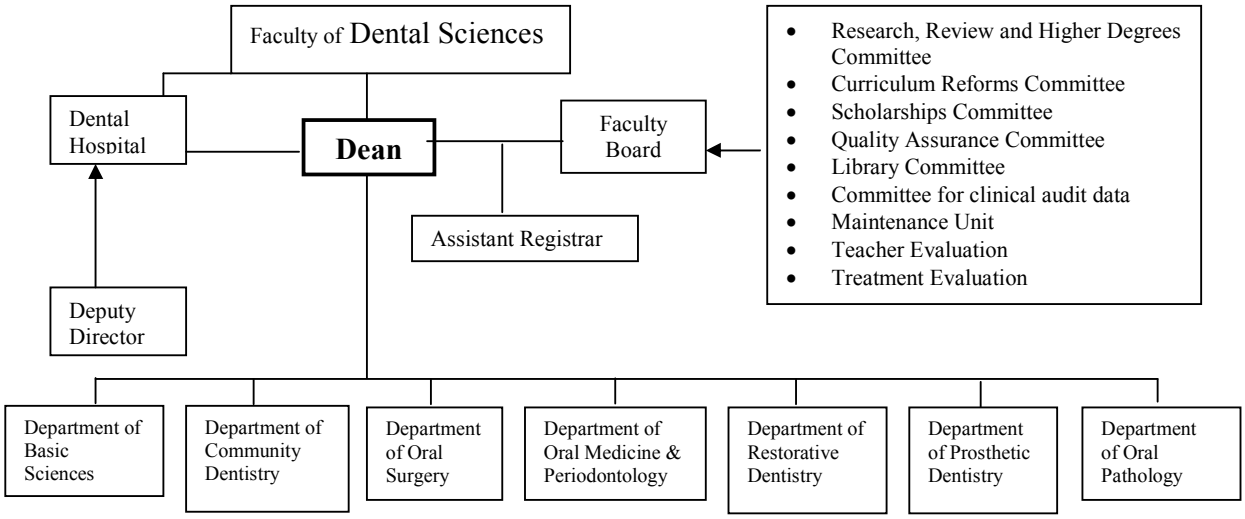

Figure 1 - Organizational Structure of the Faculty of Dental Sciences [Ref. SER]

Vision and Mission of the Faculty of Dental Sciences

Vision: "To be a centre of excellence in dental education, research scholarship and oral health care"

Mission: "To foster excellence in education and research and induce commitment to care in order to promote oral health in Sri Lanka".

The DPD was established in 1980, was located originally at Dangolla but moved to its present location on the JICA aid grant. The DPD has a permanent academic staff of 4 and 4 temporary lecturers. It has a non academic support staff of 21 including 10 technical officers, 5 nursing officers, 1 stenographer, 2 laboratory assistants and 3 labourers.

Permanent Academic Staff

Dr. T. Anandamoorthy	Senior Lecturer
Dr. J.A.V.P. Jayasinghe	Senior Lecturer
Dr. I.P. Thilakumara	Senior Lecturer
Dr. I.K. Wimaladharma	Lecturer Probationary

The DPD has a wide range of teaching/learning resources. The lecture theatres and tutorial rooms are common for many departments. They are equipped with black/white boards, OHPs, 35 mm slide projectors and multimedia projectors.

The DPD has a separate student clinical laboratory with 18 dental chairs 12 of which have dental units. Student laboratories are equipped with Bunsen burners for practice in laboratory technology. There is a technician laboratory and an advanced restorative laboratory which the DPD shares with the Department of Restorative Dentistry. A student skills laboratory is also shared with the department of Restorative Dentistry.

3. AIMS AND LEARNING OUTCOMES

Given below are the stated aims and outcomes of the DPD as given in the SER.

3.1. Aims (from SER)

Understanding the needs of partially dentate and completely edentulous patients assessing the condition of the remaining teeth and their supporting tissues develop skills in planning the treatment and providing necessary treatment with reviews periodically.

The Department of Prosthetic Dentistry aims to provide

3.1.1. Encouragements to students to apply their cognitive abilities in anatomy, dental anatomy, bio chemistry and physiology they learned during their first years of the undergraduate education.

3.1.2. Providing opportunities for students to learn clinical skills in examination of patients assessment and treatment planning.

3.1.3. Stimulating opportunity for students to learn the clinical skills and laboratory technology which are essential for successful provision of artificial substitutes.

3.1.4. A range of demonstrations in the clinical and laboratory skills in addition to lectures and tutorials to facilitate learning involved in rehabilitation of patients.

3.1.5. A friendly and supportive departmental environment that is conducive to learning prosthetic dentistry and apply the knowledge and skills in daily managements of patients.

3.2. Learning Outcomes (from SER)

On successful completion of the programme students should have

3.2.1. Gained knowledge and understanding in the needs of patients who have partial or complete loss of their dentition and the importance of assessment of the remaining oral tissues.

3.2.2. Developed the clinical skills in recording impressions and recording jaw relations of patients.

3.2.3. Achieved reasonable knowledge and skills in the laboratory technical procedures.

3.2.4. Gained knowledge and skills in designing and construction of artificial substitutes such as complete and partial dentures.

3.2.5. Developed the ability to diagnose the problems associated with denture wearing and manage the patients.

3.2.6. Obtained knowledge and understanding the psychological and social impact of tooth loss.

3.2.7. Be able to appreciate the need to manage elderly patients with kindness and understanding.

3.2.8. Understand and appreciate the significance of aesthetics during designing of dentures.

3.2.9. Obtained knowledge and skills in checking the wax dentures in the mouth and give instructions to the technician where necessary.

3.2.10. Developed skills in carrying out clinical examination and investigation collect and record relevant data of a patient with maxillofacial defect.

3.2.11. Be able to design a simple obturator, deliver the finished prosthesis and give instructions.

3.2.12. Be able to appreciate the need for rehabilitation of patients in order to help the patient to lead useful life.

3.2.13. Understand and appreciate the psychology of patients with maxillofacial defects and demonstrate kindness towards them.

3.2.14. Acquired the ability to apply knowledge gained to practice safe dentistry.

3.2.15. Acquired the skill of self learning and life long learning.

On successful completion of the course in prosthetic dentistry students should be able to demonstrate their knowledge and understanding in patient management.

Besides teaching undergraduates, the department participates in training courses for newly recruited dental technicians and nurses. The department is also responsible for training postgraduate trainees of the PGIM who are on training programmes leading to MS in Restorative Dentistry.

4. FINDINGS OF THE REVIEW TEAM

4.1. Staff

After 1993 it is only recently that the department has 4 members of a cadre of 5. Until then, Dr. T. Anandamoorthy has to be commended for attending to undergraduate teaching as well as to the teaching of newly recruited technicians and nurses and of PGIM trainees almost single handed.

Comment:-
A university department with this kind of staff deprivation cannot be expected to perform maximally. In the process of coping from day to day, creativity and innovative planning suffers. If the university expects state of the art educational programmes it is necessary to ensure that departments have adequate staff and other resources.

Some observations made during meetings with the technical and nursing staff are given in Annexure 1.

4.2. General Comments on Learning Outcomes

The DPD had clear learning outcomes. Even though, a Faculty Vision and Mission statements were found, the Faculty did not appear to have drafted Faculty learning outcomes.

Comment:-
The learning outcomes of each department or module should flow from the learning outcomes of the institution.

4.3. Comments on Departmental Aims

3.1.1 Encouragements to students to apply their cognitive abilities in anatomy, dental anatomy, bio chemistry and physiology they learned during their first years of the undergraduate education.

Comment:-
The application of basic sciences to clinical work could begin in the pre-clinical years thus enabling better vertical integration. During discussions with students they indicated that they too would like this as they would be able to follow their 3rd year lectures better.

3.1.2. Providing opportunities for students to learn clinical skills in examination of patients assessment and treatment planning.

Comment:-
Students would like more exposure in this area. At the discussions we had with the staff they too felt that there were ways and means of increasing the effective time of clinical exposure e.g. by rearranging the programme with the Department of Restorative Dentistry. The review committee felt this was a reasonable modification towards the fulfillment of this aim.

3.1.3. Stimulating opportunity for students to learn the clinical skills and laboratory technology which are essential for successful provision of artificial substitutes.

Comment:-
The DPD needs to review if opportunities for learning are fully utilized at the clinic and the laboratory.

3.1.4. A range of demonstrations in the clinical and laboratory skills in addition to lectures and tutorials to facilitate learning involved in rehabilitation of patients.

Comment:-
Satisfactory exposure

3.1.5. A friendly and supportive departmental environment that is conducive to learning prosthetic dentistry and apply the knowledge and skills in daily managements of patients.

Comment:-
Yes, indeed there was a very friendly and supportive environment in the department.

4.4. Comments on Departmental Outcomes

3.2.1. Gained knowledge and understanding in the needs of patients who have partial or complete loss of their dentition and the importance of assessment of the remaining oral tissues.

Comment:-
The fulfillment of this outcome needs to be tested out in a more focused way e.g.

- *Student presentation of cases to teachers and fellow students at the clinic.*
- *Maintenance of a case book of cases they see.*
- *Students should understand the basis behind all the clinical procedures before they commence the treatment. Closer supervision during the clinical training is suggested. The DPD has taken steps to overcome this problem by allocating staff members to students to give continuous guidance, but staffing problem seems to be a constraint.*
- *The cases selected should be given ideal or near ideal treatment and NOT what the patient may request. The student needs to be taught to provide patients proper treatment and to develop the capability to explain to the patient and to convince him/her if what the patient demands are contrary to the proper treatment.*

3.2.2. Developed the clinical skills in recording impressions and recording jaw relations of patients.

3.2.3. Achieved reasonable knowledge and skills in the laboratory technical procedures.

3.2.4. Gained knowledge and skills in designing and construction of artificial substitutes such as complete and partial dentures.

Comment:-

- *All the skills referred to in these outcomes are not assessed during training e.g. jaw registration.*
- *The clinical and laboratory skills that students in Prosthetic Dentistry learn have a SEQUENTIAL form. E.g. it would NOT be advisable for a student to move to the trial stage without getting adequate competence in jaw registration. Students also have to learn to do certain procedures in a specified TIME LIMITATION. E.g. the 3 hours as given now, is excessive time for a final year student to do bite registration.*

- *Students who are found to be incompetent at the course assessment are not subject to remedial teaching and retesting. This needs to be rectified.*
- *Acquiring competence in clinical and practical skills is particularly important as there is at present no internship and many take to private practice directly after qualifying.*

3.2.8. Understand and appreciate the significance of aesthetics during designing of dentures.

3.2.9. Obtained knowledge and skills in checking the wax dentures in the mouth and give instructions to the technician where necessary.

Comment:-
Is addressed in 1, 2 and 4 above.

3.2.10. Developed skills in carrying out clinical examination and investigation collect and record relevant data of a patient with maxillofacial defect.

3.2.11. Be able to design a simple obturator, deliver the finished prosthesis and give instructions.

3.2.12. Be able to appreciate the need for rehabilitation of patients in order to help the patient to lead useful life.

Comment:-
3.2.10 to 3.2.12 can be monitored during sessions in the clinical laboratory and through student presentations as mentioned in 3.2.1 above.

3.2.13. Understand and appreciate the psychology of patients with maxillofacial defects and demonstrate kindness towards them.

Comment:-
These abilities could be monitored in the clinical set up and tested in an OSCE.

3.2.14. Acquired the ability to apply knowledge gained to practice safe dentistry

Comment:-
As mentioned in 3.2.1 above continuous assessment needs review and change to ensure that students are capable of practicing safe dentistry.

3.2.15. Acquired the skill of self learning and life long learning.

Comment:-
Students need to be guided into these skills. The DPD as well as Faculty needs to review the way in which students use the library and IT.

4.5. Curriculum Design, Content and Review

Prosthetic Dentistry is taught in the third and final years. The teaching programme consists of a total of 322 student contact hours of which 54 are lectures hours, 64 practical classes, 20 tutorials and 184 hours of clinical sessions.

3rd Year Programme

During the 3rd year main emphasis is given for laboratory technological work and basic training in clinical work. Students have weekly lectures of one hour duration and are trained in the rehabilitation of completely edentulous patients both in clinical and laboratory work.

The entire batch of students is divided into 8 groups for clinical sessions. Each group has to undergo a block appointment of 4 weeks of clinical work in the prosthetic clinic. During these appointments, clinical demonstrations are given by academic staff members after which students practice on their own. Each student has to carry out all the clinical procedures involved in the construction of a complete denture and deliver the finished denture at the end of the clinical appointment

In addition, each group of students follows weekly 2 hour sessions in laboratory technology. Demonstrations are done by senior dental Technical Officers after which students work on their own.

Lecture Topics in the 3rd Year

Physiology of oro-masticatory apparatus – revision

Medical problems in the elderly edentulous patients

Adaptation for mastication and mandibular posture in edentulousness

Changes in mucosa bone, joints muscles

Effects of edentulousness on nutrition

Psycho-social aspects of edentulousness

Epidemiology of edentulousness

Final Year Programme

Lectures of one hour duration are conducted throughout the period. Tutorials are conducted weekly for different group of students.

During the final year students undergo clinical training in the construction of partial dentures and maxillofacial prosthetics. Each group of students spends their 3 hour morning sessions for a period of 4 weeks. Each student has to complete the treatment of one completely edentulous patient and 3 partially dentate patients.

In addition each group of students has to undergo their clinical learning of two hours duration in the afternoons on a rotational basis through out the year. During their rotation appointment each student has to complete the treatment of 2 partially dentate patients.

Lecture Topics in the Final Year

Introduction to complete denture prosthetics

Applied anatomy and physiology

Facial and intra oral changes following tooth loss

General principles of denture retention

Mandibular movement and positions

Muscle balance

Occlusal balance

History taking and examination

Impression taking

Construction of record blocks

Recording jaw relation (Bite recording)

Selection of teeth

Articulators

Setting up of teeth on plane line articulator

Trying in dentures

Flasking , packing & processing

Finished denture, fitting and advice

Denture complaints

Relining and rebasing of dentures

Overlay, on lay and over dentures

Implant dentures

Disjunct dentures, Sectional dentures and hinge dentures

Introduction to maxillo-facial prostheses

Causes and types of maxillo-facial defects and applied anatomy in relation to facial and oral defect.

General principles of retention, support and stability of maxillo-facial prostheses

History taking and examination of the patient

Preparation of the mouth for M.F.P

Impression taking (Preliminary, Master)

Designing of an obturator

Trying the prostheses in the mouth finished prostheses fitting and advice adjusting the prostheses at recall visits

Prosthetic skills that the student is expected to acquire by the end of the course:

1. Carry out the clinical examination and investigation, collect and record the relevant data of the edentulous patient.
2. Prepare the mouth prior to the construction of complete dentures where necessary. Eg: Alveolar plasty, frenectomy.
3. Record the impressions of the upper and lower denture bearing tissues.
4. Record the jaw relations using wax record blocks design the denture select teeth and instruct the technician.
5. Check the trial dentures where necessary and give instructions to the technician.
6. Deliver the finished denture and give instructions to the patient on proper use.

7. Manage patients in short term and long term follow up to assess the success of dentures.

Prosthetic laboratory skills that the student is expected to acquire:

1. Cast impression and obtain primary cast
2. Construct special trays on the primary casts
3. Construct record blocks
4. Transfer the jaw relations to the articulator and mount the casts
5. Carry out the setting up of teeth
6. Carry out flasking, packing and processing of acrylic dentures
7. Deflask, trim and polish the processed dentures
8. Reline and rebase dentures
9. Repair fractured dentures and carry out addition of teeth to existing partial dentures
10. Copying of existing dentures

In relation to the Curriculum Design, Content and Review, the judgment of the review committee is GOOD.

4.6. Teaching, Learning and Assessment Methods

Teaching and Learning Methods

The DPD deals with the teaching of rehabilitation of patients who have lost teeth and other supporting tissues with artificial substitutes. The academic programme is conducted in the form of lectures, tutorials, demonstrations, practicals and clinical teaching sessions. Facilities are available to encourage the student to use the computer aided learning.

Lectures are conducted as a means of delivering subject specific information to students. The members of the staff use a range of audio visual aids and printed materials when conducting lectures.

Tutorials classes are interactive and serve the purpose of clarification and elaboration of lecture material. They encourage the development of problem solving ability as they are conducted in the form of questions and answers.

In the laboratory, students are allowed to construct trial prosthesis on standard models by applying their theory knowledge.

At the clinical practice sessions, students are first given demonstrations on patients prior to the practice by themselves. Students are supervised by the academic staff.

The application of basic sciences to clinical work could begin in the pre-clinical years thus enabling better vertical integration. During discussions with students they indicated that they too would like this as they would be able to follow their 3rd year lectures better.

Also in the 1st and 2nd year, students could be exposed to some clinical cases. Students said that they did have medicine and surgery ward classes in these years but not all of them were well organized. The time allocation for these ward classes in the first two years could be reviewed and structured so that clinicians are clear about the objectives to be

met at these ward classes and some of this time could be devoted to clinical exposure to dental cases as well, to introduce students to and help them to understand and appreciate teaching in the third year.

There are several ways to improve the clinical training. This is particularly important as there is at present no internship for dental graduates and many take to private practice directly after qualifying.

The following suggestions are made with regard to the clinical training.

I. The effective time for teaching of clinical skills could be increased by rearranging the programme with the Department of Restorative Dentistry. E.g. block appointments could be so arranged, to increase the EFFECTIVE time of learning.

II. Clinical teaching could be made more effective if students were made to present cases to teachers and fellow students at the clinic just as they would do to an examiner; and if they were made to maintain case book of cases they see.

III. On questioning students, it was found that they were unable to justify what they were doing and also some did not appear to understand what the patient management should be. So closer supervision and insistence on students presenting to teachers a patient management plan is suggested. It is also suggested that students be made to practice their communication skills by presenting cases to teachers and fellow students
The DPD has taken steps to provide more supervision by allocating staff members to students to give continuous guidance, but staffing problem seems to be a constraint. We suggest that the seconded officer from the Ministry of health is also used for these clinical teaching sessions.

IV. The cases selected were being given treatment according to what the patient requested instead of the ideal or near ideal treatment. The student needs to be taught to provide patients proper treatment and to develop the capability to explain to the patient and to convince him/her if what the patient demands are contrary to the proper treatment.

V. The clinical and laboratory skills that students in Prosthetic Dentistry learn have a SEQUENTIAL form. E.g. it would NOT be advisable for a student to move to the trial stage without getting adequate competence in jaw registration. Students also have to learn to do certain procedures in a specified TIME LIMITATION. E.g. the 3 hours as given now, is excessive time for a final year student to do bite registration.

Assessments

The students have to pass the end of the 3rd year exam known as final B.D.S (part I) before commencing the Final year course.

This consist of 4 SAQS	-	25 marks
2 in course assessments	-	15 marks
Total	-	40 marks

Fifty percent of the mark should be obtained to pass the examination.

At the end of the final year the Final B.D.S (part II) examination is conducted.

Theory	1. essay type question		
	4 SAQS	-	40 marks
	2 incourse assessments	-	15 marks
	OSCE	-	30 marks
	Practical (clinical)	-	25 marks
			110 marks

50% of the total mark is (55 marks) the pass mark. (77 mark) 70% of the total mark for a distinction.

Those students who fail to obtain a mark of 50% of the total at both examinations are deemed to have failed the examination. They are allowed to sit the repeat examination after 40 days from the day of the release of results.

The student who shows the best performance is awarded Gold medals.

The review team wishes to draw attention to the following with regard to assessments.

I. The 15 marks given for the in course assessments are marked from 40-100%. i.e. every student gets a minimum mark of 40%.
II. If a student fails in prosthetic dentistry at the 3rd or final year, he/she has to repeat only the theory component and the previous mark for the in course assessments is carried forward.
III. Apparently, the minimum mark of 40% was decided upon with faculty approval to give the student a better opportunity to pass at the repeat examination.
IV. A limited number of skills are tested at the 3rd and final year in course assessments.
V. 3rd year assessments are on:-
   a. Construction of record blocks
   b. Setting of teeth for complete denture

   Final year assessments are on
   Recording of impressions
   Jaw Registration
   Denture Complaints

On comparing the final year lecture topics against the theory paper and practical it was found that 16 of 23 had been addressed. More topics may have been addressed in the OSCE.

It is suggested that a grid be used to ensure that as much as possible of the curriculum is addressed in the assessment.

As mentioned under assessments above, continuous assessments at both the 3rd and final year are marked from 40-100% and a student who fails in prosthetic dentistry does not have to repeat the clinical examination. Thus many students who have not developed the proper clinical skills may be passing in prosthetic dentistry and this is not satisfactory. Continuous assessment at both 3rd and final should be marked from 0-100%. There should be remedial classes for those who fail and the repeat examination should include a clinical test as well.

As there are possible improvements that could be introduced in teaching/learning strategies and assessments, Teaching, Learning and Assessment Methods are judged as SATISFACTORY.

4.7. Quality of Students including Student Progress and Achievements

Student Intake

Table 1. Advanced Level exam scores by districts of students entering the Faculty of Dental Sciences (from SER)

	Average marks	Z score		
District	**2001/02**	**2002/03**	**2002/03(a)**	**2003/04**
Colombo	71.66	1.8182	1.8547	2.1000
Gampaha	67.75	1.5980	1.6298	1.8397
Kalutara	68.75	1.6421	1.5936	1.8968
Matale	66.75	1.6596	1.3625	1.7325
Kandy	69.66	1.8006	1.7807	2.0179
Nuwara Eliya	55.50	0.9235	0.8191	1.1117
Galle	71.50	1.8132	1.8132	2.0672
Matara	71.66	1.8067	1.8477	2.0867
Hambantota	69.00	1.6934	1.6066	1.8389
Jaffna	68.75	1.7945	1.7767	1.9113
Kilinochchi	60.66	1.3292	1.3137	1.3819
Mannar	54.50	0.8290	0.8444	0.8700
Mulativu	61.33	1.1743	1.4118	1.3774
Vavuniya	64.00	1.7542	1.6424	1.8771
Trincomalee	64.66	1.6062	1.4603	1.5772
Batticaloa	66.25	1.4469	1.4486	1.7436
Ampara	65.00	1.3565	1.4831	1.6128
Pattalam	66.50	1.5104	1.5348	1.7866
Kurunegala	68.75	1.7469	1.7357	1.9676
Anuradhapura	64.66	1.5831	1.5586	1.8075
Polonnaruwa	62.50	1.2625	1.2017	1.5645
Badulla	66.00	1.4271	1.4243	1.6434
Monaragala	61.75	1.0098	1.0417	1.4567
Kagalle	69.25	1.5722	1.5912	1.9028
Ratnapura	66.25	1.4722	1.5577	1.8665

The Faculty of Dental Sciences takes in about 70 - 75 students each year, admitted by the UGC on the basis of Z scores. With reference to Table 1, between 2002 and 2004, there is seen a progressive increase in the Z scores of students entering for Dental Sciences.

The average age of students entering the Faculty is 22-25 years, and the male to female ratio almost equal.

With reference to Table 2, the Colombo District enjoys the highest proportion of admissions being 38.4% in 2003. A few districts have shown a consistant low entry proportion according to figures for 1998-2003. e.g. Matale, Trincomalee, Batticaloa, Moneragala, Hambantota, Mannar, Mulativu, Kilinochchi, Polonnaruwa, Vavuniya and Puttalam. This poor performance in districts in the North and East is reflected in the ethnic proportions of students entering the Faculty. E.g. in 2004, 84.9% were Sinhala, 9.6% Tamil and 5.5% Muslim which is not quite the national ethnic distribution.

No comment is being made of the religious profile of students as we feel that religious considerations should be divorced from academic considerations.

Over 50% of students receive financial assistance through the Mahapola, University Bursary and other schemes.

Examination Results

Given below is the pass rate at some recent examinations.

Final part 11	Pass rate
2005 April/ May	79%
2005 October (repeat)	90%
2004 march/April	92%
2004 September (repeat)	100%
2004 February/March	85%

1

Final Part 1	
2003 June	90%
2004 February (repeat)	100%
2004 February	70%
2005April	80%
2005 October	90%
2006 May	80%

Table 2. District-Wise Analysis of Students Entering the Faculty of Dental Sciences [Ref. SER]

District	1998	1999	2000	2001	2002	2003
Colombo	18 (24%)	28 (20%)	18 (23.3%)	27 (18.9%)	14 (19.8%)	28(38.4%)
Kalutara	6 (8%)	11 (7.8%)	5(6.5%)	9(6.3%)	5 (7.0%0	2(2.7%)
Gampaha	11(14.6%)	18 (12.8%)	10 (12.9%)	25 (17.5%)	6 (8.4%)	4(5.5%)
Kandy	6(8%)	6(4.2)	2 (2.6%)	5 (3.5%)	4 (5.6%)	4(5.5%)
Matale	1 (1.3%)	2(1.4%)	1 (1.3%)	3 (2.1%)	1 (1.4%)	1(1.4%)
Nuwaraeliya	1(1.3%)	4(2.8%)	1 (1.3%)	3 (2.1%)	1 (1.4%)	3(4.1%)
Trinco	1(1.3%)	4(2.8%)	3 (3.9%)	3 (2.1%)	2 (2.8%)	1(1.4%)
Baticcolo	3 (4%)	2(1.4%)	1 (1.3%)	3 (2.1%)	1 (1.4%)	1(1.4%)
Ampara	3(4%)	4(2.8%)	1 (1.3%)	3 (2.1%)	1 (1.4%)	2(2.7%)
Kegalle	1(1.3%)	4(2.8%)	3 (3.9%)	3 (2.1%)	3 (4.2%)	3(4.1%)
Ratnapura	1(1.3%)	4(2.8%)	5 (6.5%)	5 (3.5%)	2 (2.8%)	2(2.7%)
Badulla	1(1.3%)	5 (3.5%)	3 (3.9%)	4 (2.8%)	0	2(2.7%)
Monaragala	2 (2.6%)	3(2.1%)	2 (2.6%)	1 (0.7%)	3 (4.2%)	1(1.4%)
Galle	2(2.6%)	7(5%)	2 (2.6%)	8 (5.6%)	6 (8.4%)	2(2.7%)
Matara	1(1.3%)	9(6.5%)	3 (3.9%)	9 (6.3%)	6 (8.4%)	2(2.7%)
Hambantota	2(2.6%)	5(3.5)	2 (2.6%)	6 94.2%)	1 (1.4%)	1(1.4%)
Jaffna	3(4%)	4(2.8%)	2 (2.6%)	5 (3.5%)	4 (5.6%)	2(2.7%0

Mannar	2(2.6%)	1(0.7%)	1 (1.3%)	2 (1.4%)	1 (1.4%)	1(1.4%)
Mulativu	1(1.3%)	2(1.4%)	2 (2.6%)	3(2.1%)	1 (1.4%)	1(1.4%)
Killinochchi	1(1.3%)	1(0.7%)	1 (1.3%)	0	0	1(1.4%)
Anuradhapura	3(4%)	3(2.1%)	3 (3.9%)	3 (2.1%)	0	2(2.7%)
Polonnaruwa	1(1.3%)	1(0.7%)	0	2 (1.4%)	2 (2.8%)	1(1.4%)
Vavuniya	0	2(1.4%)	0	2 (1.4%)	1 (1.4%)	1(1.4%)
Kurunegala	4 (5.3%)	7(5%)	5 (6.5%)	6 (4.2%)	5 (7.0%)	4(5.5%)
Puttlam	0	3(2.1%)	0	3 (2.1%)	1 (1.4%)	1(1.4%)
Foreigners	0	0	1 (1.3%)	0	0	0
Total	**75**	**140 (2 batches)**	**77**	**143 (2 batches)**	**71**	**73**

The pass rate at examinations is good. However it must be pointed out that the 40-100% range of marking used for continuous assessment and not having a practical test at the repeat examination may have influenced these pass rates. Thus these pass rates may not be a true reflection of quality.

The committee also suggests that formal reports should be obtained from external examiners. Also committee suggests that there should if possible be double marking of answer scripts.

The quality of students entering the dental faculty is good but not representative of the island or its ethnic distribution. Although the pass rate is good, it may not be a true reflection of student achievement as explained above under comment.

Quality of Students including Student Progress and Achievements is judged as SATISFACTORY.

4.8. Extent and Use of Student Feedback

In the DPD, student feedback is obtained of lectures in the form of answers to a given questionnaire. *This is to be commended.* Similar assessments should be carried out to get the feedback for clinical teaching as well.

A Teacher evaluation committee had been formed in 2003 in the Faculty and teacher evaluation conducted by students by means of questionnaire. However, there had not been any activities since then and *it is suggested that this committee should be activated.* There is no Staff/Student Liaison committee to monitor the quality of teaching.

As there is room for improvement in this area, Extent and Use of Student Feedback is judged as SATISFACTORY.

4.9. Postgraduate Studies

One staff member from the DPD and one member from the Department of Health are undergoing full time postgraduate clinical training at present leading to MS in Restorative dentistry. The MS in Restorative dentistry is conducted by PGIM Colombo. Part of the training is carried out in Prosthetics. The Postgraduate students are satisfied with their clinical training.

PG students undergoing Diploma in Hospital Dental Practice were not available as they were training in another department.

Postgraduates learn in an apprentice style. There is no appraisal based learning programme, nor is there a postgraduate student journal club and a clear set of learning objectives for postgraduates.

There are no research students in the department although facilities ARE available to do research. The DPD identified that knowledge on clinical research methodology is lacking among them. The introduction of students to the basic concepts of research is being planned for the new curriculum

It is suggested that staff members are sent for training in clinical dentistry research and also that they apply for funding for research, preferably for multidisciplinary research studies. There is an abundance of clinical material that can be researched.

There is room for improvement but the DPD is hampered by lack of staff. Postgraduates are satisfied with the training they receive.

In relation to the Postgraduate Studies the judgment of the review committee is SATISFACTORY.

4.10. Peer Observation

There is no formal peer evaluation system although departmental staff realize the value of such evaluation. However the DPD has made a start and peer observation at lectures has been started.

It is suggested that the Head of Department sits in at some of the lectures and other classes conducted by junior staff. Also that staff of all categories sit in at each others teaching and make a criterion based assessment for constructive purposes.

Since Peer Evaluation has been started, it is judged as SATISFACTORY.

4.11. Skills Development

Skills development has been extensively discussed under 4.6 above. The staff acknowledged that the teaching and observation of generic skills requires more thinking and planning.

In addition to what has been said it is suggested that more emphasis be given to the teaching of generic skills and language and communication skills.

In relation to the Skills Development the judgment of the review committee is SATISFACTORY.

4.12. Academic Guidance and Counseling

Students said that they did not feel free to meet the staff members for guidance and they did not seem to be aware of Faculty arrangements for such guidance and counseling. If there is some matter that they find unsatisfactory they address their problem to the student union.

Students did not appear to know that there were student counselors in the Faculty.

The department staff said that they counseled students when they first began their study programme in the department.

There appeared to be a lack of communication and knowledge about the procedure for taking grievances to members of staff.

It is suggested that this problem be addressed at a faculty level.

As the counseling system does not appear to serve the purpose that it should, it is judged as UNSATISFACTORY.

5. CONCLUSIONS

Based on the observations made during the study visit by the review team, the eight aspects were judged as follows:

Aspect	Judgment
Curriculum design, content and review	Good
Teaching learning and assessment methods	Satisfactory
Quality of students including student progress and achievements	Satisfactory
Extent and use of student feedback, qualitative and quantitative	Satisfactory
Postgraduate studies	Satisfactory
Peer observation	Satisfactory
Skills development	Satisfactory
Academic guidance and counseling	Unsatisfactory

6. RECOMMENDATIONS

1. It is recommended that the clinical exposure in dental practice be provided in the first two years towards better understanding of teaching from the 3rd years onwards.
2. Clinical and practical skills training need to be more focused, more closely supervised and more cost effective in terms of time.
3. It is the opinion of the review committee that the assessment scheme should ensure that students who pass can practice safe dentistry.
4. It is recommended that a serious review and amendments be made to assessments and allocation of marks in prosthetic dentistry, and that more emphasis be placed on the display of competence in a wider range of clinical and practical skills and patient management.
5. Staff cadre need to be increased to provide especially quality supervision in the clinical setting.
6. It is recommended that research be initiated and encouraged among the academic staff of the department.
7. Students need to be actively guided towards self learning, life long learning and the optimal use of library and IT.
8. It is strongly recommended that the academic guidance and counseling support be reviewed at a Faculty level.

7. ANNEXES

ANNEX 1. SOME OBSERVATIONS AT MEETINGS WITH TECHNICAL AND NURSING STAFF

Technical staff

The Technical staff felt that the work load is balanced in the general prosthetic laboratory.

The Advanced Laboratory is shared by the DPD and the Department Restorative Dentistry, and work is at times problematic as the work is expected to be completed within a short period of time. They suggested that a register be maintained of cases handled.

The Porcelain room is not ventilated properly. The technicians find it difficult to work comfortably in this room for long periods of time.

Comment:-
Some attention needs to be given to the working environment of the porcelain room

Nursing staff

The shortage of nurses from the permanent cadre affects the work of the remaining staff as they are over loaded with work.

Nurses are finding difficult to do the clerical work in addition to the assisting work in the clinic. They requested a clerk and a computer.

They also requested Tamil language classes.