European Association of Establishments for Veterinary Education

and the **Federation of Veterinarians of Europe**

European System of Evaluation of Veterinary Training

REPORT ON THE VISIT TO THE FACULTY OF

VETERINARY MEDICINE OF LEIPZIG

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INTRODUCTION

The Faculty of Veterinary Medicine is one of the 14 Faculties and an integral part of the University of Leipzig. It was evaluated and approved by EAEVE during 1998. Since this first visit, the Faculty has been restructured, consolidated and thoroughly renovated. The Faculty is the smallest of the 5 establishments for veterinary education in Germany.

The second evaluation of the Faculty by an EAEVE Team took place from 20-24. October 2008. The Faculty had prepared an excellent Self-Evaluation-Report and the organization of the visit was exemplary.

Until 2007, the structure of the Faculty was comprised of 2 Departments, 11 Institutes and 4 Clinics. In order to pool the strengths for research, teaching and service, 4 Centres and a University Veterinary Hospital were created with the aim of harmonizing teaching and improvement of interdisciplinary teaching, increasing cooperation on research projects creating more critical mass for the common raising of grants, establishment of common postgraduate and continuing education programmes, coordination of services, sharing of laboratories, equipment and personnel, development of common concepts for quality assurance and coordination of public relations. This new structure can be considered to be in a test-phase, but benefits in terms of cooperation and horizontal communication on every level are already apparent.

The Faculty has introduced an extensive programme for continuous assessment of the quality of teaching, which includes online evaluation by students of at least one course per year in each subject taught and of the newly introduced modular teaching as well as assessment of extramural training by extramural instructors and students.

E-learning in general and in particular an advanced electronic learning platform “moodle” has been set up to improve information flow, to support teaching organization, to make the curriculum more transparent and accessible for students and teachers and to assist in self-directed learning.

The evaluation visit took place at a time of transition, since the Federal Law, (TAppV) which came into force in October 2006 and whose teaching and examination rules were published in October 2007, has required many changes to the curriculum. The Saxon-State University law is under revision and is likely to come into force in 2009. Evaluating (clinical) teaching during this transition period was somewhat inconvenient for the EAEVE Team, but the same would have been true for any German Faculty at this present time.

1. OBJECTIVES & STRATEGY

1.1 Findings

“The University of Leipzig supports achievement, qualification and competition in research and teaching. Research at the highest level is both the aim of the University and the standard by which its members are measured.

The University is a place of culture and free enquiry dedicated to pure research.

Teaching at the University is characterized by high scholarly and didactic levels and by individual application.”

“The Faculty has to ensure high-quality and research-based training in veterinary medicine, which follows modern trends of development and needs of society.”

(For details see SER p12)

1.2 Comments

- In general, the objectives cover adequately the total education programme.
- In accordance with EU Directive 2005/36, during the past 2 years, an extensive nationwide reform of the veterinary curriculum has been undertaken and one of the primary objectives of the Faculty is to fulfill the goals of this study reform.
- The Faculty has to submit an annual report to the Rector`s Office for assessment of the achievement of the objectives in teaching and research.

1.3 Suggestions

1.3.1 Based on the Federal Law, a new State law which regulates Universities in Saxony will come into force in 2009. Care should be taken to exploit to the maximum any increase in autonomy and flexibility offered by this new law.

2. ORGANISATION

2.1 Findings

The Faculty of Veterinary Medicine is one of the 14 Faculties comprising the University of Leipzig. The Dean of the Faculty directly reports to the Rector of the University.

(The detailed organizational structure can be found on pages 14-19 of the SER.)

2.2 Comments

- The recent (2008) changes to the organization of the Faculty structure (see pages 5-6 of the SER) resulted in 5 Centres in which 11 Institutes and 2 Departments are distributed, including 3 Large Animal Clinics, a Clinic for Birds and Reptiles and 1 Department of Small Animal Medicine.

- The above structure struck the EAEVE Team as unusual, but the reasons therefore were discussed with senior Faculty members and one of the Centre`s speakers. The long-term aims of harmonizing of teaching and improvement of interdisciplinary teaching, increased cooperation in research projects and common raising of grants, establishment of common internal and external postgraduate and continuing education programmes, coordination of services, common use of laboratories, equipment and personnel, development of common concepts for quality assurance and coordination of the "corporate image" to the public all seem to be rational, but it is recognised, that the concept is likely to be accepted and applied differentially by the various Centres. Nevertheless, it seems that the recommendation made in the EAEVE visit in 1998 to form Departments has been undertaken but with an alternative nomenclature of Centres instead of Departments.

- On page 6 of the SER, it is stated that "each institute and clinic remains a separate unit with regard to administration, finance, personnel and equipment"; in context with the new structure it has to be understood that this traditional concept can only continue to be applied temporary and if the Centres structure should really to work in the future, some autonomy has to be transferred to or shared within the Centres structure.

- A new Bird and Reptile Clinic was founded and a professorship position filled about one year ago and, at the time of the visit, a new Clinic for Ungulates had just been created and a person was identified to fill the new professorship.

- An internal control mechanism for coordination of veterinary clinical studies including liaison with the industry has been established as Ko-Vet, acceptance of which should be established across the Faculty.

- Two vacant professorships (small animal internal medicine and small animal surgery), despite appropriate efforts, could not be filled so far.

2.3 Suggestions

2.3.1 In order to coincide with international standards, it is strongly suggested that the Centres should be renamed "Departments".

2.3.2 Anatomy should become an Institute equivalent to Pathology.

2.3.3 Department of Small Animal Medicine should become "Small Animal Teaching Hospital (alternative such as "University Small Animal Hospital" are acceptable.) "Clinic of Surgery" should be renamed "Clinic of Equine Surgery or alternatively "Clinic of Large Animal Surgery".

2.3.4 Centres (renamed Departments) should be given more decisional and functional authority (Department head should have budget, personnel, equipment-resources and teaching coordination responsibility).

2.3.5 Vacant professorships in the small animal hospital: the Hospital Centre and/or other councils should analyze all possible reasons for failure to identify

suitable candidates, including possible economic and career-related reasons. As an example, given the present structure, a future full professor within the Department of Small Animal Medicine will not have the same degree of autonomy and standing within the Faculty as a professor in one of the Large Animal Clinics.

3. FINANCES

3.1 Findings

The financial situation can be found on pages 20 to 23 of the SER. What is clear is that the budget assigned by the University is totally inadequate to support the structures and staff of the Faculty. For this reason, other income is sought by the Faculty in terms of obtaining grants, donations and fees for services offered. From a total annual budget in 2007 of € 25.65 million, € 5.87 million were generated by the Faculty, i.e. in excess of 20%. Close to 50% of these funds are generated by the Small Animals Clinic. All non-budgeted posts are financed from this source as well as all materials and medicines used in the clinics. The positive side of the coin is that with the exception of 3% going to the Dean`s budget for general Faculty use, each individual clinic can retain and use the funds generated.

Additional income generated was as follows in € million:

Year	**2004**	**2005**	**2006**
Dept of Small Animal Medicine	1.648	1.786	1.762
Large Animal Clinic for Internal Medicine	0.291	0.262	0.262
Large Animal Clinic Surgery	0.399	0.371	0.433
Large Animal Clinic Ambulatory Service	0.156	0.091	0.094
Clinic for Birds and Reptiles			0.126

The Finance Committee has an advisory function to the Dean, who, together with the Faculty Council, decides on the allocation of the budget.

3.2 Comments

- Retaining of clinic income by each entity is basically a commendable concept, however overhead should be increased. The Unit Head should share financial autonomy for more transparency.

- Registration fees per term are retained by the University and are not passed on to the Faculty.

- Incomes for academic and technical support staff are generally low. For example, research assistants are paid at an hourly rate of € 10,47 and student assistants are paid at the rate of € 6,62.

- In general, the observation can be made, that due to very efficient and consistant efforts to generate additional funds for supplementing a clearly inadequate governmental budget, the overall funding of the Faculty is satisfactory

3.3. Suggestions

3.3.1 Despite the limited budget and the need to supplement it, consideration must be given to improving the remuneration levels to make positions available more attractive.

4. CURRICULUM

4.1 General Aspects

4.1.1 Findings

The curriculum is regulated by federal law, actually changed from the TAppO to the TAppV. It seems, that the TAppV offers the faculty more flexibility in organising specific aspects of the curriculum according to the profile of the faculty. Decision making structures and bodies and their responsibilities seems to be appropriate.

The definitions for the types of training given in the SER generally are in accordance with the SOP´s. In general, the curriculum seems to be balanced and covers all needs.

The TappV gives the Faculty the possibility to decide upon 20 % of the curriculum. The Faculty uses these hours (40) to organize a clinical rotation in the second year. This clinical rotation gives the students a first impression how to handle animals. On the other hand Faculty does not use the freedom offered by the TappV to increase the number of hours for clinical rotations in the 9th and 10th semester. The TappV attributes 372 hours of clinical rotation in the clinics to each student.

In the 5th year, students participate actively in the 24 hr emergency service: that is a compulsory attendance of 31 hours per week during clinical rotations, emphasizing hands-on clinical training of at least 6 hours per day during 5 days per week. On a rotational basis, the students have to do night or weekend shifts instead of the day-shifts.

Since October 2007 the Faculty introduced integrated teaching in theme-oriented modules for students of the second and third term and for students entering the fifth term.

26 modules were developed (5 pre-clinical and 21 clinical). 48% of the ex-cathedra teaching is now organized in these modules. The teachers in the clinics have the feeling that students now have a broader view on the problems of an animal which is presented with illness.

Immediately after each module, students are examined, and a new module starts straight after the examination. Although this system keeps the students continuously busy, they do not complain.

308 hours of teaching are organized as elective courses (84 hours in year 2, and 224 hours in year 3, 4 and 5)

96 of the 224 elective hours in year 3,4 and 5 will be allocated to a “project” that the student has to accomplish as self directed work.

During the visitation, the team did not notice students from the last year in a clinical rotation system. Staff of the clinics explained this fact by the transition from TappO to TappV in the curriculum. Over a period of 6 months there appears to have been no students available to work in the clinics, a situation which made evaluation of clinical skills of senior students more difficult for the EAEVE Team. Over the past years, clinical hands-on teaching has improved from marginal to acceptable. Nevertheless, it was concluded, that as soon as the new regulation comes into effect at the beginning of the new calendar year, clinical teaching and “first day clinical skills” will drastically improved.

Post-graduate students confirmed that the new TappV definitelywill result in remarkable progress in the day-one skills of the graduates. In the past, (TappO) a student got only one week of clinical rotation in each clinic. The other exposure to clinical cases was only sporadic (one or two hours per day) without any possibility for transfer of case responsibility case responsibility.

4.1.2 Comments

- Because of the absence of students in clinical rotation, it was somewhat difficult to evaluate the clinical teaching.
- The TappV will most likely result in better day one skills of the graduates.
- The implementation of a practical clinical training course during the third and fourth term is an interesting approach in the context of vertical integration of clinical disciplines and a precondition for successful extramural training opportunities after the second and fourth year. Also the introduction of interdisciplinary POL-seminars is a valuable asset.
- The stimulation of continuous learning by course related examinations is a new and valuable didactic approach
- According to both ratios (practical; theory; clinical work: lectures and practical work) the theoretical training is reduced remarkable in favor of supervised practical training. The ratio R 7 is a strong indicator for the large extent of clinical work compared to laboratory and desk based work and non-clinical animal work.
- The following re-calculation of R6 was necessary to correct a probable mistake reported in the SER on pages 32-33. If one follows the description of the interdisciplinary teaching in theme-oriented modules, it becomes obvious, that these hours count for theoretical training. This means, that the ratio should be calculated as

2629:2391. In this case the result is 0.91 instead of 1.54 as given on page 53 of the SER.

- Ratio 7 does not seem to be in full accordance with the SOP´s. Ratio 7 is defined as F/D + E, whereas the result given is understood as F/A + B + D + E + G. This results incorrectly as 1 : 2.19.

- Obviously there is a good integration of courses and the collaboration between the steering group “Neue Lehre”, the persons responsible for each module, the curricular committee, the Dean for study affairs and the Dean´s office is remarkable.

- The organisation of electives in 5 modules and the compulsory attendance out of three of them including Clinical Sciences and Veterinary Public Health supports the integration of courses substantially.

- Nevertheless, the arrangement of the clinical practical year and extramural training has to be evaluated carefully after the first experiences. It will be a challenging issue for the faculty to look for sufficient guidance of the program. It is very uncommon to have nearly 2/3 of clinical education under extramural supervision. Another concern can be that the schedule foreseen does not ensure sufficient knowledge and skills for all participants of the clinical rotations, since 50% of students get first their extramural training before they receive appropriate clinical training by the Faculty. Perhaps this may cause problems with practitioners based on significant variations in knowledge, competencies and skills of trainees. This controversial situation should be kept in mind also in the context of the corresponding evaluation by the practicing tutor..

- 4.1.2 The extent of student mobility (outgoings) is comparably low. Obstacles from the curriculum should therefore be reduced to a minimum.

General indicators for types of training

R6 - Ratio **theoretical training : supervised practical training** according to SOP is 1:0.91 (2629/2391). Hours of modules (1081hrs) should not be considered as (“practical training) because of not included practical training as it was reported in SER. (see Faculty´s comments from November 10, 2008 under R6 as attachment in the SER)

R7 - Ratio **Clinical training : Laboratory and desk based work+non clinical animal work** according to SOP is 1:0.55 (1544:847). (see Faculty´s comments from November 10, 2008 under R7 as attachment in the SER)

R8 - Ratio **self directed learning/teaching load** is 1:51.2 (98:5020)

Special indicators of training in Food Hygiene/Public health

R9 - Ratio **Total no. curriculum hours Food Hygiene and Public Health/Total no. hours vet. Curriculum** is 1:8.81 (570:5020)

R10 - Ratio **Total no. curriculum hours Food Hygiene and Public Health /Hours obligatory extramural work in Veterinary inspection** is 1:0.44 (570:250)

4.1.3 Suggestions

4.1.3.1 The Faculty should recalculate the number of hours a student is supposed to partake in the clinical rotations, if in a 24/24 service students are involved full time.

4.1.3.2 In order to increase outgoing mobility rate of students, adequate measures should be taken into account to increase this mobility.

4.1.3.3 Efforts by individuals in different institutes to further development of e-learning should be coordinated as to become more cost-effective and to projects by individual establishments in economies of scale in terms of working hours and costs can be achieved.

4.2 BASIC SUBJECTS & SCIENCES

4.2.1 Findings

Some subjects (Physics, Chemistry, Botany, Animal Breeding, History of Veterinary Medicine, Veterinary professional legislation, Veterinary practice management) are taught by experienced lecturers from outside bodies. These lecturers are contracted to assure proper coverage of teaching and the content is in good accordance with the needs of the subjects taught..

There are sufficient facilities at both the Institutes of Anatomy and of Pathology for the handling and storage of carcasses. Both units are well equipped with chilling and freezing facilities as well as other conservation methods such as plastination or bone de-greasing. Also the possibilities for transportation of small and large animal carcasses are satisfactory. The number of cadavers available for dissection courses is sufficient.

As stated on page 32 of the SER in many cases high school graduates do not fulfill the requirements in basic sciences. Nevertheless, these basic subjects are all alloicated into the first term and teaching hours in some of these subjects were reduced. To solve this problem satisfactorily will be a challenging issue for both the Faculty and the high school systemcontributing tutorial system seems to be essential. The impact of insufficient high school preparation in biology in general combined with the reduction of Faculty teaching on those subjects cannot be appraised so far.

According to the data given in the annex to the SER, there is a strong relationship between contents of basic sciences and later courses; the latter have been augmented by the introduction of 5 preclinical and 21 clinical theme-oriented interdisciplinary modules (see page 34 of the SER).

The total number of hours for basic subjects as well as the proportion between practical and theoretical work in general is adequate and thus meets the criteria of the EAEVE.

The hands-on participation by students in anatomy and pathology courses is very well developed and takes place in small groups of between 3 to 6 students.

4.2.2 Comments

- There are excellent documents available for students for lectures and courses in different basic sciences. They are designed according to an interdisciplinary approach and give students an actual insight in further needs. Also strong efforts were made in online-based services, available for students from outside the campus as well.

4.2.3 Suggestions

4.2.3.1 The process of restructuring the teaching of basic sciences is making good progress and should be followed-up consistently.

4.2.3.2 It will be important to continue to rationally use facilities some of which have yet to be created (for example expanding laboratory space by using and adapting unused space like basements to improve laboratory conditions for students), and for safety reasons.

4.2.3.3 The participation in some basic subjects, especially pre-clinical, should be enforced in order to enhance the concept of interdisciplinary modules.

4.3 ANIMAL PRODUCTION

4.3.1 Findings

The animal production (AP) disciplines are distributed from the 1st to the 5th years in the core courses, in modules and in elective subjects of the new curriculum.

The AP subjects are taught by teachers from different Institutes; amongst these, the animal nutrition lectures are given by the Institute of Animal Nutrition, Nutrition Diseases and Dietetics which is in not on the Campus.

The Animal Nutrition Institute is located in Möckern (about 20 min from the Faculty). It has specific laboratories for food analyses and a small food laboratory equipped with a grinder, a mixer and a pelleting machine to prepare concentrates for animal feeding.

Moreover, some of AP disciplines are taught by lecturers from outside the Faculty.

At the time of the visit, the Faculty position for an Epidemiologist was vacant.

During the AP courses, the students can do practical work on animal production subjects in small groups (about 15 students per teacher) at the Oberholz Farm at the Saxony State Institute for Agronomy as well as at the Zoo of Leipzig; moreover, the students can use the animals maintained in the clinics and in several institutes and they have further access to the farm animals via the visits by the mobile-clinic.

The agricultural extramural training (70 hours = 2 weeks) is the only extramural training organized by the Faculty at the Oberholz Farm for Teaching and Research with the supervision of the members of the Faculty. The academic staff of the AP subjects supervises the students during the activity on the farm. The Oberholz farm has accommodation (12 double rooms) to permit the students to stay there overnight.

4.3.2 Comments

- The animal production (AP) disciplines are well integrated into the subjects of the veterinary training but they are dispersed in different institutions (Faculty of Natural Sciences of the University Halle-Wittenberg) and in different Institutes of the Faculty. Nevertheless, Animal Production teaching requires interdisciplinary teaching coordination to give students a horizontal view in feeding, breeding, housing and farm management.

- The animal nutrition institute is well-equipped and run by enthusiastic members of staff; nevertheless, the outdated laboratories may constitute a problem for student safety.

- The extramural work and the collaboration between AP and clinic courses in the new curriculum permit the students to have an early exposure to handling of farm animals.

- In general, the animal production subjects have too many hours of theoretical teaching compared to those of practical work (less than 20%), with the exception of the animal nutrition courses which show a good involvement of the student in research and practical work (48% of practical vs. 52% of theoretical work), especially during the elective courses.

- The animal nutrition courses give a complete practical vision on how to formulate, prepare and analyze foods for animal nutrition.

4.3.3 Suggestions

4.3.3.1 Practical work in the animal production teaching programme should be increased. The professors of AP subjects should change the ratio of theoretical / practical work based on the TappV legislation, by following EC directive (2005/36/EC), regulating the total hours for each subject but not the distribution in teaching and practical work.

4.3.3.2 It is strongly recommended that the Institute of Animal Nutrition, Nutritional Diseases and Dietetics should move to the Campus. This could be an occasion for renovating the laboratories and could improve the integration of its staff with that of the other disciplines. Moreover it should promote interaction with the students on campus. In actual fact, the Animal Nutrition staff collaborates closely with the Large Animal Clinic for Internal Medicine and with the Department of Small Animal Medicine as well as with the Zoo of Leipzig, as confirmed by the research projects. Closer collaboration with other units is desirable.

4.3.3.3 There should be an improvement of the information flow on animal production subjects which should be better distributed amongst the Institutes, Departments and Centres for a better understanding of the different aspects such as handling, reproduction, nutrition, milk quality and welfare.

4.4 CLINICAL SCIENCES

4.4.1 Findings

In the new TAppV students will rotate in the last year during 12 weeks in the clinics.

The total amount of mandatory presence in the clinics is 372 hours corresponding to 12 weeks per student.

Besides these 372 hours, students may work in the clinics on a voluntary basis.

Each clinic has a 24/24 hours emergency service.

The Faculty has a mobile clinic which uses two practice cars. This mobile clinic visits farms in the surroundings of Leipzig. Students can take part in the work of the mobile clinic either in the clinical rotations, or on a voluntary basis. There is also a mobile clinic for birds and reptiles.

While working in the clinics, students have an insurance for liability and for accidents. During the extramural work they rely upon the liability insurance of the practitioner who hosts them. In case of an accident they rely upon the general German social security system.

In the new TAppV, students are required to do extramural stages for clinical work during 4 weeks after the second year and during one entire semester in the fifth year. During this semester they are required to spend 16 weeks in a private practice under the sole supervision of a private practitioner, 2 weeks in a veterinary public health inspection site, 2 weeks in food hygiene, and 3 weeks in a slaughterhouse.

This means that in the fifth year the extramural practical work comprises 700 hours of training, while the intramural work in the clinics comprises only 372 hours.

At present, the only control measure for the quality of the extramural practice work is a questionnaire which both practitioner and student are filing. The practitioner`s evaluation of the student is confidential and is delivered directly to the Faculty. For the future 5th year, the Faculty has introduced a mandatory evaluation of the extramural clinical training by the students as well as by the supervising veterinarians as a first step for quality control. The results of these evaluations will be used to identify practices or clinics not meeting the minimum standards of training. Together with the running program of the Bundesverband praktischer Tierärzte (BPT; Federal association of veterinary practitioners) for certification of veterinary clinics and practices a list of recommended establishments for extramural clinical training will be compiled mid-term".

4.4.2 Comments

- There is a clear inbalance between the intramural and extramural clinical training in favour of the latter.

- The quality control for the extramural clinical training may presently be insufficient but will become more efficient in the new curriculum.

- Clinical hands-on teaching including acquisition of practical skills especially in small animal surgery is at the present time marginal. However the committee is convinced that this situation will change rapidly with the introduction of the practical year in the new curriculum, which will be started in the clinics on 01. October 2009.

4.4.3 Suggestions

4.4.3.1 Pressure should be exerted upon the German authorities to amend the TappV in order to allow the Faculty to provide substantially more hours of intramural clinical training.

4.4.3.2 The Faculty should install a trustable system of quality control for the extramural training and these initiatives should be verifiable.

4.5 FOOD HYGIENE & TECHNOLOGY AND VETERINARY PUBLIC HEALTH

4.5.1 Findings

The food hygiene sector is situated on new premises specifically designed and equipped for teaching and training undergraduate and postgraduate students. It consists of several certified diagnostic and research laboratory rooms, a common preparatory room, a double practical classes theatre, which is of paramount importance, two seminar rooms, a library, staff offices, and a slaughterhouse plant.

The slaughterhouse unit is well designed and equipped. It receives for food hygiene practical classes mostly rejected/condemned carcasses and organs from commercial slaughterhouses (over 4,000Kg, in 2008) or slaughtering a few food animals for killing methods demonstration. In 2008, faculty slaughterhouse was also used for the slaughtering of different species of food animals (86 swine, 16 cattle, 3 sheep, 15 turkeys and 50 chickens) for research purposes of different Faculty disciplines. Next to the slaughterhouse there is a meat processing plant for training undergraduate students in the meat processing of products. In another building there is a small but well reconstructed and equipped dairy plant for practical training of students on the processing of pasteurized milk, cheese and fermented dairy products.

Institute of Animal Hygiene and Veterinary Public Health is located in two separated places. In the new Food Hygiene building, the staff and administrative offices, a seminar room and four research laboratory rooms are located. On the top floor of the Anatomy building, there are teaching laboratories for chemistry, microbiology and research virology.

Teaching staff of Food Hygiene consists of two professors and five scientists. VPH teaching staff has two professorial posts (one vacant) and three scientists (one has a tenure). Three staff members of the Food Hygiene Institute and two from Animal Hygiene and VPH Institute are diplomates of the European College of Veterinary Public Health.

4.5.2 Comments

- Time allocation to theoretical and practical training of intramural activities in food sciences and food hygiene (156hrs+84hrs) seems adequate and hands-on classes are held in an excellent teaching environment both in meat inspection and in other animal products (ex. milk, cheese, fish, poultry, game, eggs). Another 59 hours of food hygiene training are allocated to six different modules together with 12 different institutes and clinics. In such perspective, food safety and food quality components as well as herd health matters, including toxicological and chemical residues and microbial resistance issues, are adequately addressed.

- Furthermore, all students have to perform a compulsory extra-mural training period of 7 weeks (250hrs), corresponding to both VPH training in official regional services (75hrs), meat inspection in EC approved commercial slaughterhouses (100hrs) and hygiene control, food monitoring and food examination (75hrs). These extra-mural activities are evaluated by the teaching staff using an evaluation inquiry on slaughterhouse work and a check list on hygiene control activities performed by the students and an inquiry to be fulfilled by the veterinary training supervisor.

- Most of mentioned practical training blocks have to be held at the 4th year, due to the clinical rotations of the 5th year. In the old curriculum, students were taking 98hrs of elective courses in VPH and Food Hygiene subjects. In opposition, with the new curriculum only students that choose VPH track at the 5th year will have 42hrs of these matters.

- Training seems to be well balanced. A total of 320hrs is performed on-site and another 250hrs are used in three essential components of VPH (regulatory activities, food hygiene and food safety interventions, and slaughterhouse hands-on training) in obligatory extramural work. Overall, new curriculum will allow students of Leipzig faculty to have 570hrs of curriculum hours in VPH/Food Hygiene which corresponds to 11% of the total faculty curriculum.

- VPH teaching and training is mostly done by the staff of the Institute of Animal Hygiene and Veterinary Public Health. They take responsibility for the teaching and practical training of six different disciplines - Animal Husbandry (T30), Animal Hygiene (T30), Biometrics (T14+P14), Animal Protection and Welfare (T28), Ethology (T14+P14), and Control of Epidemics and Epidemiology (T46+P14). In the new curriculum, two modules concerning VPH are also held in 4th year, one of them related to herd management integrates blocks of matters from nine institutes and clinics and addresses 123hrs of animal hygiene, animal husbandry, transmissible diseases, diagnostic sampling and examination and preventive medicine topics.

- The present faculty organisation proposing a VPH Centre which integrates two Institutes (Animal Hygiene/Veterinary Public Health and Food Hygiene) is in the view of the team opportune and innovative to adequately address these important and fast developing areas of the veterinary profession. It deserves to be supported in staff reinforcement (a professorship in Epidemiology and a lecturer tenure in Food Hygiene) to ensure the enthusiasm and dedication of the highly credited staff members.

4.5.3 Suggestions

4.5.3.1 The VPH elective track might permit students to get a more integrated and market-oriented training.

4.5.3.2 The professorship in Epidemiology should be urgently filled and the tenured lecturer in Food Hygiene (milk hygiene) would be of great benefit to achieve the VPH Centre objectives.

4.6 ELECTIVES, OPTIONAL DISCIPLINES & OTHER SUBJECTS

4.6.1 Findings

The offer in electives seems to be plausible and covers professional needs (See pages 44-48 SER.)

4.6.2 Comments

The fact that students have the choice and also the obligation to elect 3 modules out of 5 is a proper way to ensure “general approbation” but also satisfies individual needs and interests.

4.6.3 Suggestions

4.6.3.1 The selection of electives offered should periodically be evaluated in terms of actuality and needs.

5. TEACHING QUALITY & EVALUATION

5.1 TEACHING METHODOLOGY

5.1.1 Findings

Remarks on structure and content of the courses, extramural training, and teaching methodology have been made already in Chapter 4. The curriculum and its teaching was comprehensively assessed and reviewed in recent years, in particular following the more liberal TAppV. The main changes are:
a) completing of teaching and examination of basic subjects in the first term
b) interdisciplinary teaching in theme-oriented modules in order to strengthen problem based learning
c) continuous examination after 4^{th} term
d) clinical practical year with focus on intramural practical training, extramural training, structured elective teaching, and self directed work.

Specific learning objectives are available for students in all cases in written and / or electronic format, generally based on power-point presentations. Many of these course descriptions are supplemented by materials of high quality.In some cases also students contribute in providing such notes.

The in-house evaluation of teaching activities is compulsory and scheduled by the Teaching Evaluation Rules of the Faculty. The procedure occurs in cooperation with the Centre for Evaluation of the University Leipzig and is under supervision of the Dean for Study affairs. Excellence in teaching or major contributions to improvement of teaching is being rewarded.

The above mentioned changes according to the TAppV also strengthen the aspect of practical work, especially the intramural clinical work in the 5th year and the extramural training effective from the 7th term onwards.

The clinical rotations during the 5th year will be full-time on a rotational basis and determined on case needs, including night duties and weekends. Undergraduates will be fully integrated in the medical services by systematic involvement in routine work, emergency service, interaction with clients, and the needs of the mobile clinic.

5.1.2 Comments

- The changes made within the framework of the new TAppV are commendable. The reduction of class room theoretical teaching, the enhancement of small-group work, the introduction of interdisciplinary and problem oriented teaching supported by e-learning can be expected to make a considerable contribution in directing students to take over individual and clinical responsibility.

- The consequent continuation of this process is strongly recommended, since it is a challenge for staff to reorient content and methods and for undergraduates to accept that they are expected to complement the formal teaching with their own bibliographic and study work. For this reason, the introduction of a mandatory project work in the 5th year is an excellent addendum to the Faculty´s policy of teaching.

- Concerns on potential weaknesses and threats concerning the organization of the clinical year are already mentioned under chapter 4.

- The strong collaboration between the Commission for Study Affairs, the Steering Group “Neue Lehre”, the persons responsible for the modules, and the Dean for Study Affairs is a solid basis for further effective monitoring of this evolutionary process.

5.1.3 Suggestions

5.1.3.1 The Faculty should continue to develop its teaching methods, in particular to reinforce the principle of student self-directed learning, oriented on clear learning objectives and evaluated by learning outcomes.

5.2 EXAMINATIONS

5.2.1 Findings

The framework for examinations is regulated in detail by the TAppV. The older TAppO is still applicable but only for students of the current 5th year and will phase out in 2009.

According to the different types of examinations, the ranks of MC-tests, the timetable for taking the examinations, the prerequisites for admittance to the examinations and the maximum amount of time to pass the examinations are laid down in an amending regulation on these matters by the Faculty. Examinations can either be written or oral, complemented by practical components, as required. Written examinations are predominantly multiple choice questions.

The first part of the preclinical examinations is held after the 1st term, the second part after the 4th term. In the clinical part MC-exams follow the corresponding modules immediately. Non-modular teaching units are examined by so called block exams or final exams.

The examinations following the modules are held in the lecture period. All other exams are scheduled in the lecture free periods. A maximum of two retakes is allowed.

The prerequisite for participation in the subsequent term is the successful completion of the final examinations as well as the participation in all courses and module and block examinations of the foregoing term.

In those subjects, where the faculty has no staff available, external examiners have been appointed.

According to the detailed regulations on examinations they are scheduled in a well structured way.

5.2.2 Comments

- The prerequisites for examinations and their chronology are clearly regulated. The rights offered by the “continuous examinations” after the 4th term seems to be an appropriate measure by collecting scores over a longer period instead of full dependence on a one time assessment. Additionally, this can be felt as an important element for motivation of students.
- Another important aspect is the continuation of oral examinations in order to contribute to developing adequate communication skills as an essential element of the subsequent professional career.
- It has to be emphasized, that there is a continuing validation process of the questions in case of MC-examinations and a systematic evaluation of examination results.

5.2.3 Suggestions

5.2.3.1 The Faculty has a remarkable awareness for accompanying measures of quality assessment. For this reason, this scope should be supplied with appropriate resources.

6. PHYSICAL FACILITIES & EQUIPMENT

6.1 GENERAL ASPECTS

6.1.1 Findings

The Faculty has 8 lecture rooms each with 90 to 160 places. All lecture rooms are well equipped with didactic material and are in good working order.

Group work by students can be organized in 40 different rooms with a capacity from 2 to 72 places. Each room has adequate and modern accommodation and technical infrastructure.

33 premises for practical work are available. The team was pleased with the good equipment available for students. Especially a large number of high quality microscopes in several rooms was noticed.

The necropsy hall is well equipped, ventilated, and has good light conditions. All safety measures concerning bio-security are being applied.

In every room designated for practical work adequate safety measures are present.

All clinics have their own hematology and clinical chemistry laboratory with modern and high quality equipment. The large animal clinic for internal medicine also has a smaller lab with equipment which can be used by students in emergency cases, and which is comparable to the equipment normally available in some private veterinary practices.

The large animal clinic for internal medicine has an accredited sterilization facility for surgical material and endoscopes. The other clinics can make use of this facility.

Two vehicles for animal transportation are available in the Faculty. A standard Mercedes Sprinter van and a brand new Mercedes Atego equipped with disinfection material and air conditioning in the animal compartment. These vehicles are used to transport ill animals from the surrounding farms and horse stables to the Faculty.

The Faculty has a Teaching and Research Farm (Oberholz Farm) approximately 10 km from the campus. This farm is used for practical teaching. Students can stay at the farm 24/24 and have modern accommodation. The Faculty does not provide transport to the farm for students. The farm houses a museum of old veterinary instruments.

On the farm cattle, sheep, swine and horses are kept. De sheep facility is new and a good example for the students. The stables for the cattle are rather old fashioned and there seems to be a hygienic problem. The stables for horses are small and constructed by a framework of horizontal bars with interspaces of approx 35 cm. It is questionable whether this type of construction is either appropriate or safe.

6.1.2 Comments

- The Faculty has no central laboratory which can be used by the several clinics and departments.

6.1.3 Suggestions

6.1.3.1 The team felt strongly, that a centralized diagnostic laboratory with the most sophisticated instrumentation (combining resources including personnel of the several small laboratories in the clinics and institutes) is essential and should be set up as soon as possible.

6.2 CLINICAL FACILITIES & ORGANISATION

6.2.1 Findings

The Small Animal Hospital building (that is the Department of Small Animal Medicine) is one of the best designed veterinary hospital complexes in Europe. All sections under its roof are well equipped, some of them, like medical imaging, are outstanding. Treatment and animal housing facilities are well build. The layout is designed for teaching; in fact, the structure should be called “Small Animal Teaching Hospital”. A 24hr, 365 day emergency service is available with personnel in charge on the premises round the clock and specialists (surgeons) on call during off hours. Intensive care on the same off hour basis is ensured as well.

Large Animal Clinic facilities (equine surgery, large animal internal medicine and theriogenology) are housed in different but similar buildings dating from the 1920s. Nevertheless these clinical facilities are more than adequate with examination and therapy rooms, surgical suites for horses, anaesthesia recovery boxes, new surgical table, LA medical imaging, an excellent unit for equine scintigraphy and adequate boxes and stables for housing horses and cattle properly separated. A treadmill for horses is available at the Oberholz farm; this equipment would find better use in closer proximity to the clinics and should be transferred. Excellent and new large animal trucks (air conditioned) are available and used for horse and cattle transportation to and from the School. A 24hr emergency service within the equine surgery facility has been instituted and is functional.

6.2.2 Comments

- The team took note that most cases in all the clinics were referral cases, underlining the high standards of clinical care.
- There is no rotating internship in the Small Animal Hospital.
- Clinical services as well as research-related teaching in small animal reproduction have a low profile compared to other specialties exercised within the hospital.

6.2.3 Suggestions

6.2.3.1 It is recommended that a rotating internship programme be introduced in the small animal hospital.

6.2.3.2 Small animal reproduction should be given more attention.

7. ANIMALS & TEACHING MATERIALS OF ANIMAL ORIGIN

7.1 Findings

The animal material received for practical anatomical training is obtained from clinics, veterinary practices and Zoo; it is prepared (fixed or refrigerated) by the technical support staff. The practical work is carried out in small group of students under the supervision of an academic staff member

With regard to the necropsies, in general, the animal material (table 7.2) comes from slaughterhouse, clinics, and the most part of necropsies is carried out by the Institute of Pathology, as far as food-producing animals are concerned and by the Clinic for Birds and Reptiles, for poultry, pet birds, reptiles and fishes.

For numbers of necropsies over the past 3 years, see Table 7.2 in the SER.

The main animals used for practical teaching in Animal Production are those kept at the Clinics of the Faculty (see Tab. 7.4) and at the Oberholz Farm (especially cattle, sheep, pigs and horses). In addition various experimental animal species are kept for research in some institutes and used for teaching purposes. Moreover, students can access food-producing animals by joining the visits by mobile clinic on farms (see Table 7.5).

During the Extramural work, the students at the Oberholz farm under the supervision of a faculty member, perform practical work on animal hygiene, milking, feeding of horse, cattle and pigs. Moreover, they can decide according to the Faculty to spend their extramural work on another farm under the supervision of and gaining insights from experienced farmers.

For numbers of cases received for consultation and/or hospitalization by the Faculty Clinics over the past 3 years see Table 7.4 in the SER.

All the clinics of the Faculty are open five days per week and an emergency service is available full-time and supported by at least one staff member and some post-graduate students. The clinics have also 2 trucks for large animal rescue.

For clinical training purposes the Large Animal Clinic of Theriogenology uses organs collected from slaughterhouses and dead animals collected from the Oberholz Farm.

The clinics of the Faculty use commercially available computer-based, veterinary software (VETERA® or EasyVet®) for record keeping.

The Faculty has a Mobile clinic which is run by the Large Animal Clinic of Theriogenology and Ambulatory Services; it visits the Oberholz Farm as well as several private farms around the Faculty. The mobile clinic is open 24h per day and the average operating time is 30 hours per week. The approximate number of farm visits is 320 per year.

Also the Clinic for Birds and Reptiles run a Mobile Clinic which is open 12 hours per weekday. The approximate number of farm visits is 40 per year.

The students are integrated in the Mobile clinic in groups up to 4 under the supervision of a staff member. Their attendance is compulsory and represents a part of the “clinical-practical year”.

The approximate number of animals seen by the Mobile clinic is shown in Table 7.5. in the SER.

The following ratios are calculated considering the mean values of the past three years (2005 – 2007).

R11 - Ratio **no. of students graduating annually : no. of food-producing animals seen at the Faculty** is 1:6.27 (131:821).

R12 - Ratio **no. of students graduating annually : no. of food-animal consultations outside the faculty** is 1:100.2 (131:13128).

R13 - Ratio **no. of students graduating annually : no. of herd health visits** is 1:2.93 (131:384).

R14 - Ratio **no. of students graduating annually : no. of equine cases** is 1:7.99 (131:1047).

R15 - Ratio **no. of students graduating annually : no. of poultry/rabbit cases** is impossible to calculate (131:Ø) because of there are no poultry cases in the past three years.

R16 - Ratio **no. of students graduating annually : no. of companion animals seen at the Faculty** is 1:127 (131:16674).

R17 - Ratio **no. of students graduating annually : poultry (flocks)/rabbit (production unit) seen** is 1:0.18 (131:24).

R18 - Ratio **no. of students graduating annually : no. necropsies food producing animals + equines** is 1:1.92 (131: 251). No necropsies on equines are reported in SER.

R19 - Ratio **no. of students graduating annually : no. necropsies poultry/rabbits** is 1:1.52 (131: 199). No necropsies on rabbits are reported in SER.

R20 - Ratio **no. of students graduating annually : no. necropsies companion animals** is 1:6.76 (131: 886).

7.2 Comments

- In the Dept. of Anatomy, Histology and Embryology there is a large room for practical work, this is a significant point for the Anatomy discipline which is an important prerequisite for surgery and clinical work; hands-on dissection is a central part of learning anatomy.

- The number of necropsies per student for the major domestic animal species increased in 2007 (except for dogs) and it is adequate for the territory (high number of pigs vs. cattle and small ruminants). The numbers of equine necropsies were 78 (2005), 93 (2006), 111 (2007).

- For farm animal work, the variability both of species and of outside establishments that the students can visit is large, enabling them to be exposed to different areas of animal production and to evaluate the strengths and the weaknesses of farms, especially during the extramural work (agriculture). Some problems there are in

controlling the type of practical activities done by the students when they decide to spent their extramural work in private farms.

- The team observed low level of hygiene in the management of some animals, especially the cattle stalls, and in the storage of animal feed in the Oberholz farm. This should be avoided considering the educative role of the Faculty farm. The team had no clear information about financial situation and administration of the farm.

- The clinical material available is adequate to develop the skills of the students and there is a reasonable balance between small animal and large animal cases.

- The number of clinical caseload pets received by the Faculty for consultations + hospitalized in the last three years is satisfactory and provides sufficient cases for clinical teaching and acquisition of basic animal handling skills in small animals.

- The current emergency service is good but it is not clear if the students to be trained, stay in the Clinics in addition to the already trained students or if they are only on call. This service has a vital teaching function in order to expose the veterinary students to emergency and critical care medicine. However, the Faculty explains that with the only exception of the Clinic for birds and reptiles, in all other clinics the students to be trained participate in the clinics with emergency service on a rotatory basis as described above (Comments to p. 7, Chapter 4.1.1) together with more experienced students who work on a voluntary and remunerated basis in those clinics.

- The mobile clinic represents a good solution to increase the clinical caseload livestock training of students and to improve the access to a large animal material, especially pigs; moreover, it could promote in a positive way the competition between the clinics of the faculty and the practitioners.

7.3 Suggestions

7.3.1 The Faculty should improve the utilization of all the facilities at the Oberholz Farm. The presence of animals in inadequate stables should be avoided.

7.3.2 A higher level of hygienic conditions as well as of feed storage should be maintained; probably, a solution could be reached with an increase in the number of technical support staff in Oberholz, as well as with better training and/or increased authority of the administrative director of the farm.

7.3.3 An more intensive use of the mobile clinic could be an incentive to promote high standards of the facilities in the Faculty and this also in relation to the large animals consultations.

8. LIBRARY & EDUCATIONAL RESOURCES

8.1 Findings

The library on the Veterinary Faculty Campus is a branch site of the University of Leipzig Library. It is fully financed by the University and the staff are on the University payroll, not that of the Faculty. Full details of the library can be found on pages 98-100 of the SER.

In brief, the State Government of Saxony supplies the University Central Library Committee with a budget, which, together with the Rector, distributes funds to the Library and its different departments (structural development, ordering/acquisition, financial etc). There are subject specialists for the 14 different Faculties, 2 from Veterinary Medicine. The Dean appoints a Representative of the Library, who becomes a member of the Central Library Committee. The Dean and the Representative control, then the Faculty Library.

Library Budget is € 140.000 per annum with an addition of € 5 - 8.000 from the Friends of the Faculty. This budget is purely for the purchase of books, journals, journal subscriptions etc. All costs including the 2.5 personnel are carried by the University. There are 160 hard copy journals, on-line access to 10,000 journals and 3,300 electronic books. The facilities are well used with 23,000 loans per year.

8.2 Comments

At the time of the visitation, the library was being moved from rather cramped old premises to very generous “state-of-the-art” facilities in the new building, which will be officially opened on 01. December 2008.

Information Technology in the Faculty is at a very advanced level and the servicing thereof has been outsourced to a small private company. WLAN offers students the possibility to have in internet connection throughout the campus.

The services offered are impeccable and the significant and frequent use by students confirms the student-friendly nature of the library.

The only limiting point noted was that the opening hours are only Monday to Friday 09.00h-18.00h. There is are no weekend opening hours, nor are there evening opening times.

The emphasis on hyper-modern e-learning, which is very far advanced in the Leipzig Faculty, and the unlimited access of students to electronic books and journals, reduces the practical impact of the limited opening times.

Nevertheless, this is a “state-of-the-art” veterinary library and, once established in the new premises, will count amongst the best veterinary libraries in Europe.

8.3 Suggestions

8.3.1 It should be considered, whether, by installing shift working of staff or by training willing students, the library opening hours could be extended to 21.00h on weekday evenings and limited opening times on Saturday and perhaps Sunday. This would result in a virtually perfect library service.

9. ADMISSION & ENROLMENT

9.1 Findings

A total of 802 undergraduates are enrolled on the veterinary programme, about 86 % of whom are female. The minimum admission requirement is a secondary school-leaving certificate qualifying for enrolment. As veterinary medicine is a so-called “numerus clausus” discipline, the number of applicants is much higher than the number of student places available. This number of places is strictly calculated according to the capacity of the institution, especially the resources available.

40 % of student places are directly allocated by the “Zentralstelle für die Vergabe von Studienplätzen” (ZVS) without any influence of the Faculty, the remaining 60 % are allocated by the Faculty itself, according to criteria, defined by the Faculty (Leipzig first choice, weighed school grades). 80 % of study places at the disposal of the Faculty were directly allocated according to the rank list, for the remaining 20 %, interviews were performed with three times as many applicants as places available.

There is a direct link between budget and the number of students, because all places are government-funded and the admission is limited to 150 applicants according to the German Capacity Regulation.

It is obvious, that the admission procedure results in students having a high motivation and aptitude and in many cases also the knowledge base for veterinary studies.

The dropout rate of less than 10% is acceptable especially considering that most of the students graduated within the normal period.

9.2 Comments

- Although most of first year undergraduates studied in secondary schools offering general education and the Faculty is allowed to select 60 % of students by its own criteria, the level of knowledge varies widely, especially in the subjects of natural sciences. The selection criteria defined by the faculty will improve this situation, but cannot solve the problem.

- The special provision of Leipzig as first choice seems to be a particular aspect of motivation for students as well as teaching staff, fostering the responsibility for serious progress during the undergraduate programme.

- The possibility for a specific selection process amongst the applicants is beneficial for the establishment. There are no indications of access inequalities caused by this procedure. By contrast, noting the gender distribution, measures should be taken to increase the percentage of male students.

- In the SER there are no indications as to the projected state or national need for veterinarians for the Free State of Saxony or for Germany. Nevertheless, the number

of students graduating each year seems to be sufficient for the needs of replacement and for development of new jobs.

9.3 Suggestions

9.3.1 The Faculty´s system of student selection should be maintained and developed further, especially in order to influence the gender of applicants admitted at least according to market needs.

9.3.2 Measures should be taken into account to ensure a sufficient number of veterinarians for farm animals and in particular for veterinary public health in the future.

9.3.3 Considering the strong efforts by students and staff to improve the results, restrictions on budget or personnel are unacceptable and are a point of major concern.

9.3.4 In order to improve the knowledge base of applicants, a feedback system to secondary schools on the needs on natural sciences for applicants could contribute to improving this situation.

10. ACADEMIC & SUPPORT STAFF

10.1 Findings

As reported in the SER Introduction (page 5), the Faculty is organized into 4 Centres plus the University Hospital Veterinary incorporating the 17 Structures: no. 12 Institutes, no. 1 Department and no. 4 Clinics.

There are no distinctions between teaching staff and research staff. The budgeted academic staff is required to work in teaching, research and service and they are obliged by law (DAVOHS) to perform a minimum of 4-8 hours per week, except those who operate in clinical and para-clinical sciences who are granted a 30% reduction of teaching obligations. Therefore academic staff is indicated as teaching staff (Professors and Scientists).

The academic staff of non-budgeted posts (FTE=29.08) are paid for with money by external incomes or research funds of the individual research group.

The support staff of non-budgeted posts (FTE=14.60) are paid with money of third-party grants or of revenues by services.

The following ratios are calculated with data from July 2008 (see also comments of the Faculty from Nov 10, 2008 as addendum to the SER)

R1 - Ratio of **no. total academic FTE in veterinary training : no. of undergraduate students** is 1:6.1 (131.08:802), considering academic + support staff.

R2 – Ratio of **no. FTE total at Faculty: no. of undergraduate students** is 1:2.78 (288.68:802), considering budgeted and non-budgeted posts.

R3 – Ratio of **no. total VS FTE at Faculty : no. of undergraduate students** is 1:0.12 (95:802); it was calculated considering only the "academic budget posts" because no information is available in the SER about the number of VS among the non-budget posts; moreover the team did not receive any information about it during the visit.

R4 - Ratio of **no. total VS FTE in Veterinary training : no. of undergraduate students** is 1:1.38. (95:131). This was calculated considering only the "academic budgeted posts" because no information is available in the SER about the number of VS among the non-budgeted posts; moreover the team did not receive any information about it during the visit.

R5 - Ratio of **total FTE academic staff in Veterinary training : no. total FTE support staff in veterinary training** is 1:1.20 (131.08 :157.60).

The allocation of staff to the Faculty is based on the decisions made by the University and the Saxon Ministry of Science and Arts on the basis of the Saxon universities budget. Rector's Office of the University determines the allocation of staff within the universities.

Decisions upon the allocation of staff are made by the Dean after hearing the Faculty Council. The allocation depends on the requirements of the institution in relation to the teaching load, research and services. Every structural question is discussed by the Committee of Structural Development and the Faculty Council.

The Faculty faces some difficulties in recruiting or retaining some academic staff. In particular it is still very difficult for the clinical institutions because of the salary structure which is less attractive than that of the private industry or of the public institutions in the Western Europe or USA.

Over the past decade, the staff level (paid by University) has not changed significantly.

Professors are permitted to engage in private activities, according to Saxon regulation and with the permission of the Dean and the Rector.

The Faculty supports the academic staff in attending scientific meetings by using additional income from services or research projects.

According to Saxon regulation a sabbatical leave may be taken every 7 semesters for a period of 1 semester. At the end of this period a report must be presented.

The percentage of academic staff members who are veterinarians is 91% (95 out of 104).

The support staff is involved in teaching and research.

Actually, the Clinics, Departments and Institutes face a critical shortage of animal care technicians and they only obtain contracted staff by using their income or research funds.

10.2 Comments

The Faculty Council has recently (2008) decided upon the unification of institutes and departments into 4 Centres clustering related disciplines. The formation of the Centres should be also a way to coordinate the services, for the common use of laboratories, equipment and personnel. This could reduce the administration load on staff if, inside the Centres, each institutes or clinic does not remain a separate administrative unit with regard to administration, budget, personnel and equipments (as reported in chapter 2).

With regard to teaching staff, an increase of them means an increase in student numbers and vice-versa. Nevertheless, it is not easy to recruit or retain new persons for professorships for the Saxon regulation and the salary structure of academic staff is not attractive; the limitation of a maximum 12-year job duration for academic staff (except professors and few tenured staff positions) at a University is another disincentive.

Considering the particular need of the veterinary training course for hands-on practical work on animals, the critical shortage of animal care technicians, especially in the clinics, must be solved.

The Faculty encourages academic staff to participate at scientific meetings; nevertheless, considering the involvement of the support staff in teaching and research, the opportunities to attend up-to-date courses for acquiring additional skills for this category of personnel is necessary too.

The team noticed a certain lack of motivation of technical support staff especially amongst the more senior maintenance staff and the animal caretakers on permanent employment contracts, a situation which should be resolved.

10.3 Suggestions

10.3.1 The University and the German authorities must recognize that veterinary education is more expensive than training in other science-based disciplines and should consider steps to ease the problem of recruiting and retaining key staff, such as by affording due recognition to clinical performance in promotions and/or paying a supplement for high clinical activity on the specialist level.

10.3.2 The modernization of the teaching methods necessitates additional personnel.

10.3.3 The Faculty needs from the University more transparency in the criteria used for the planning of personnel and how the budget of retired Faculty personnel is reutilized by the University.

10.3.4 The strong inadequacy of the number of animal care technicians could be alleviated using the income from service offered by the Hospital.

10.3.5 In order to introduce junior staff in an adequate manner to teaching obligations there should be a Faculty-wide programme for gaining and further training pedagogical and didactic skills.

11. CONTINUING EDUCATION

11.1 Findings

The Faculty makes considerable efforts in the field of continuing education. They offer programs in cooperation with the State Veterinary Chamber of Saxony.

Besides short evening and weekend courses for regional practitioners, the Faculty organizes every 2 or 3 years, in cooperation with the German professional veterinary organizations, a congress called Leipziger Tierärztekongress.

This nationally well-known congress attracts veterinarians from everywhere in Germany.

The team learned from local practitioners that inscription fees for continuing education courses are acceptable and that the quality of the courses is much appreciated.

11.2 Comments

No comments

11.3 Suggestions

No comments

12. POSTGRADUATE EDUCATION

12.1 Findings

At graduation (after 11 semesters of study) a German veterinarian receives the title of "Tierarzt". With this title he is entitled (Approbation) to practice.

German law does not yet allows the bachelor-master system in veterinary medicine (Bologna Declaration). This may result in a competitive problem when a graduate wants to work in another member state of the European Union.

As there is no bachelor-master system and there is also no credit system for the different subjects in the curriculum, it is practically impossible for a student to get credits for some subjects in one Faculty, and get the credits for other subjects in another faculty in Germany or abroad, thereby reducing academic mobility.

After graduation approximately 50% of the graduates start a so-called Dr. Med Vet. "Promotion" system in which over 2 to 3 years they have to undertake some scientific research and end by writing and presenting a doctoral "Dissertation" (thesis). A doctor med vet title is awarded to successful "Dissertation Students". During the period of preparing the "Dissertation" they are graduated veterinarians and can already work in a private practice or in the Faculty`s clinics or institutes.

The Faculty also organizes the "Fachtierarzt" courses. This is the first and until today the most frequent type of specialization for veterinarians in Germany.

The title "Fachtierarzt" can be obtained after 4 or 5 years of supervised activity in the field of the chosen subject. The title can be obtained in about 30 preclinical, paraclinical or clinical subjects.

The examination board for "Fachtieraerzte" is appointed by the Veterinary Chambers of each of the 15 German States. Faculty specialists, who have an authorization for training "Fachtierarzte" are members of the examination board.

The title of Diplomate of an European College offers another option for specialization in Germany. In the past, this title was not officially accepted, but, today, the Chamber of Saxony does not oppose any more the public use of the European diplomate title.

At the the Faculty several residency programmes for veterinarians preparing themselves for European Diplomate certification are run. Such programmes are available in the clinic for theriogenology (1), the clinic for birds and reptiles (3) and in the department for small animal medicine (3).

The postgraduate level of “Habilitation” needs 6 to 9 years of study and scientific research. “Habilitation” is comparable with the PhD in other European countries and is a prerequisite for appointment as a professor.

12.2 Comments

- The two types of specialization (the national “Fachtierazt” – European Diplomate title) cause some confusion especially in the view of the public.
- It is far more difficult to obtain the title of Diplomate, which has a legal basis in Europe, but some German States do not recognize this title. In some States veterinarians are only allowed to use the title “Fachtierarzt”, which hardly finds recognition outside Germany, whilst the title of Diplomate is widely recognized in the whole of Europe.
- The habilitation in Germany takes twice the time of the Ph.D in other countries. A Ph.D. system is not yet installed in the Faculty

12.3 Suggestions

12.3.1 Pressure should be exerted on the German Government and Veterinary Professional Organizations (Tierärztekammern) to recognize uniformly the title of European Diplomate.

12.3.2 The Faculty should stimulate the development of more residency programmes, also in the light of some specialities where Diplomates are available without having organized residency programmes.

12.3.3 Alongside “Habilitation”, a Diplomate title should also be an important factor for a scientific career within the Faculty.

12.3.4 A Ph.D. system should be installed in the Faculty.

13. RESEARCH

13.1 Findings

Faculty research has a sound basis, is diversified and is commensurate with what may be expected of a teaching institution of that size. Also, teaching definitely is research-oriented.

A listing of a fair number of grant-funded research projects confirms the Faculty's efforts to generate outside funding from industry and government. In some areas and occasionally, parts of those research funds are invested to improve teaching. Although there might not always be a clearly defined margin between teaching and research, in general, research funds should be employed exclusively for that purpose; additional funds required to cover increasing needs for teaching should in large be provided by government sources. Apparently that is not always and sufficiently the case.

Presently, approximately half of all graduating veterinary students pursue a doctor thesis. Each of these theses is based on a postgraduate research project, directed by Faculty members. Most of the randomly checked theses were of good research quality, some were excellent for the level of a basic doctor degree (not a PhD). All students confirmed to being supplied with ample choice of research projects as well as any other necessary support to conduct research necessary to fulfill the requirements for a thesis.

A PhD programme in accordance with the Bologna recommendation is planned; however, this type of post-graduate formation requires extensive interdisciplinary and extramural collaboration and will need more time to materialize.

Residency training programmes by definition generate research output; this is in Leipzig without doubt the case; in the area of clinical sciences, excellent equipment (for instance medical imaging, mini invasive surgery tools) are enhancing research output on resident and Faculty level. The regular presence of Leipzig Faculty members at international research meetings reflects these efforts.

13.3 Suggestions

13.3.1 Enhance efforts to fill vacant professorships and insure that future full professors, especially in the clinical areas, can develop under the same degree of autonomy granted to other professors on the same level.

13.3.2 Increase the number of residency programmes in disciplines covered by Diplomates.

13.3.3 Develop a research bonus system by which institutes/clinics with high quantity/quality research output receive additional commensurate benefits (funds, personnel).

13.3.4 Stress early on in the curriculum the importance of research and involve students as early as possible to research-based problem solving and to evidence-based medicine.

EXECUTIVE SUMMARY

The Faculty of Veterinary Medicine of the University of Leipzig was initially evaluated and approved by an expert team during 1998. Since this first visit, the Faculty has been restructured, consolidated and reconstructed, As a result of the mandatory evaluation as a member of EAEVE every 8-10 years, a new expert team visited the Faculty from 20-24. October 2008. The visitation programme planning, realization and hospitality were exemplary. The Self Evaluation Report was thorough, clear and of high quality.

Until 2007, the structure of the Faculty was comprised of 2 Departments, 11 Institutes and 4 Clinics. In order to pool the strengths for research, teaching and service, 4 Centres and a University Veterinary Hospital were created with the aim of harmonizing teaching and improvement of interdisciplinary teaching, increasing cooperation on research projects creating more critical mass for the common raising of grants, establishment of common postgraduate and continuing education programmes, coordination of services, sharing of laboratories, equipment and personnel, development of common concepts for quality assurance and coordination of the public face. This structure can be considered to be in a test-phase, but benefits in terms of cooperation in module teaching have already been shown in the Centre for Basic Veterinary Sciences and in the Centre for infectious diseases.

The Faculty has introduced an extensive programme for the continuous assessment of the quality of teaching, which includes online assessments by students of at least one course per year in each subject taught and of the newly introduced modular teaching as well as assessment of the extramural training by students and the extramural instructors.

A new advanced electronic learning platform “moodle” has been set up to improve information flow, support teaching organization, makes the curriculum more transparent and accessible for students and teachers and to assist in self-directed learning.

The evaluation visit took place at a time of flux, since the Federal Law, (TAppV) which came into force in October 2006 and whose teaching and examination rules were published in October 2007, has forced many changes to the curriculum. The Saxon University law is under revision and is likely to come into force in 2009. This was inconvenient for the EAEVE Team, but the same would have been true for any German Faculty at this present time.

In general, it can be stated, that the teaching programme, staff and facilities of the Veterinary Faculty in Leipzig exceed the requirements of EU Directive 2005/36 significantly in all aspects. No Category 1 Deficiencies were identified by the team and it can be concluded, that graduates from this Faculty meet the requirement for free movement of professionals across European Union

An educational establishment cannot expect to be perfect, so the EAEVE/FVE team have highlighted positive and negative aspects to the training of veterinary science and medicine**.**

Some of the important positive aspects found were:

- The primary objective of the Faculty is “To ensure high quality and research-based training in veterinary medicine, which follows modern trends of development and needs of society”. In general, this objective can be perceived has being met.

- A new Universities Law in the State of Saxony will come into force in 2009 and the increase in flexibility and particularly autonomy should be exploited by the Faculty to the maximum extent.
- Despite the totally inadequate financial contributions from the State and the University, the Faculty Clinics make an inordinate contribution to filling out the budget with external money in terms of research grants and services fees. Without this contribution, the Faculty would have existence problems.
- The introduction of the new curriculum and the resulting interim period made actual assessment by the Team difficult, but it was recognised that the changes made including the introduction of cross-discipline modules and the release of the 5th year for practical work both intra- and extramural has improved the quality and emphases of the teaching programme.
- The advanced nature of the electronic learning platform “moodle” and the emphasis on e-learning are exemplary within the European context. Additional participation of some of the basic subjects should be encouraged in order to further the concept of interdisciplinary modules.
- On food hygiene, the training is balanced and this discipline benefits significantly by the presence on the campus of a small but active slaughterhouse.
- It is considered extremely satisfactory that the Faculty has an active and thorough internal quality assurance system.
- The change in the examinations system to “continuous examinations” straight after each module, where points can be collected by the student is motivational and fair.
- The buildings on campus are either new or thoroughly renovated old ones and the equipment therein is exemplary. The campus is compact and furthers the evident pride and family-like atmosphere experienced by the Team.
- The Small Animal Hospital can be considered in premises and instrumentation as one of the finest in Europe, but it is suggested that a rotating internship programme be introduced into the Small Animal Hospital and that small animal reproduction should be given more attention.
- The high standard of clinical care in virtually all clinics, results in most of the animals seen being referral cases.
- Case-loads would be the envy of some European faculties and the mobile clinics, mainly for cattle, sheep and birds/poultry/reptiles function well.
- When completely moved to its new quarters, the library, which is exemplary in veterinary medicine, will be one of the best in Europe and maybe the world. The only note was the limited opening hours, which should be improved.
- The motivation of both teaching staff and students was very high.
- The Faculty has a sound selection procedure for new students.
- The Continuing Education programme seems to meet the demands of both the internal and external veterinary profession.
- Faculty research has a sound basis, is diversified and is commensurate with what can be expected of a medium-sized teaching establishment, where teaching is research-based.

Some of the important negative aspects found were:

- Although the new federal law TAppV offers the Faculty a little more flexibility than its predecessor, it is still restrictive well beyond the needs of European veterinary training and there is a need for re-negotiation at political level of the strictures on the curriculum.
- The change in 2008 to the organization of the Faculty structure creating 4 Centres and 4 Clinics is at variance in both name and responsibility to the norms within Europe, although the reasons for the creation of the Centres has been understood by the team. It is suggested, that the Centres be named Departments and that the current Departments be named Institutes or Clinics to standardize the situation.

- There are too many professorial positions which have not been filled. Conditions have to be conceived in order to attract and retain well qualified teachers and researchers.
- The “normal” University contributions to the running of teaching and research are totally inadequate and representations should be made to the relevant Governmental Authority to increase the budget for veterinary training.
- Staff incomes, particularly in the junior levels of professional staff are very low and are inhibiting attracting good colleagues to join the Leipzig Faculty for a career in teaching and research. Remuneration levels are going to have to be improved.
- Although animal production disciplines are well integrated into the programme, they are dispersed amongst several different institutions. In order to improve contact between staff involved and to guarantee the cross-discipline module approach, the Team recommends that the Institute of Animal Nutrition, Nutritional Diseases and Dietetics be moved as soon as feasible to the main Faculty Campus.
- As a result of TappV, the emphasis and time assignment favours extramural work, leaving too little intramural contribution.
- It is a requirement of the EU Directive 2005/36 that the extramural training must be well managed and controlled. Although the Team is aware of the questionnaires completed by the student and the practitioner after the period of the assignment, this was neither considered to be adequate nor particularly trustworthy and an improved system should be conceived.
- The Team found the Faculty Farm “Oberholz” rather disappointing in terms of utilization of the opportunities offered. Several units were rather dirty and hygiene of management left a lot to be desired. The farm is an integral and essential part of the training establishment and closing it would create a category 1 deficiency.
- The Team also felt strongly that there should be one central diagnostic laboratory on campus in order to relieve the acute shortage of personnel and to pool the sophisticated instruments available.
- A significant deficiency in the number of support staff was perceived and a solution for this problem should be sought.
- Political pressure should be exerted at Federal level to force recognition of the European Colleges Specialization Programmes and their Diplomates.
- Several suggestions have been made on filling vacant professorships, increasing the number of residency programmes and the introduction of a research bonus system.

At the end of the evaluation visit programme, the expert team unanimously made the decision to recommend to the Joint Education Committee (JEC), a joint committee between the EAEVE and the Federation of Veterinarians of Europe (FVE) to add the Faculty of Veterinary Medicine of the University of Leipzig to the “Approved” list.