

European Association of Establishments for Veterinary Education,
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European System of Evaluation of Veterinary Training

**REPORT ON THE VISIT TO THE UNIVERSITY OF VETERINARY
MEDICINE HANOVER, FOUNDATION**

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INTRODUCTION

The “Stiftung Tierärztliche Hochschule Hannover” (University of Veterinary Medicine Hannover Foundation), shortened as TiHo throughout the report, has been an independent establishment since 1778. Recently, on 01 January 2003, the form of the University was changed to that of a public foundation, an unique situation in Europe, a move which has brought with it a wide variety of opportunities within the realms of research, teaching and veterinary services, since there is now greater in-built flexibility in terms of financing and decision-making. Just prior to this restructuring, the existing classical Chancellor/Rectoral system of management was changed to a Presidial system, whereby the TiHo is managed by a President and three Vice-Presidents elected by the Senate. Legal control of and responsibility for the Foundation rest in the hands of the Board of Trustees (SER p18).

Since the inception of the above major structural and management modifications, many changes and improvements have been made, which have had a major bearing on the quality of teaching and research at the TiHo over the past 5 years.

Firstly, the National Veterinary Curriculum (*Tierärztliche Approbationsverordnung*) in its revised form came into force in 2006. Amongst other aspects, it gave more flexibility to modify and optimize the veterinary undergraduate teaching programme. Individual items included improved linking of food hygiene to farm animal clinical subjects and the reduction of hours in chemistry, botany and zoology and a mirrored increase in hours for propaedeutics, clinical immunology, clinical pharmacology and clinical endocrinology. The other major change was the introduction in 2004/5 of the “practical year” replacing semesters 9 and 10. (SER p6-8).

Secondly, the buildings are in a continuous state of flux, since the long-term objective is to move all the establishments on the Bischofsholer Damm Campus to the Bünteweg Campus. Construction is in progress on a new Clinic Complex, which will involve the Small Animal Clinic, the Equine Clinic and the Clinic for Pets, Reptiles and Pet & Feral Birds. This building will be completed by the third quarter 2009. In addition, the building of a new Research Laboratory for Infectious Diseases (L3) including large animal housing will begin shortly. The Field Station for Epidemiology in Bakum and the Farm for Education and Research have both been renovated and improved on a continuing basis, which keeps them both at a state-of-the-art level.

Thirdly, the TiHo has introduced a PhD Programme, which is aimed at establishing a scientific qualification, which is oriented towards international standards and permits reciprocal student exchanges. (SER p8-9)

1. OBJECTIVES & STRATEGY

1.1 Findings:

The Mission Statement is clearly defined and covers the Target Areas (SER Annex 1):

- Science and Research
- Courses of Study and Instruction
- Patient Care and Public Service Duties
- Public Image
- Financial Goals
- International Relations
- Internal Structures and Procedures

The Objectives outlined on p11 of the SER are succinct and cover the full range of the needs of a Veterinary Teaching Establishment.

There is a review of the Mission Statement, the Objectives and the Strategic Goals of the TiHo when deemed necessary but at least every 5 years

The Agreement on Objectives is reviewed annually by the TiHo Presidium and the Lower Saxony Ministry for Science and Culture. Research and Teaching Reports are published annually and an Annual Report is presented to the Foundation Board of Trustees.

1.2 Comments

The comments made in the SER on p12-14 appear to be relevant and the Strengths and Weaknesses are concise and listed.

The Objectives certainly cover the total education programme adequately.

Undergraduate Education is the primary reason for the existence and funding of the TiHo, but the balance with Research is well based.

1.3 Suggestions

1.3.1 A system of agreements on Annual Objectives between Presidium and the Institutes and Clinics, together with performance-related allocation of funds, would improve the direction and commitment of all involved.

1.3.2 Additional emphasis should be given to modern IT teaching solutions, such as e-learning, on-line examinations, on-line teaching assessments etc.

1.3.3 Follow up and increase the emphasis on the modern trend towards Veterinary Public Health.

1.3.4 The flexibility offered in the revised Tierärztliche Approbationsverordnung does not appear to the team to have been used in the most appropriate and necessary way. The option for a "Modellstudiengang" should be considered.

1.3.5 Full introduction of the ECTS system should be achieved using the credits system applied in most other European countries.

2. ORGANISATION

2.1 Findings

The University of Veterinary Medicine Hannover, Foundation (TiHo) is a scientific institution of higher education of the German State of Lower Saxony. Until the end of 2002, the Ministry of Science and Culture of the State of Lower Saxony was entirely responsible for the supervision of the TiHo. Since 2003, the TiHo became a Public Foundation and the Ministry of Science and Culture delegated the responsibility for legal supervision to the Board of Trustees.

The legal bodies of the foundation are the Presidium, the Foundation Board of Trustees (*Stiftungsrat*) of 7 members (minimum of 3 female members). 5 members (not from the TiHo) are elected by the Senate and should be representatives of Business/Industry or Science/Culture familiar with higher education. The Board of Trustees advises the TiHo, makes decisions of fundamental importance to the establishment and monitors the activities

of the Foundation. The Presidium conducts the routine business affairs and prepares and implements resolutions for the Board.

Supervision of the Veterinary Licensing Examination is the responsibility of the Lower Saxony Ministry of Nutrition, Agriculture and Forestry, which appoints the members of the examining committees for preclinical and clinical examinations.

The formal Veterinary Licensing Authority is the Chamber of Veterinarians of Lower Saxony (*Landestierärztekammer Niedersachsen*). (SER p16-17).

The structure of the interrelationships between Ministry, Foundation and the University of Veterinary Medicine as well as an Overview of the Clinics and Scientific Organisational Units are laid out on p18-19 of the SER. The Allocation of Duties of the Presidium and Assigned Administrative Areas as well as the appointment of the President can be found on p20-22 of the SER.

2.2 Comments

The TiHo has 5 Clinics, 22 Institutes, one Field Station and one Experimental Farm. In order to achieve optimal organization, coordination and communication, the Senate has established four Central Commissions: Preclinical; Paraclinical, Clinical and Biology. The structure has developed both historically and personality-linked. It appears to function quite smoothly and the relevant cooperation between entities seems, with few exceptions, to be good. (SER p22).

2.3 Suggestions

2.3.1 The team felt that the number of 22 Institutes within the TiHo is rather excessive and believes that some consolidation would improve interrelationships in some broad subject areas. (The team is aware that the long-term strategy of moving all entities to the Bünteweg Campus will offer opportunities to this end).

3. FINANCES

3.1 Findings

It is particularly significant, that the TiHo operates a lump-sum budget, which permits a flexible allocation of financial resources and the accrual of capital reserves. The budget has been decided in agreement on goals and objectives with the Ministry of Science and Culture. The allocations and funding are detailed on p23-24 of the SER.

Cleaning, Energy, Maintenance etc are funded centrally i.e. the money stays in the TiHo

Since autumn 2006, student must by law pay a semester fee of € 500. These contributions have been used to support small group clinical teaching and to supplement the number of student and scientific assistants an all practical area of teaching within the Clinics and Institutes.

In 2006, the total TiHo Budget was approximately € 71 mio. (p26 SER). The level of Government Funding has been set by contract and is guaranteed currently until 2009.

There are considerable additional sums derived from the German Research Association (DFG), the EU and the Volkswagen Trust (VW Stiftung), which are used to fund large instrument purchases etc.

The budget for Research is also well supported by the Industry in terms of grants and project fees.

Owing to the good financial situation of the TiHo, a new Professor for Anaesthesiology has been employed and a search is in place for a Diagnostic Imaging Expert.

3.2 Comments

The financial situation is good and in a recent survey undertaken by the Ministry of Science and Culture, the TiHo revealed the lowest cost per employee of any higher education establishment in Lower Saxony. This supports the conclusion that there is good cost management at the TiHo.

The TiHo has virtually full autonomy, complete flexibility and all income is retained. (p26-27 SER)

The fact that several diagnostic procedures, laboratory analyses etc. are commercialized means that there is significant additional income, of which 90% remains in the Clinic or Institute, which generated it, thus creating further flexibility.

3.3. Suggestions

3.3.1 Since the new Clinic am Bünteweg will only have one lecture theatre able to hold a full student year and the only alternatives are in Physiology and Pathology, any additional financial opportunity should be used to relieve the chronically cramped lecture halls situation.

4. CURRICULUM

4.1 GENERAL ASPECTS

4.1.1 Findings

The precise nationally-defined Curriculum can be seen as a guarantee of harmonisation amongst the 5 veterinary universities. However, as it is difficult and takes time to change the law, even a "Verordnung"; its evolution can be too slow when compared to social, didactic and scientific changes. Moreover, it can be a limiting factor for improving and updating the curriculum and for innovation in teaching methods and use of new education technologies.

4.1.2 Comments See specific sections of chapter 4

4.1.3 Suggestions See specific sections of chapter 4

4.2 BASIC SUBJECTS & SCIENCES

4.2.1 Findings

The curriculum is precisely determined by the TappV at the national level. Moreover, all basic subjects are adequately integrated into the topics taught by the different institutes. So, all topics included in the 2005-36 Directive and the SOP are properly taught and covered.

The basic knowledge of the incoming students seems to be satisfactory, as the general level is very good, due to the admission process.

In most cases, the basic subjects are taught with a permanent and close look on the clinical and field issues with which they are related. The TiHo, acting as an independent university, has the ability to introduce “vet topics” as early as in the first semester and it is done. Nevertheless, the problem-based approach is not often used in the early semesters.

Due to the combination of the application of TappV and the high number of students, the theoretical/practicals ratio is not optimal. But, despite this situation, in nearly every course, the practicals are of high standard and the students can have direct hands-on experience, with a number of animals, materials and facilities available that is *more than* sufficient.

Generally, even in old buildings, the animal or carcasses handling systems are correct. The overall facilities are adapted. The students always have access to wardrobes, washbowls, etc.

4.2.2 Comments

- The collaboration of the teachers from different institutes or clinics seems to be regular, and the creation of the “virtual centers” and the “Querschnittsunterrichten” helps. However, that collaboration could be reinforced by reducing the number of different structures (see chapter 2).
- The problem with the theoretical/practicals ratio should *not* be interpreted as the necessity to increase the quantity and/or the quality of the practicals, but to reduce the number of compulsory lectures, in order to give the student the opportunity to be more active in the learning process, to work by themselves on a regular basis (i.e. every week), to better use all the facilities (library, e-learning etc.). That comment takes into account that the expert team perfectly understood that the teaching load is defined at the national level.

4.2.3 Suggestions

4.2.3.1 Define the specific learning objectives in all courses and make them available for students. (see suggestion 5.1)

4.2.3.2 Reduce the number of lectures and develop a more active learning process (see suggestion 5.3)

4.2.3.3 Increase the number of problem oriented lectures/seminars in the early semesters and make sure that *all* basic sciences are taught in correlation to sound evidence based medicine and the "real life".

4.3 ANIMAL PRODUCTION

4.3.1 Findings

Lectures on agronomy (including rural economics) are given in the first year, and the basic knowledge on farm management to be taught is completed with practical work during the mandatory two-week course at the Farm for Education and Research in Ruthe.

Animal nutrition and feeding is taught by the Institute of Animal Nutrition in the fourth and seventh semesters (lectures and practical classes in small groups).

Lectures and practical classes on animal husbandry, animal ethology and protection and laboratory animal medicine are given by the Institutes for Animal Breeding and Genetics, the Institute for Animal Hygiene, Animal Welfare and Behaviour of Farm Animals, and by the Institute of Animal Welfare and Behaviour (pet and laboratory animals and horses).

Teaching is spread over the second, third, and fourth years. According to the TappV, three examinations in these subjects, i.e. "Animal breeding and genetics", "Animal husbandry and animal hygiene" and "Animal welfare" must be done by each student.

The lecturers are also invited to present specific related topics to the clinics and food hygiene lectures. The three institutes offer a range of specific electives. Numbers of doctoral and PhD theses elaborated here are submitted every year.

4.3.2 Comments

- All EU subjects required by the directive are covered.
- Some of the subjects not explicitly listed in the curriculum have been included into the programme of other subjects (Rural economy/Agronomy).
- The total numbers of hours devoted to animal production are in balance with other parts of the curriculum.
- Technological aspects of feed production are mentioned in the veterinary context of feed evaluation. The numbers of hours devoted to these topics are low but still sufficient.
- In all subjects, practical work is done by students. In early stages of their study, they get a basic knowledge of agricultural technologies at the school farm in Ruthe. The farm is easily accessible and can provide a technical support for students who thus can stay for two weeks. During this time, they are also exposed to handling various farm animal species. Later on, students are brought to the farm for practicals in animal breeding. Laboratory practicals and computerized approaches are also used.
- The Institute of animal breeding and genetics dispose of stables with several breeds of pigs, sheep, goats, horses and cattle that they regularly use for practical teaching.
- Teaching is sufficiently integrated not only among the institutes involved but it is also well coordinated with clinical teaching and courses of food hygiene. The integrative concept of herd health management and production medicine is thus well presented to students although the herd health management practice is taught by the cattle clinic.
- The TiHo has a very good reputation in the field of animal production within and outside Germany. One of its strong points is a veterinary-oriented programme in the animal production related subjects. The subjects are taught by veterinarians who are well recognized experts in their particular field. Animal nutrition, husbandry, breeding, genetics, protection and welfare are thus taught in the context of related veterinary problems and provide students with specific and useful information in the respective fields. Animal nutrition and dietetics are thus presented in the context of the biology of disease, animal breeding and genetics focus on breeding capabilities, inherited diseases and genetic resistance to disease. Both of them have included modern molecular and other approaches. Also in animal husbandry, protection, ethology and welfare students are taught modern concepts in all fields, including important European and national legislation and ethical issues, like transportation of animals. Here again, the global problems are taught in a veterinary-oriented context.

- All the institutes also do very good research and regularly publish in international journals. The proportion between basic and industry research reflects the current situation in the area and in the country. The facilities are adequate and the laboratories are well equipped.

4.3.3 Suggestions

4.3.3.1 Animal production and production medicine are one of the strong points of TiHo. In general, like in other subjects, maximal exposure of students to practical works in the farm, in laboratories and at any other occasion is recommended. Especially in animal production, it is very difficult to bring 250 students to farms, excursions and to provide them with adequate teaching material, which applies also for other subjects, in particular for clinics. This suggestion thus relates in general to the high numbers of students entering the school every year. It seems that 220 students is the optimum number for TiHo. The facilities (lecture halls) also correspond to these numbers.

4.4 CLINICAL SCIENCES

4.4.1 Findings

A most important area for the veterinary students is the clinical training. In Hannover most training is offered at the University. There are well-functioning University Animal Hospitals and field services in the form of an ambulatory clinic, the Farm for Education and Research in Ruthe and the Field station for Epidemiology in Bakum.

The curriculum is based on the national regulations (TAppV) which leaves some freedom to educational institutes to arrange their program (20 % of the number of hours). In the 4th semester clinical subjects start to be taught for 5 semesters. After this education for all students the so-called practical year covers the 5th year. This year could be introduced because of a new TAppV in 2004. The final semester (11th semester) is dedicated to the final exams.

Clinical training is provided throughout the entire study program. It starts on a low level in the first year in basic subjects and sciences. These subjects are taught in relation to veterinary medicine, partly integrated with teachers from clinical subjects. Practical clinical training involves the following obligatory classes for all students and is structured as follows:

- Clinical training with examinations of the animals, diagnostic procedures and surgery; these problem orientated case discussions are held three days/week for two hours for students of the third and fourth years.
- Courses in surgery and reproduction in the clinics dealing with farm animals are held in the 7th semester.
- Students have to participate in the activities of the mobile clinic for 15 hours in the 4th year. In addition students (2nd- 4th year) are encouraged to participate in the emergency (24-hour) and hospitalisation activities in the clinics and join the activities of the students already in the practical year (5th year).
- In the 5th year all students are in the so-called practical year and have 460 hours of clinical training in a species orientated clinic chosen by the student. A group of 12-20 students/clinic are assigned to a 10 week internal education program. A rotation (1-2 students in one group) is performed for different subjects. The students spend the whole day in the clinics, are involved in the daily patient management, have their own students' consultation room for primary case responsibility, are involved in the

emergency service during nights and weekends and depending on their animal species choice, in the mobile clinic, have surgery classes and different seminars to provide case orientated teaching on cases seen in the clinics during the day or learn special techniques (e.g. ultrasonography, electrodiagnostics etc).

- In the practical year students must also complete an obligatory extramural part of the studies comprising a total of 1,100 hours. During this time, 850 hours (1 x 4 weeks and 2 x 2 months) are spent in private practice or a TiHo clinic, and 250 hours (2 x 3 weeks, 1 x 2 weeks) in governmental or private institutes concerned with different aspects of food hygiene.
- A group of approximately 40 students are hired by the different clinics for a small salary to support the clinical staff by working regularly one night/week and/or at the weekends.
- Students are encouraged to participate in the activities of the special herd health services offered as an elective subject by the Clinic for Swine, Small Ruminants and Forensic Medicine, by the Clinic for Cattle, the Clinic for Poultry and by the Field Station for Epidemiology in Bakum (swine).

4.4.2 Comments

- In the Visitors' opinion, the basic and paraclinical subjects are of good quality and lay the necessary groundwork for the clinical subjects. The planned integration of the curriculum will further enhance this.
- There is no problem in providing students with animals for learning basic clinical skills before the students are allowed to enter the different animal hospitals. The propaedeutics are very useful and well organized.
- The Visitors can confirm that the curriculum includes all relevant clinical subjects. The visitors found that the allocated hours to clinics and practicals are adequate and in balance.
- The core subjects are adequately covered to give students the knowledge required to meet the day 1 competencies' and the electives give the student the choice of further specialization in selected areas. However several staff members found that the definition of Day 1 competences needs further reflection and clarification.
- The visiting team is very satisfied that the establishment operates an emergency veterinary service in which students really participate on a compulsory basis. All animal clinics are open around the clock, all year round.
- The University has an ambulatory clinic operating the whole year, with additional stand-by service at night and week-end. Animals treated are mainly cattle, but also horses, small ruminants and pigs. Students do participate in the emergency and night duties as part of their coursework.
- The new TAppV has led to a new curriculum. This is considered both by staff and students as a great improvement. Hands-on clinical training has increased considerably being of extreme importance for the clinical education. The visitors are very happy with this improvement and with the great opportunities students have to handle a great number of different patients in all clinics.
- The Visitors are very satisfied that the quantity and range of both large and small animal clinical cases available to students is sufficient. The case load of the animal hospitals is high and is properly used for educational purposes. However the visitors are concerned about the future case load of the Clinic for Cattle and the Clinic for Swine, Small Ruminants and Forensic Medicine. Because of hygienic measures and epidemic diseases there is a real chance that the number of cases may drop.
- The visitors are very much concerned of the fact that those students having a main interest in cattle are not involved in working in the ambulatory clinic which is mainly a cattle practice. The reason is that this mobile clinic does not belong to the Clinic for Cattle. The visitors are also of the opinion that the case load of the ambulatory

practice is borderline. In future it can be expected that the number of farms and animals in the region of Hannover will further decrease leading to an insufficient number of patients.

- Students and staff found the extra-mural practicals very useful. In the visitor's opinion however, extra mural practicals are only useful if their quality is sufficiently controlled. Extra mural practicals should not be seen as a substitute for the instruction provided by the School. There must be an appropriate balance between EM practicals and School-based clinical training.
- With the increasing number of students, staff and students are concerned about their courses and practicals. Many of them are of the opinion that group size is too high.
- The Visitors were impressed by the investment and excellent facilities of the farm. They were sure this provides good quality teaching opportunities for the students.
- During their work in practicals, clinics and extra-murals students are fully covered by liability insurance.

4.4.3. Suggestions

4.4.3.1 The TiHo curriculum prepares students well for all aspects of veterinary medicine. The goal in the near future must be to enhance the integrated teaching process and review and evaluate the major changes carried out in the last few years.

4.4.3.2 The TiHo is closely following the official reform process of the national curriculum. Experience with the TAppV in its current form and its interpretation by the TiHo should facilitate this national process.

4.4.3.3 Lower Saxony is a Federal State where agronomy and food animal production are important economic factors. Therefore, besides a strong component of small animal medicine, farm animals are a major focus in TiHo's teaching system. The visitors recommend strongly a better integration of the ambulatory clinic with the Clinic for Cattle. Students interested in cattle should spend sufficient time, day and night, in the ambulatory practice.

4.4.3.4 The field services in the form of the ambulatory clinic for farm animals must be extended and strengthened.

4.4.3.5 In view of the fact that the period spent by students on clinical EM practicals is considerable, the selection and evaluation of the practitioners involved in EM practicals is very important to ensure the quality of students' clinical training. The TiHo is asked to consider the implications of this point, and take steps to assure the quality of practitioners involved in extra mural training. There must be a member of the academic staff, responsible for the overall supervision of the extra mural practicals. Students should have access to suitable database of EM placements and must be able to seek and obtain advice and guidance on the suitability of EM placements.

4.4.3.6 Practices should be asked to complete a confidential assessment form. Students should be judged on practical matters as well as knowledge. There should also be a mechanism to enable students to formally report on the quality of the instruction and experience of EMS placements

4.4.3.7 During EM practicals students should be encouraged to develop a portfolio, being a record of the students' experiences and personal/ professional development as they progress through these practicals. One of the key elements of the portfolio is the encouragement of the development of reflective practice. Students should write at least 2 clinical case reports.

4.5 FOOD HYGIENE & TECHNOLOGY AND VETERINARY PUBLIC HEALTH

4.5.1 Findings

The Curriculum hours in the EU-listed subjects taken by each student and referred to as Food Hygiene and Food Science & Technology comprise theoretical lectures, seminars, laboratory, desk-based work, and other practical work including inspection and control activities in slaughterhouses, food processing plants, and official veterinary agencies for consumer and food protection.

The number of elective subjects offered to the students is high considering contents, titles and topics, and they may change every semester.

Extramural work comprises mandatory hours for practical learning in Food Hygiene related to consumer and food protection and practical work in large industrial slaughterhouses for the most common animal species. Programmed practical objectives includes training in inspection and control of foods of animal origin, training in inspection and control activities related to public veterinary services, and training in inspection and control activities related to slaughterhouses and other food derived industries.

The practical year contains as an option a number of practical hours for a number of weeks to gain experience in diagnostic and research activities performed at the Institute for Food Quality and Food Safety. At this Institute there is a functional in-house facility for training of students (slaughterhouse facility), and a small in-house food processing unit.

4.5.2 Comments

- The teaching and practical hours for instruction of veterinary students in Food Hygiene and Food Science & Technology compares favourably to those applied to other subjects of the curriculum. The titles of the subjects reflect its content appropriately.
- The number of elective subjects offered in Food Hygiene and Food Science & Technology is large. The selection of the elective subjects, which would include emerging topics in Food Hygiene and Inspection, means that the number of students for some elective subjects could become too large and those with no students withdrawn.
- The existence at the Institute for Food Quality and Food Safety of an active in-house facility for training of students (slaughterhouse facility), and an small in-house food processing unit is considered very useful.

4.5.3 Suggestions

4.5.3.1 The incorporation into the veterinary curriculum of aspects of animal health as a prerequisite of food safety is recommended. The safety of foods of animal origin from the farm to the consumer, giving the slaughterhouse a crucial role for

inspection, intervention, and control activities, would have a profound significance on Veterinary Public Health.

4.5.3.2 In order to accomplish the above cited objective, a deeper and stronger interaction of Food Hygiene with disciplines related to herd health management, including epidemiology studies, risk factor analysis, diagnostic analysis, and intervention strategies is required. The existence at the TiHo of Institutes with interests in food safety and the Field Station for Epidemiology at Bakum, may facilitate such a task.

4.5.3.3 An increased effort to communicate to the students the professional and market opportunities of trained veterinarians in the Food Hygiene and Inspection Field should be made.

4.6 ELECTIVES, OPTIONAL DISCIPLINES & OTHER SUBJECTS

These subjects have been covered specifically in other sections of Chapter 4 and do not need to be commented upon separately.

5. TEACHING QUALITY & EVALUATION

5.1 TEACHING METHODOLOGY

5.1.1 Findings

The TiHo, by tradition and by application of the TappV, has developed a high-quality level face-to-face teaching programme. All the factual information given in the SER concerning teaching methodology (pages 30-32 and 58-61) globally describes the reality. Particularly should be outlined:

- A close supervision of the students during the seminars, practicals and the clinics, even in the early semesters, as much as possible when considering the high number of students.
- The variety in the teaching methods used.
- The fact that most teachers are very enthusiastic in teaching.
- The excellent facilities (rooms, equipments, etc.), that will further increase after moving the small animals and horses clinics.
- The noticeable number of textbooks, mostly in German, to which the students can refer.

Since the appointment of an e-learning advisor, a packet of e-learning software has been made available, which offers a significant resource to undergraduate and postgraduate students as well as to the veterinarians involved in continuing education. Synchronous (such virtual classrooms) and asynchronous (pdf files to download, videos, Casus clinical cases, forums, etc.) techniques are already implemented and begin to be used by some teachers.

The number and the variety of the electives can be regarded as a positive point, provided that the teachers are not overloaded with lectures, and that the number of weekly face-to-face teaching hours is not excessive.

However, it can be noticed that the “day-one skills” and the related set of specific learning objectives are not clearly defined and written and given to the students in all different courses, including the extramural periods. But, in that direction, the portfolio of technical skills which begin to be used in the small animals section is a good tool.

The implementation of the practical year is unanimously considered and agreed by the team as a great improvement for students.

Due to the structure of the curriculum, and to the weight of the tradition, the examination system is almost fully disconnected from the learning process. In some courses, for example in the early semesters, there is no “formative evaluation”, and the examinations can be placed one or two years after the related semester. Moreover, as a consequence, in those disciplines some students limit their efforts to the strict minimum during the semester. They really learn during the period of time just before the examination. So, in these cases, there is a disconnection between the interactive delivery of the scientific information, the learning process (not interactive) and the final evaluation, a situation which is not ideal.

The system devoted to evaluation of teaching by the students is efficient, easy to use and the results are readily accessible and analyzable. Each student must fill in at least 5 questionnaires, but some of them do more. The students have the real feeling that it helps to improve the quality of teaching.

The existence of the course for improvement of pedagogical and didactic skills has to be considered as a very positive point. The two sessions that were organized were appreciated. Some additional seminars (for example on multiple choice tests) are done. Other incentives to improving teaching quality are not yet effective (i.e. reform of the salary structure) or have disappeared (awards).

5.1.2 Comments

- An effort could be made to define the students` minimum knowledge level expected, i.e. what he/she is able to solve and to do, either at the end of each course, of the core curriculum, and of each major type of practical year.
- Additionally, special attention could be paid to including the final examinations in the learning process, that is, at the end of each semester, wherever possible. It would offer the students a better incentive to work regularly throughout the year. Moreover, the present system doesn't match the spirit of the European Credit Transfer System, which is supported by three major principles:
 1. The curriculum is split into semesters that include teaching, learning and evaluation. Each semester has 30 credits.
 2. Each credit takes into account the total student workload, and not only the teaching hours. The personal work is the major part of the learning process and remains under teachers' supervision.
 3. If the credits are validated in another university (after passing the examination), they

5.1.3 Suggestions

5.1.3.1 Define the day-one competencies and the minimum learning objectives in each field. Generalize portfolios to all clinics and extramural periods.

5.1.3.2 Fully implement the ECT system, including the close time relationship between teaching, learning and examinations.

5.1.3.3 Reduce the number of compulsory face-to-face teaching hours, in order to increase the part of active teaching methods, self-directed learning access to foreign languages.

5.1.3.4 Further improve problem-oriented learning.

5.1.3.5 Encourage the use of e-learning and blended learning in the undergraduate curriculum.

5.1.3.6 Generalize the compulsory evaluation of teaching by students to all courses and to all types of teaching and put the results on the StudIS/DozIS for free access and not only for the related teacher.

5.1.3.7 Further encourage the teachers's participation in the didactic seminars and courses.

5.1.3.8 Re-introduce a “best teacher of the year” award or something similar.

5.2 EXAMINATIONS

5.2.1 Findings

As mentioned before, the timespan between the courses and the related examinations is often too long and disconnected. The overall organisation of the examination procedure is described in the SER in pages 62-64. The TiHo aims to reinforce the procedure, to include an online quick and useful assessment tool, to add more multiple-choice tests to the oral examinations and is looking to utilising the resources and the teachers education in a better way.

5.2.2 Comments

- Added to a reorganisation of the position of the examinations within the curriculum, an evaluation of the examination procedure by the students could be added.

5.2.3 Suggestions

See §5.1.2.

6. PHYSICAL FACILITIES & EQUIPMENT

6.1 GENERAL ASPECTS

6.1.1 Findings

The TiHo is primarily located on two sites approximately 4 km apart. The Bischofsholer Damm Campus is situated 2 km from the town-centre and is connected to the Bünteweg Campus by a tram line and a public road with a cycle track.

In addition, the TiHo maintains its Farm for Education and Research in Ruthe (20 km south of the site Bischofsholer Damm) and the Field Station for Epidemiology in Bakum (approximately 200 km to the north-west).

An in-house slaughterhouse facility for the training of students is available in the Institute for Food Quality and Food Safety). The TiHo has also a small in-house foodstuff processing unit which provides appropriate access for undergraduate students.

There are 23 lecture halls (19 on the Bischofsholer Damm Campus and 4 on the Bünteweg Campus). Total number of places in lecture halls is 2,895 (2,367 on the Bischofsholer Damm Campus and 528 on the Bünteweg Campus)

The number of premises that can be used for group work (supervised work) is 55 (30 on the Bischofsholer Damm Campus and 25 on the Bünteweg Campus.)

The total number of places in rooms for group work (supervised work) is 1,024 (439 on the Bischofsholer Damm Campus and 585 on the Bünteweg Campus).

The number of laboratories for practical work by students is 39 (16 on the Bischofsholer Damm Campus and 23 on the Bünteweg Campus).

In total, the clinics and Field station in Bakum run 4 vW buses (4-6 students each) and 4 VW cars (2-3 students).

General health and safety measures include provision of a locker for every two students for protective clothing on the Bischofsholer Damm Campus.

As the highest risk is assumed to originate from material in pathology, students there have to wear protective clothing of distinctive colours (including aprons, rubber boots, gloves and if necessary safety goggles) at all times, and individual lockers are provided for each student to keep their gear in. For clinical work students receive TiHo clothing in different colours with special name tags for identification.

All laboratories where students come into contact with potentially hazardous material (anatomy, microbiology and pathology) have forced ventilation, and no

formaldehyde-fixed materials are used in anatomy courses.

All students are informed in small groups about the risks of transmitting highly

contagious animal diseases (primarily FMD) in their second year during their practical period on the Farm for Education and Research in Ruthe.

All clinics routinely provide facilities for students to clean and disinfect their aprons and rubber boots. In case of outbreaks of disease (CSF, FMD), disposable protective clothing is also available to students. In addition, all clinics and departments are equipped with telephones, first aid kits, and fire extinguishers.

Student working in radiology area are equipped with individual pen-dosimeters.

6.1.2 Comments

- The facilities are, despite their age (Bischofsholer Damm: 40-60 years), generally in a good condition. The new clinics at Bünteweg Campus will significantly improve facilities for patients, employees and students.
- Also a large lecture hall will be built in the new clinic complex to accommodate the increased student numbers so that a total of 4 large lecture halls at the TiHo, each seating more than 250, will be available.
- However, the number of students admitted every year is too high regarding the number of places in the lecture halls. There are not enough sitting places for all students, which is not only a matter of quality of learning, but a security problem.
- Students have access to computer rooms at both campuses. The computers are of standard so that sophisticated applications and e-learning programs can be handled without any problems.
- With exception of the personal dosimetry in the clinics, the students seem to be well aware of the health and safety items.

- The frequent rotations of the students between the teaching places on the two sites should be reconsidered.

6.1.3 Suggestions

6.1.3.1 It is strongly recommended that a W-LAN Network for an e-campus at Bünteweg would improve the application of e-learning.

6.1.3.2 It is suggested that extensions to the mensa, cafeteria and self study space at Bünteweg Campus would improve the quality of student life.

6.2 CLINICAL FACILITIES & ORGANISATION

6.2.1 Findings

All premises used for clinics and hospitalisation are located on the Bischofsholer Damm site. Since the TiHo is structured according to a species model, the premises for hospitalisation are located in the respective clinics. All clinics run a 24 h- emergency service, where students are integrated.

Farm animals for teaching purposes are kept at the Farm in Ruthe. Further animals for teaching purposes are kept by the different clinics.

Routine clinical laboratory diagnostics are performed in each clinic specialising in the respective animal species. In all diagnostic laboratories of the Clinics and Institutes relevant teaching is held; students are taught the techniques and spectrum of methods of analysis in small groups.

Facilities are designed to host small students groups for teaching purposes.

With the exception of poultry and fish, diagnostic pathology is performed for all clinics in the diagnostic unit of the Institute for Pathology (including a necropsy room of 1,200 m²). The diagnostic unit provides a 5-day per week service performing approximately 2,500 necropsies and analysing 7,500 surgical biopsy samples per year from within and outside the TiHo.

Specialised diagnostic services are provided by the responsible TiHo laboratories (animal nutrition, immunology, endocrinology, microbiology, parasitology, pharmacology, toxicology, virology, etc.).

The Field Station for Epidemiology in Bakum is equipped with a necropsy room and a well-equipped diagnostic laboratory.

The mobile clinic is run by the Clinic for Small Ruminants and Pigs. Students are integrated in the daily work.

The Small Animal Clinic and the Clinic for Horses will move to Bünteweg. In this new Clinic Complex („*Klinikum am Bünteweg*“) the Clinic for Pets, Reptiles and Pet and Feral Birds will likewise be incorporated. It has already been officially founded for organisational legal reasons and will be perceived by the public as an entirely independent clinic with its move to the Clinic Complex.

For communication among the Clinics and the Diagnostic Laboratories the "Integrated Veterinary Information System (IVIS)" has been implemented in nearly all Clinics and

Institutes with diagnostic service. It combines the 2 sub-programmes “Vetware” (patient documentation) and “Labcontrol” (laboratory data incl. invoicing). A new system is under evaluation in the Small Animal Clinic at the moment, on the basis of the system used in Vienna. In the Clinic for Small Food animals a Wifi system allows the use of a laptop for the patient documentation directly in the stables.

For research in infectious diseases a new high safety facility (L4vet/S3) including animal housing is to be built.

6.2.2 Comments

- Modern scientific and clinical work is heavily dependent on the establishment of new methods, which require investment in expensive equipment. In the small animal clinic, there is a strong need for renewal. The Clinic Complex will provide optimal facilities and equipment for teaching, research and services. The team was impressed by the new building plans.
- In the other clinics, the premises, that have been continuously updated, allow good working opportunities and optimal handling of the animals. There is enough place for the high number of patients.
- The question of the remaining of bovine hospitalization facilities on the TiHo site should be addressed, in regard to potential epidemiological problems (MKS, IBR). The future of the mobile clinic should also be considered in the same time, as the distance to the farm is still growing over the years. A solution should be evaluated, in order to be ready to handle in case of a risk of closure of the bovine stables.

6.2.3 Suggestions

6.2.3.1 An evaluation of alternative solutions to the bovine hospital and the mobile clinic (acquisition of a private veterinary clinic for instance) should be considered).

7. ANIMALS & TEACHING MATERIALS OF ANIMAL ORIGIN

7.1 Findings

All clinics receive ambulatory patients (32 porcine, 103 small ruminants, 1900 equine, 12'000 canine, 3400 feline, 6000 exotic pets) and offer an hospitalisation service (1600 bovine, 340 porcine, 550 small ruminants, 30 other farm animals, 3000 poultry, 700 equine, 2200 canine, 600 feline, 1200 exotic pets). Between 70 and 90 % of the cases are referred.

For clinical training 12 cows are purchased by the Bovine clinic for rectal palpation exercises, and 40 cows in late pregnancy for caesarian sections by students.

There are different trucks and trailers for the transport of animals (Bovine Clinic 3 trucks, Horse Clinic 1 truck, Clinic for Pigs and Small Ruminants 1 car with trailer)

All cadavers (15 dogs, 74 cats, 50 goats, 14 equine, 50 pigs, 120 chickens, more than 100 small exotic animals) or specimen (10 equine heads, 46 feet) dissected by students are fresh or shortly stored without formalin (cooled, frozen or stored in saline solution). The large number of necropsies or pathological anatomy work done on a broad number of species is issued from euthanized patients, organs from slaughtered animals, or samples from the clinics or sent from outside.

Students have access to healthy farm animals in Ruthe, the Institute for Animal Breeding and Genetics, the Institute for Reproductive Biology, Institute for Physiology. Additionally, students have access to farm within the scope of herd health management.

The ambulatory clinic operates the whole year, with additional stand-by service at night and week-end. Animals treated are mainly cattle, but also horses, small ruminants and pigs. In 2006, they were 3400 visits to farms and stud and 1100 visits for herd health service.

Additionally, farms / plants are contractually visited on a regular basis (275 cattle, small ruminants, pigs or fish, 24 poultry, 77 equine, 3 ornamental fish).

The Institute of Food Quality and Food Safety receives samples from the Institute of Parasitology e.g. *Trichinella*) and carcasses or by-products from the slaughterhouses (100 pigs, 15-20 cattle, 10 sheep, 120 poultry, 5-15 game, 1-2 horses). Different material is also provided to each student for teaching (fresh meat, fat tissue, conserves, eggs, fish, manufactured products).

7.2 Comments

- All the ratios concerning animals available for teaching are good (R9 – R18). In other words, the number of animals available is remarkably high. Additional purchase of animals gives excellent opportunities to show a broad spectrum of clinical cases and necropsies to the students.
- Herd health medicine is also well represented and students are constantly involved in the visits.
- The students are also given excellent exposure to slaughtered animals on-site and outside the TiHo.
- In the opinion of the team, the clinical materials available are sufficient to enable staff to maintain or develop their skills. The experts were pleased to notice the importance accorded by the TiHo to good and non-competitive relations between the veterinary school and the practitioners of the area. However, the progressive evolving of the clinics towards referral institutions could influence the type of cases seen by the students, and reduce the number of cases needed to guarantee sufficient basis day-1 skills and competencies. Delegation of this part of the teaching to the extramural supervisors doesn't seem to be a good alternative.

7.3 Suggestions

7.3.1 Care should be given to insure appropriate case load in food producing animals even in case of epidemiologic problems. Alternative solutions to hospitalised bovine patients should be investigated.

7.3.2 Food producing animals mostly relay on the economic situation in the concerned marked segment (low at present time for pigs, higher for milk), the setting of the prices for treatments should be correspondingly adapted and communicated to the referring practitioners and farmers.

7.3.3 The station in Bakum gives excellent teaching opportunities. The team would recommend ensuring a continuity in the management and teaching for the future years. The opportunity to run a polyclinic for pets in the new clinics building should be evaluated.

8. LIBRARY & EDUCATIONAL RESOURCES

8.1 Findings

The factual information on the library can be found on p97-98 SER and has been confirmed as accurate.

The facilities for the library are located on three floors of a separate building, the basement being basically for storage of papers, dissertations and journals, the ground floor for reception and books and the first floor for text books and study rooms. On-line access points to internet databases etc. are plentiful.

A number of the databases are in a Lower Saxony Consortium and are paid for centrally. Other databases not included are subscribed individually.

A number of learning programmes are available to students.

Searching the internet aids are well developed, both externally and internally.

General digitalizing is in progress and should be complete in 2008.

Opening hours, within the personnel constrictions, appear to be acceptable to the students.

8.2 Comments

The appointment of a member of teaching staff three years ago exclusively for e-learning is very progress oriented and is intended to take care of the evidence/problem based medicine aspects which need to be improved. This programme can foresee digitalized lectures and direct feedback and is considered by the team as a very positive move, even though acceptance is slow.

8.3 Suggestions

8.3.1 The emphasis on e-learning should be increased and ways and means sought to facilitate acceptance by both students and teaching staff, so that this method of learning occupies a prime position within the training programme as a whole.

8.3.2 The absence of W-Lan is a disadvantage and should be catered for in plans for the near future.

9. ADMISSION & ENROLMENT

9.1 Findings

The studies of Veterinary medicine at the TiHo are subjected to a "*Numerus clausus*" admissions system. The selection of students takes place at the Central Allocation Office (ZVS), a national agency, and is primarily based on the grade of the final school examination. The ZVS allocates 20% of the student places amongst applicants with excellent school leaving grades, and a further 20% of the places to those with less good grades after a waiting period.

Since two years, the remaining 60% of the student places are allocated directly by the Universities. The ZVS implements a pre-selection procedure amongst the eligible applicants on behalf of the University. The applicants have to name the TiHo as their first University of preference and to obtain average grades of university entrance qualification up to 2.7. The applicants nominated by ZVS can participate in a veterinary medical orientated motivation test at the TiHo for ascertaining particular suitability. The TiHo makes the ranking for admission after the results of this test.

Other possibilities for admission include: a) any advanced qualification in a profession related to Veterinary Medicine, b) transfer from a Faculty of Veterinary Medicine outside Germany, or c) transfer from related subjects (Human Medicine).

The number of students admitted per year is restricted and calculated on the basis of budget-staff numbers. Legal actions may also permit the admission of extra students. Most of the students finish his/her studies in the year matching the minimum number of years.

9.2 Comments

- The veterinary medical orientated motivation tests performed at the TiHo intend to measure the aptitude, knowledge, and motivation of applicant students to pursue studies in veterinary medicine.
- The link of budget to staff numbers has a profound reflection in the number of students admitted.
- The admission process is continuously internally evaluated in order to avoid access inequalities.
- The low observed drop-out rate may be an indicator of the learning attitude of students at the TiHo.

9.3 Suggestions

9.3.1 The veterinary medical orientated motivation test performed at the TiHo may be acceptable, but a continuation of the search for others methods which may be more efficient is recommended. Further efforts would be undertaken to test aptitude better in terms of preparation, knowledge, and motivation of students applying for admission to pursue veterinary studies at the TiHo.

10. ACADEMIC & SUPPORT STAFF

10.1 Findings

The teaching staff to student ratio is precisely defined by the "Kapazitätsverordnung" and is correct. Amongst the teachers, the veterinary surgeon (VS) vs non veterinary surgeon (NVS) remains in an acceptable range, provided that the range will be approved by the EAEVE. The support staff, in the different institutes and clinics is correct, both from the quantitative and qualitative point of view.

As mentioned above (see Chapter 5), the introduction of a course dedicated to teachers' improvement of their didactic skills is a very positive point.

10.2 Comments

As far as the team could ascertain, the continuing education of the support staff seems to be underdeveloped.

At the time of the visit, there was no position for a professor of Diagnostic Imaging and, considering the rapid development of the available equipment, including MRI, scintigraphy etc., that situation has to be quickly corrected. Such professor, if possible an ECVDI diplomate, could be assigned to the small animal clinic, but with transverse responsibility in the other clinics.

The VS to NVS ratio is correct but it should not decrease. In order to ensure or reinforce the clinical- and public health-oriented quality of teaching, even in the early semesters, this ratio must be maintained.

10.3 Suggestions

No specific suggestion.

11. CONTINUING EDUCATION

11.1 Findings

Conforming to the objectives of the school, the TiHo staff are regularly involved in continuing education programs as speakers on a national and international basis.

The TiHo is also gives a great importance to the cooperation with professional of states organism in order to offer updated and outstanding professional education.

In addition, the TiHo also offers good e-learning and blended learning opportunities of continuing education.

11.2 Comments

- The quality of the CE provided by the TiHo is high, and adapted to modern professional education. In the opinion of the team, advantages could be taken from electives to enlarge the offer in that field. As part of an evidence-based veterinary medicine for practitioners, these activities would reflect the leading influence of the School in the life long learning efforts of the german veterinarians.
- Yet, the effort made by the different teachers should be rewarded in the TiHo internal index system.

11.3 Suggestions

11.3.1 Make use of teaching material prepared for elective courses in order to provide CE for the practitioners.

11.3.2 Include the work done in CE in the career evaluation of the teachers.

12. POSTGRADUATE EDUCATION

12.1 Findings

The TiHo offers a variety of postgraduate educational programs including a Dr. med. vet., and three PhD programs in “Veterinary Research and Animal Biology”, “Systems Neurosciences”, and “Infections Biology”.

In addition, the TiHo offers a Clinical Specialist Training for Veterinary Specialists (National Board), and a Training for Veterinary Specialists in accordance with the European Board of Veterinary Specialization (EBVS). Trained veterinary students at the TiHo can apply for recognition by other European Institutions.

12.2 Comments

- The students involved in a Dr. med. vet. at the TiHo give public oral presentations of their research topic and present results in a written format. However, no information is

given about minimum publication requirements (if any) for graduate students involved in doctoral programmes (Dr. med, vet. or PhD programs). For the PhD programmes, a description of the contents of the first comprehensive examination and the final examination is useful.

- A large number of veterinary surgeons receive their Doctorate in Veterinary Medicine (Dr. med. vet.) at the TiHo. Most of the Dr. med. vet. and PhD students are involved in a double training, combined with a programme for Veterinary Specialists. Private and public enterprises may finance the research activities of students involved in postgraduate activities.

12.3 Suggestions

12.3.1 The achievement and recognition by the TiHo of either specific (Dr. med. vet.) and/or universally accepted (PhD grade) doctoral degrees, creates a complex and paradoxical situation. Accordingly, a suggestion is made that the TiHo should offer in the medium term a single doctoral degree (PhD) based on an acceptable programme.

12.3.2 An increased offering by the TiHo of definitive PhD programmes, research-oriented and funding-pending, would surely activate and enlarge the involvement in the research activities of many industrial platforms, as well as the professional and universal recognition of the doctoral graduates by public and private institutions, either national, local or from other European countries.

13. RESEARCH

13.1 Findings

Research activities are considered to be one of the crucial objectives of the TiHo. The mission statement defines areas of primary interest, like infection medicine, clinical research, systems neuroscience and animal health and food quality.

With regards to teaching, interested undergraduate students can get involved in research in their practical years within the intramural practical in the paraclinical institutes and during the extramural practical time.

Outside of the curriculum, undergraduate students can participate in research in all institutes and clinics and special electives related to research activities are offered.

The sources of funding research include the German research funding society (DNG), industry, foundations and money raised by offering specialized services.

3.2 Comments

- The amount of money raised every year permits the engagement of undergraduate and graduate students to particular areas of research, which is reflected by the considerable number of doctoral and PhD theses submitted by each institute and/or clinic.

- The TiHo reflects properly current demands in the area and in the country. The proportions between basic, clinical, applied and industry research thus corresponds to the current situation. On the other hand, this implies that the research effort is not always cohesive and integrated.
- The quality of research in terms of the number and quality of research publications and of the professional reputation of the team/department leaders is in general high.

13.3 Suggestions

13.3.1 Undergraduate students should be more motivated to take the research track in order to promote very early their potential academic career. Excellent graduate students should be stimulated to enter the PhD rather than the doctorate programme.

EXECUTIVE SUMMARY

Firstly, the statement should be made, that all requirements laid down in the EU Directive are exceeded by the TiHo and that, with the exception of a rather high theory to practical ratio, which is somewhat compensated for by the excellence of the practicals, all EAEVE Ratios are within the ranges.

There have been many changes which have taken place over the past five or so years ranging from the changes within the national veterinary curriculum and the manner in which greater flexibility has been applied, through the continual move towards the long term goal of having all Clinics and Institutes on the Bünteweg Campus as confirmed by the Small Animal, Equine and Pet Exotics Clinics building under construction, to the introduction of the research-oriented PhD programme, a first in Germany.

The University of Veterinary Medicine Hannover, Foundation has a long tradition of excellence aiming at the production of a top quality product. The TiHo has the enormous benefit of being an independent entity uniquely involved in everything around training good veterinarians. A financial situation has been created, which would be the envy of most other European Establishments for Veterinary Education. The staff appears to the team to be highly motivated with a high level of collaboration in both teaching and research. The list of strengths is long, but the following need to be highlighted:

- The high quality of teaching materials including animal availability with high case loads as well as fine equipment
- Good practical education with significant hands-on experience and detailed supervision in practicals
- Veterinary-oriented programmes in Animal Production and Food Hygiene
- The Experimental Farm in Ruthe
- The Epidemiology Centre in Bakum
- Excellent Research
- Emphasis on European College Certifications
- Commercialisation of know-how

It would be unreasonable to expect, that no weaknesses have been found, but this is not necessarily negative because they offer potential for improvement. The following are the highlights of the most critical of these points from the point of view of the EAEVE Team.

Of primary importance is the fact that the theoretical teaching to practical teaching ratio is clearly high. In the team's opinion, it is essential that the number of theoretical lectures is reduced and replaced by student self-learning time. Despite the strait-jacket of the National Veterinary Curriculum, it is within the competence of the TiHo to modify this and it should be done as soon as possible.

The ECTS credits system reflects student activity and is not only useful when considering student movement across Europe. It is our opinion, that full implementation of the ECTS, including its effects on students' workload, is essential and would benefit both the students and the TiHo.

The organization of the semesters and examinations is not very student-friendly. Examinations on all subjects taught in a semester should follow immediately thereafter.

The definition of a core of practical clinical teaching, common for all students within the differentiation system should be developed leading to a realistic list of day-one skills.

There should be improvement of supervision, selection and evaluation of extramural training quality, especially since it has been considered as a fully equivalent form of practical training for the purposes of this report. The school's supervision must be clearly defined.

The two campuses create not only logistic problems, but necessitates a complex organization in a long-term perspective. The clinics will have to go through an extended transition phase. The team wishes the TiHo a successful move period.

More flexibility for the school within the TappV is necessary, especially in terms of the admission procedure, numbers of students, teaching hours, teaching methods and examination procedures. The team fully supports the TiHo Presidium's diplomatic/political activities in this matter.

A more future-oriented mission statement, including new concepts of the veterinary profession, especially in Veterinary Public Health could well be conceived.

It was considered desirable that a representative of the active veterinary profession should participate in the Curriculum Committee.

The team recommends, that the ambulatory clinic should be better integrated in its activities with the Bovine Clinic, especially with relation to field services, which ought to be extended and strengthened.

The library is good, but there is a need for a Wireless-LAN circuit on both campuses.

The team does not believe that there are any potential Category 1 Deficiencies and confirms that the TiHo is an European Veterinary Educational Establishment exhibiting many strong points. In the team's opinion, many of the weak points offer immediate potential for further development and improvement.

In conclusion, the EAEVE Team recommend, that the TiHo be added to the Approved Establishments List.