Experiences in Introducing E-learning at the faculty of Veterinary Science in Budapest

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It started in 1991

• EAEVE Report:
  – Article No.5: “… the major goal is problem solving…, the students should actively be involved in the teaching/learning process … “

• Mississippi Report
  – 2 600 000 “learning objectives”
    one fact/every six minutes (7days a week; all throughout 5 years)
Demands of the ever changing society

- in the past:
  - ready made veterinarian

- lately:
  - a professional with potential to change

- future:
  - ??? (always up to date; servant of the society)
What have we got?

- Claude Bernard on the wall
- tradition in veterinary education
Development

• In science
  – only new techniques bring new results

• In educations
  – can we apply computers?
  – ZX spectrum, Commodore
  – PC or Mac
Two hemispheres, two functions

- **Right side**
  - Impression
  - Totality
  - Inductive
  - Innovative
  - Inspiration

- **Left side**
  - Understanding
  - Segmental
  - Deductive
  - Passive
  - Systematic
Example

- right side
- left side
- more right side

The protein secretion is bound to the Golgi apparatus
Multimedia – advantages

• Multiple interaction with the brain
  – see (jpg, movies), hear, act

• Own pace
• Motivation
• Activity
• Self testing
Multimedia – disadvantages

• stress for the teachers
  – (we always do thing we are not trained for)
• takes a lot of time
• teaching vs. research
• requires infrastructure
• manual skills might suffer
• stress for the students
Student stress

- OK
- fear
- boredom
Multimedia at our Faculty

• Hajós - Szalay: Histoclick

• Rudas: Veterinary Physiology

• Sótonyi: Anatomia Canis
3.1.
Tissue: psoas major
Staining: HE
Mag: high - medium

An overview shows the **myofibres**, the units of the skeletal muscles which develop by the fusion of embryonic myoblasts. Accordingly, they are long, multinucleated giant cells containing a high number of **nuclei** located close to the common **cell membrane** called the **sarcolemma**. Between the fibres, space is filled with **loose connective tissue**. Skeletal muscle is capable of fast, high-power contraction but needs rest after a relatively short working period.
Aktionspotential der Arbeitsmuskulatur

1. Schwelle: Natrium strömt ein

2. Phase 0: Depolarisation
   schnelle Na-Strömung

3. Phase 1: "overshoot"
   Na-Einträumung hält an,
   Cl-Influx und K-Efflux

4. Phase 2, Plateau
   langsamer Ca-Influx,
   lanfsame K-Efflux

5. Phase 3: Repolarisation
   K-Efflux

6. Phase 4
   Nachhyperpolarisation

Stimulation: Depolarisation

Ruhemembranpotential

mV

+25

0

-55

-90

Sótonyi: Anatomia Canis

10. Cleidocervicalis muscle
Student's opinion

• 40% enjoys, 30% likes, 30% dislikes

„More explanation on the blackboard, please!“
Other alternative methods

• Student Essay (SE)
  – students prepare a SE
  – it had to be scientific
  – was like the literature overview of a paper
  – understand a topic not from textbooks
  – we have a copy of each in the library
Something has changed

• Earlier:
  – you worked for your drawer
  – files remained on your computer

• Information technology did help
Web 2.0 was introduced

• not only read but write the web
• web site appearance changes by interaction
• you can share everything
  – data, photos, sounds, videos, ideas
  – motivates to prepare nice things
  – eliminates physical distance
  – promotes collaborative work
  – makes alive the dead-end multimedia
Web 2.0 on teaching material

• Concept does not change very much
  – authoring software -> web design software
  – CAL -> distant learning, e-learning

• Valorization
  – accessibility increases
  – mobile devices also has an impact
  – content is either free or for a low price
new Student Essay

• paper based -> wiki based
• principles:
  – volunteer
  – shows that students can learn from articles
  – bonus for the exam:
    • teacher finds it good (scientific): bonus
    • students also find it good: extra bonus
  – collaborative work with other universities
  – Confucius rulez!
• students put a lot of energy in such a job
Other experiences

• Virtual Classroom (lecture from Hannover)
• Case Based learning
  – Virtual Patient – even in basic science
  – Harvard method – Hannover method
• Our university introduced Moodle
  – fully equipped servers with a lot of modules
Something has changed 2

- students are different

- how to ask the question?
  - viewpoint of non-veterinarians
  - labor market considerations
  - professional considerations
  - viewpoint of students
New generations identified

- Rock and Roll generation (50\textsuperscript{th})
  - after war, give a home and food to the family
- Big generation (60\textsuperscript{th})
  - hippies, "make love no war"
- generation X
  - loyalty, repairing things
- generation Y
  - easily swaps, new ways of motivation
- generation Z
  - digital natives
Must prepare for generation Z

• What is the university for?
• Who is considered to be old?
  – asylum seeker – digital immigrant – digital native

• Social networking is there
  – Facebook, twitter, blogs, etc.
• We should fill it up with professional content
• Use new possibilities in education
NOVICE project

• The Network Of Veterinary ICT in Education
  – UK, NL, D, H, RO

• Two major goals:
  – how to use ICT in veterinary education
  – provide closed network for veterinary students and veterinarians (LLL)
Hello Tibor Bartha, welcome to NOVICE!

Next Online Meetings:
TUE May 8th, 15.00h CET about "How to use NOVICE" (Presenting the NOVICE possibilities and features - Clarifying problems you might have with NOVICE) The recording could be found HERE.

4th-5th October 2012 at the Faculty of Veterinary Medicine, Bucharest, Romania: the Novice Conference: see the conference website for first information!

Top Tip: If you want to invite your friends to NOVICE you can do this HERE. More top tips FAQs

Discussions you may like to join
Video of Gill Biopsy in Koi - Aquatic Veterinary Medicine
Animal Welfare in Slaughter Houses - Animal Welfare
Use of Antibiotics in Animals - Help! I search for...

Your NOVICE Administrator this week is... FACULTATEA DE MEDICINA VETERINARA BUCURESTI - BINE ATI VENIT IN NOVICE!

Groups and discussions...
Join special interest groups to participate in discussions, or create your own group if it doesn't already exist! Here are a few featured groups:

World Aquatic Veterinary Medicine Association
Aquatic Veterinary Medicine

Latest activity
All

Akos Kenez is now a friend with Jan Ehlers
(35 minutes ago)

Lisa Schaper has posted a new comment on this discussion topic Organising committee and scientific committee
This is the list from the conference website (see READ MORE)- the answer of my question (from above) about the organizing committee
(2 hours ago)

Sarah updated a page titled Dissemination Activities (3 hours ago)

Dr S M Shariful Islam is now a member of HELP! I search for... (4 hours ago)
Groups and discussions
This section will allow you to discuss veterinary topics with like-minded people. Each discussion is part of a group. Some examples of groups are: small animal, equine, food safety and veterinary education. Each of these groups have an area where they can share files and pages and discuss various topics. You can search for groups you are interested in by their tag (one word description, such as 'equine'), and then 'join the group' to take part in their activities!

WikiVet
Description:
WikiVet is a Veterinary Wiki for anyone related to veterinary medicine that has been created to cover the entire undergraduate veterinary curriculum.
WikiVet is a collaborative initiative that initially involved four UK veterinary schools, but since has gained support from a number show more...

Brief description: Veterinary Education Online
Tags: wikipet, wiki, elearning, collaboration, virtual patients
Website: http://en.wikivet.net/Veterinary_Education_Online

Group activity
Dr.MM Nayaz is now a member of WikiVet (yesterday)
satish pathak is now a member of WikiVet (13 days ago)
Crystal is now a member of WikiVet (18 days ago)
Sophia Mackey is now a member of WikiVet (20 days ago)
Novice Summer school
Summary

• worth to do
• must proceed
  – generation Z, progress in the USA
  – late one is left out
• we can form the future
• lectures + practical courses + Web 2.0
• we should promote the use and the recognition of Web 2.0 tools