Report on the Multimedia Exhibition of Alternatives in Education and Training

The Multimedia Exhibition of Alternatives in Education and Training at WC8 was a collaborative effort between InterNICHe and Animalearn. Following the example of those organized by InterNICHe at previous World Congresses, this year’s Exhibition brought together the resources of both organizations, including an even wider range of alternatives from their respective libraries: the InterNICHe Alternatives Loan System and Animalearn’s The Science Bank.

The alternatives covered medicine, veterinary medicine, and biology and were grouped according to discipline. These included anatomy, physiology, pharmacology, clinical skills, and surgery. The multimedia materials were aimed primarily at the university and professional academic and training level, with some alternatives suitable for high school students and teachers. At each station a range of software, models, manikins, and simulators were on display, available for trial, or demonstrated by the producers themselves. Volunteers fluent in English, French, Spanish, and other languages guided visitors and gave demonstrations according to their own educational focus and experience.

The exhibition presented both established replacement tools and newly launched products. Among the highlights was SimuRat, the new combination of interactive manikin and computer program simulating pharmacological experiments on rats, from Dr C Patil (India); the perfusion-based POP trainer for laparoscopic and other surgical procedures from Optimist (Austria); the Biopac Student Lab, a physiology self-experimentation apparatus from Biopac (USA); the Critical Care Jerry canine manikin, with breath and heart sounds simulator, from Rescue Critters (USA); the canine ovario-hysterectomy trainer from Paws2Claws (USA); a range of medical training models and simulators from Limbs & Things (UK); new inanimate frog models for practical dissection, from VetEffects (USA); and a range of plastinated dissected animals.

The hands-on alternatives – particularly the surgery simulators – were very popular, and the exhibition had a sizeable clinical skills and surgery suite with three veterinary surgeons from InterNICHe available for demonstrations. More than 100 software alternatives representing the above disciplines and several others also were presented. These included anatomy programs, both simulations of dissections and those that use technology such as QTVR, advanced animations, and fly-throughs to go beyond dissection or its simulation to help in the visualization of structure. Physiology and pharmacology virtual laboratories, including but not limited to simulations of classical preparations, virtual anesthesia, and critical care simulators were available as well.
Exemplary alternatives in clinical skills and internal medicine included the Glass Horse Equine Colic DVD from the University of Georgia (USA) and, in anatomy, the Virtual Canine Anatomy DVD from the University of Colorado (USA). Selected software alternatives and clips showing perfused cadavers for surgical training and virtual reality (VR) training devices were presented on a large monitor, and there was a discussion on haptic technology. Access to databases was provided at one station, with training in database search techniques offered. The exhibition provided access to the beta version of the new InterNICHE website and its updated databases of alternatives and academic studies.

The Multimedia Exhibition at WC8 had an even greater presence from experts and producers from around the world who were able to contribute to a rolling program of detailed demonstrations. Film recordings of some demonstrations will allow further use of the opportunities created by this event. A valuable opportunity was provided to a number of oral presenters to illustrate their talks about established and new alternatives with live demonstrations. Delegates appreciated the opportunity to meet and network with producers and engage in discussion with experts on specific tools and their implementation. Some producers offered their new products for inclusion in the organizations’ libraries and on-line databases. A number of items were borrowed, wish lists were inspired by the diversity and quality of the tools displayed, and invitations were extended to organize similar events at forthcoming conferences in other countries.

The Multimedia Exhibition gave a practical focus to the exploration of alternatives in education and training, making the issue more tangible. It provided a hub for discussion, networking, and sharing of resources and experience. Future exhibitions can build on the success of this WC8, extending it by providing: more “live” clinical skills and surgery training using simulated blood and organs; ethically sourced animal and human cadavers; a greater number of resources, including alternatives available for donation and for sale; inviting corporate and academic producers to have stalls; bringing more VR input, with the inclusion of surgical training platforms; and forging a closer relationship between the Multimedia and Industrial Exhibitions.

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