

Facilitating replacement through access to and training in alternatives

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Abstract

Access to alternatives plays a crucial role in familiarising teachers and trainers with the diversity and quality of tools available to support best practice education and professional development opportunities. InterNICHE maintains an Alternatives Loan System comprising software, videos, clinical skills training mannekins and surgical trainers; and organises seminars worldwide to provide demonstrations and expert training. Items are chosen for their pedagogical value and potential for replacement, and are available for free loan. Borrowers include teachers, students, ethics committees and campaigners in over 40 countries. Several 'micro-Loan Systems' focus on specific regions, such as Russia. The Loan Systems and seminars have facilitated the purchase and implementation of products, bringing direct replacement of harmful animal use. Examples of events and dedicated training seminars organised by InterNICHE between 2004 and 2007 include the training of over 400 teachers in 10 cities across India; the Multimedia Exhibition at the 5th World Congress on Alternatives and Animal Use in the Life Sciences in Germany; the 2nd InterNICHE Conference Alternatives in the Mainstream: Innovations in life science education and training in Norway; widespread outreach work across Russia; and laboratory animal science meetings in Australia. Further activity is planned for Europe, Latin America, Korea and Japan.

Keywords: InterNICHE, Alternatives Loan System, education, training, replacement

Introduction

InterNICHE facilitates the implementation of best practice education and training through developing and sustaining a range of projects and resources (Jukes, 2006). Access to and training in alternatives play a crucial role in familiarising teachers with the diversity and quality of tools. InterNICHE maintains a number of Alternatives Loan Systems, and organises training seminars, to meet these needs.

Content of the Alternatives Loan Systems

The Alternatives Loan Systems are evolving libraries of alternatives. Items are chosen according to their pedagogical value and potential to replace harmful animal use. Over 100 CDs, videos, simulators and training mannekins are available for free worldwide loan, some in multiple copies. One international Loan System and several regional 'micro-Loan Systems' have been established. Contents include:

- Wide range of anatomy, physiology, pharmacology and biochemistry software

- Anatomy models and plastinated dissected animals
- Veterinary clinical skills and basic surgery mannekins and simulators such as Critical Care Jerry (Rescue Critters), Skin & Suture Pattern Simulator (Ohio State University)
- Live surgery simulator, the POP (Pulsating Organ Perfusion) Trainer (Optimist Ltd.)
- Physiology self-experimentation apparatus, the Biopac Student Lab (Biopac Inc.)

Borrowing conditions and process

All borrowers sign a formal Borrower's Agreement which confirms that they will respect copyright, not sub-loan without permission, and return the items undamaged and within the agreed timescale. InterNICHE pays the outward shipping costs and borrowers pay the return. Loan periods are typically 6 weeks, but may be longer or shorter according to their own and other borrowers' needs. In each case, feedback on borrowed items is requested.

Results and impact of loans

From early 2002 to mid-2007, the international Loan System has serviced over 250 loans in over 40 countries, with over 1500 items loaned and more than 4500 usages of individual alternatives. Most requests are for 2-5 items, but large-scale loans are provided for events such as conferences, demonstrations and training. Borrowers include teachers, students, animal ethics committees, government ministries, NGOs and organisers of conferences and other events. The value of the Loan System is indicated by a number of positive results:

- Familiarisation with alternatives
- Significant teacher use
- High number and wide geographical range of loans
- Positive feedback on the resource from borrowers
- Direct short term replacement of harmful animal use
- Subsequent purchase and implementation of products
- Subsequent long term replacement of harmful animal use
- Providing an international resource for campaigners
- Providing critical feedback for producers

The success of this international resource is mirrored in the achievements of the regionally-based micro-Loan Systems. These seed projects of the larger international Loan System focus on one country or region, such as Russia and Central America. This decentralisation avoids the delays and costs associated with international shipping. They have empowered InterNICHE National Contacts and local teams by equipping them with a valuable resource under their management. In Russia the micro-Loan System has been further decentralised to deal with the large distances involved, for example across Siberia.

Demonstrations and training

Since 1988, InterNICHE has organised demonstrations of alternatives at conferences and outreach events, in some cases working closely with producers. For example, a major tour of Japanese veterinary faculties was organised in 2004 using Loan System items. Since 2005 the alternatives have been widely used for loans, outreach visits and press conferences in Russia and neighbouring countries, with significant media coverage (Jukes, 2005). Dedicated training seminars have been a more recent innovation, allowing for more detailed exploration of specific alternative tools and approaches.

Over 400 university teachers were trained during 2004 at events in 10 cities across India in the largest training event of its nature ever held worldwide. The *Alternatives, Animal Welfare and the Curriculum* series of seminars was organised by InterNICHE

and the World Society for the Protection of Animals (WSPA) in conjunction with many committed local organisations across the country. Travel support was provided to senior university officials, heads of department and research students to attend the day-long seminars. Teams of teacher trainers self-trained and then demonstrated in detail a range of alternative tools chosen according to the Indian curricula for different disciplines. Many of the tools were provided by the international Loan System, and others, such as calf anatomy models, were made in India and bought for subsequent donation to universities. The seminars generated sales within India for some producers, and achieved a degree of replacement. Requests for further InterNICHE training in alternatives have since been made by teachers and others in the region.

A major exhibition of alternatives was held at the 2nd InterNICHE Conference, *Alternatives in the Mainstream: Innovations in life science education and training* in 2005 in Oslo, Norway (Jukes and Martinsen, 2005). InterNICHE organised the Multimedia Exhibition at the *5th World Congress on Alternatives and Animal Use in the Life Sciences* in Berlin, Germany, in the same year. Demonstrations have been included in the conferences of other professional bodies such as ECVAM, AAVMC and ANZSLAS that have recognised the value of hands-on access.

Further demonstrations were held at InterNICHE Regional Meetings in 2006 in the Ukraine (for the former Soviet Union), and in 2007 across Japan and in Mexico (for Latin America). More demonstrations and training are planned within Europe and for Russia and Korea, and a similar use of Loan System items is planned for major Latin American outreach in 2008. This will involve InterNICHE presentations, alternatives demonstrations, alliance-building and support for humane education initiatives in Mexico, Bolivia, Peru, Argentina and Brazil.

Discussion

The popularity and success of the Loan Systems have required a degree of decentralisation and the establishment of several micro-Loan Systems. Parallel to this natural development is the need to update the content, both in terms of new items and upgraded versions of existing items, and to increase the size of the libraries to provide a wider range of alternatives. Multiple copies of items have been bought or been donated by producers, and recommendations, based on the excellence of a product or a specific need, have led to new acquisitions.

Feedback from borrowers has not been as consistently supplied or as thorough as expected, but has provided a degree of critical assessment, some of which is passed on to producers. Much feedback is positive, but software/hardware compatibility issues,

the need for support material and upgrades, and a lack of translated alternatives, also feature. A greater degree of automation in the loaning and feedback process is to be introduced through planned new website facilities.

Whether expectations of a specific alternative or alternatives in general are met through loans can guide both the evolving content of the Loan Systems and the potential development of new alternatives. Such expectations may differ between countries and according to university infrastructure, including access to computers. Borrowers may also have limited economic means to buy alternatives that they have tried, but in some cases InterNICHE has been able to donate bought copies through grant funding. There has been very little damage to alternatives borrowed.

Familiarisation within InterNICHE itself of the range of alternatives has also brought into focus the need to address other aspects of the production of alternatives, including the use of animals, and the representation of animals within film and software alternatives. This has been done with the promotion and on-going revision of the InterNICHE Policy (Jukes and Chiuiia, 2003), and through InterNICHE projects that put the Policy into practice, such as funding the development of new alternatives through the Humane Education Award.

A good relationship has been developed with some producers, who recognise the value of feedback and the promotion that is being done on their behalf. The choice of alternatives made by InterNICHE, however, is always based on their pedagogical value and potential for replacement of harmful animal use. The alternatives most valuable in this respect are those usually taken for demonstrations and training.

The work of InterNICHE, particularly the provision of information and resources, highlights the failures and limitations of some university authorities and teachers, ethics committees and laws in providing the same and in ensuring that alternatives are implemented.

Conclusion

The success of the InterNICHE Loan Systems suggests a significant need by different user groups across the world to have access to alternatives for trial. This includes provision of alternatives to borrowers where little access existed before. Demonstrations and training in alternatives have proved extremely valuable for providing detailed hands-on experience of a range of learning tools. The availability of these resources and the training of teachers and others in specific alternatives achieve the familiarisation that is often essential for effective implementation of alternatives and for replacement of harmful animal use.

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