Outreach, alternatives awareness and replacement in Russia

Elena Maroueva¹ and Nick Jukes²

¹InterNICHE-Russia & VITA, Moscow, Russia
²InterNICHE, Leicester, England

Corresponding author: Elena Maroueva
InterNICHE-Russia
Mutnaye 62-93, Moscow 115191, Russia
Elena-Maroueva@yandex.ru

Abstract
Significant progress has been made in Russia during 2005-2007 concerning awareness and implementation of alternatives in education. Several major outreach visits involving presentations and demonstrations of alternatives have been made by a team of InterNICHE campaigners, bringing the concept of humane education to large audiences. Media interest in these new approaches has resulted in nationwide and international coverage. Outreach letters have been sent direct to teachers across the country to promote the resources that have been developed. Printed resources and on-line information have been complemented by the distribution of freeware physiology and pharmacology alternatives - all translated into Russian. A library gives hands-on access to alternatives nationally, and the donation of computers and alternatives to some institutes has established exemplary multimedia laboratories. This multi-pronged strategy has now led to agreements being made between InterNICHE and several institutes to abandon animal experiments for teaching purposes at the departmental and faculty level. Implementation of alternative tools has been achieved at several institutes, with multimedia directly replacing the annual use of several thousand animals. The sharing between teachers of the experience of implementation has now begun. There have also been isolated cases of determined student conscientious objection, and the small number of Russian campaigners is slowly growing, empowered by the successes of recent years.

Keywords: InterNICHE, Russia, alternatives, education, replacement

Introduction
From 2005-2007, several major InterNICHE outreach visits across Russia and investment in a diversity of projects in the country have resulted in significant progress in awareness and implementation of alternatives in education (Jukes, 2008).

Outreach and alliance building
A series of outreach visits to universities across Russia have been organised by the authors of this paper in partnership with teams of humane education campaigners in the region. The outreach has brought the concept of alternatives to large audiences and has involved spoken presentations, demonstrations of alternatives, distribution of resources, and meetings with individual teachers and students for information gathering and alliance-building.

Such visits have been made to universities in Moscow, St Petersburg, Velikie Luki, Kazan and Rostov-on-Don. Further smaller meetings have been held in Arkhangelsk and in cities across Siberia, and there has been InterNICHE participation at professional meetings such as the International Veterinary Congress in Moscow. A number of major InterNICHE press conferences have announced progress in the field, resulting in national and international coverage. The outreach across Russia has often been closely linked to that in the Ukraine and Belarus (Jukes, 2005; Jukes, 2006; Jukes, 2007), with some events planned consecutively, and campaigners travelling between countries. Two Regional Meetings for campaigners from former Soviet countries – particularly Russia, Belarus, Ukraine and Georgia – have also been held. These meetings have allowed for strategic planning and the sharing of experience and skills.

The outreach supports and in turn is supported by the provision of a range of resources and projects, described below, and by the on-going campaigning activity of InterNICHE-Russia and its growing team of volunteers.

Parallel to the visits and meetings, over 1000
outreach letters have been sent direct to teachers across Russia and other former Soviet countries to introduce InterNICHE and to promote the resources that have been developed.

**Printed, software and on-line resources**

The InterNICHE book and database *From Guinea Pig to Computer Mouse (2nd ed.*) (Jukes and Chiuia, 2003) has been translated into Russian and is available for free download from the InterNICHE website (InterNICHE, 2007a). First published in 2003, with minor updates made in 2006, the 520-page book provides details of over 500 alternatives, including description, specification and source.

It also offers background information on the diversity of alternative tools and approaches, a review of published studies that assess alternatives through learning performance, and an exploration of curricular design. Seven case studies written by university heads of department who have fully replaced harmful animal use describe the experience of developing and implementing best practice teaching methods. The book also provides links to over 600 further resources.

Two editions of a Russian-language booklet, *Do we need animal experiments in education?* (InterNICHE, 2005; InterNICHE, 2006) have also been produced. This publication includes essays, case studies and testimonies from teachers and students in favour of humane education. Over 4000 copies were distributed from 2005-2007 during visits to universities. A new introductory text on alternatives to animal experiments in education and training (InterNICHE, 2007b) has been translated into over 100 languages, including all 15 national and several minority languages of the former Soviet Union. The wide range of translations reflects the InterNICHE commitment to internationalising alternatives whilst honouring linguistic and cultural diversity.

Russia's largest animal protection organisation, VITA, collaborates closely with InterNICHE and maintains a Russian-language website of comprehensive and regularly updated information, including humane education and alternatives (VITA, 2007). A summary of content is usually available in English. The large InterNICHE website is also translated into Russian and Ukrainian.

The printed and on-line resources have been complemented by the distribution of translated freeware physiology and pharmacology alternatives. The *CAL Pharmacology Compilation* and *Physiology Simulators* software, originally funded by the InterNICHE Humane Education Award, have been widely distributed across Russia, Belarus and the Ukraine, both in English and Russian. The freeware CDs contain a wide range of virtual laboratories and video clips of experiments suitable for replacing harmful animal use in the two disciplines.

Although some English-language software alternatives are now in use in Russia, the translation of the freeware into Russian has made them much easier to implement. Similarly, the translation of information resources increases their impact. When efforts are culturally inclusive, the potential for alliances and action to catalyse progressive change increases. This is particularly important as InterNICHE literature and news about alternatives now reach all parts of the former Soviet Union.

**Alternatives library**

The InterNICHE-Russia 'micro-Loan System' of alternatives gives hands-on access to humane learning tools to teachers and others across Russia. This regionally-based library is a seed project of the larger international Alternatives Loan System, and allows free borrowing of items, subject to strict conditions. Both Loan Systems have provided items for demonstrations, training and press conferences. The content and management of the Russian micro-Loan System has been decentralised into units in Moscow, Arkhangelsk and near Novosibirsk. Russian language descriptions for each alternative are available, with information taken from the book and database *From Guinea Pig to Computer Mouse (2nd ed.*) (Jukes and Chiuia, 2003).

Items from the international Alternatives Loan System are still loaned to Russia and used on outreach trips, but the Russian micro-Loan System has minimised international shipping and the associated costs. It has empowered the Russian campaigners who now manage a valuable resource of exemplary and curricula-relevant alternatives. Such access supports negotiations concerning replacement. The resource has brought about direct replacement of harmful animal use and the purchase and implementation of products. The success of the micro-Loan System illustrates how much can be done with seed funding to support small-scale but highly effective and sustainable projects that are designed to facilitate replacement of harmful animal use.

**Investment and grant funding**

The donation of computers and alternatives to some institutes has established exemplary multimedia laboratories to provide students with access to modern and best practice learning tools. At the St Petersburg State Academy of Veterinary Medicine, grant funding by the International Association Against Painful Experiments on Animals (IAAPEA) enabled the creation of a multimedia laboratory at the Department of Pharmacology. The donation secured the replacement of over 1000 animals and comprised part of a signed agreement between the department and InterNICHE that the former will no longer use...
any animals for education.

Several Russian universities have themselves invested in multimedia laboratories, often with the InterNICHE freeware providing the software component to the new practical classes. Further donations of alternatives have been made on a case-by-case basis to support replacement initiatives. The InterNICHE Humane Education Award, an annual grant program of 20,000 Euro established to support ethical and effective education and training within the life sciences, has provided funding to a number of applicants from Russia for the purchase of alternatives such as software, video, training mannekins and simulators.

Funds will also be provided for alternatives demonstrations and training events related to Award projects and resources, such as showing the Pulsating Organ Perfusion (POP) Trainer (Optimist, 2007) at medical conferences and training centres in Russia. This advanced surgical simulator may be donated through the Award to a Russian university or surgery training centre. Targeting such locations of high and severe animal use to implement 'live' surgery training can replace the in vivo aspect and significantly enhance the level of training.

Conscientious objection

There have been isolated cases of determined conscientious objection in Russia. The introduction of alternatives can obviate potential problems between student and establishment, but in some cases teachers have refused to implement alternatives despite students concerns about harmful animal use and quality of education. Biology student Roman Beloysov was expelled from Moscow State University in 2007 after two years of requesting alternatives, openly criticising animal use in physiology practical classes, and taking legal action against the university and government. He is planning to continue legal challenges at the European level to assert his right to a biology education using alternatives only, and to address issues of discrimination on civil rights grounds.

Another significant case was in Blagoveschensk in the Russian far-east during 2006. Conscientiously objecting veterinary students at the Far-East State University of Agriculture complained that they were being made to practice surgery on stolen companion animals and strays. Campaigners publicly criticised the Department of Surgery, which retreated into classic Soviet denial about the cruelty and thefts. Students and teachers involved in the campaign were intimidated and discriminated against. The scandal did lead to the end of animal experiments in the department but also the expulsion of one student.

InterNICHE contributed to the campaigns with information and support, including provision of an expert witness in the legal challenge by Roman Beloysov. Despite the obstacles and losses, the two campaigns do reflect significant achievements considering the inertia and corruption within such universities. The campaigners' use of contacts, information and other resources, and their situating of campaigns in the wider context of progress towards humane and best practice education in Russia and beyond, is a reflection of a movement that is becoming stronger.

Discussion

The multi-pronged strategy and the synergistic use of resources and projects described above have now led to formal Agreements being made between InterNICHE and several institutes to abandon animal experiments for teaching purposes at the departmental and faculty level. Implementation of alternative tools has replaced the annual use of several thousand animals within these universities.

The Agreements and the implementation provide powerful examples for other universities locally and across Russia. Replacement is now seen by an increasing number of teachers and students as feasible for Russia. Despite the cost of computer hardware, the benefits of multimedia are being openly discussed and teachers are sharing their experience of change and innovation amongst their peer group. Indeed, there is now a momentum for replacement, and the new (2007) Veterinary Department at Velikie Luki Agricultural Academy is committed to using alternatives only. Corruption and conformity continue to hinder change in many universities, but a growing minority of teachers are willing to take the risk of stepping out of line to implement new approaches, including alternatives.

A transformation in the style of reporting about alternatives has been apparent in the Russian media in the period 2005-2007. As well as the wide coverage, reaching many 10's of millions of television viewers, the message from many of the reports changed from cynical to practical and optimistic with regard to change. The fact that there are now initiatives from within the country to break from the orthodoxy and to try new approaches has made the issue newsworthy. Interest has also been generated due to an awareness of the economic challenges that universities face, particularly since the collapse of the Soviet Union.

In general, when universities face major funding challenges - as most in Russia do today - then departments significantly reduce animal use. This funding vacuum and pedagogical challenge provide a major opportunity for the establishment of progressive, alternative teaching methods. Indeed, a growing number of universities are demonstrating that alternatives can help guarantee a better quality education in difficult economic circumstances. Such
an investment in education limits the possibilities of a return to out-of-date, inhumane methods if funding ever returned. Modernising education, particularly when combined with international collaboration, may also stand universities in good stead during government assessment.

There are different degrees of autonomy at each department and faculty with respect to curricular change, so while some can easily change the practical classes, others require an initiative or approval from university rectors or changes in the government-approved curricula and standards. Work to create change at these levels is on-going. Russian law and the keeping of statistics relating to animal use are virtually non-existent, and this situation also requires change.

Conclusion

The InterNICHE outreach, projects and provision of resources have brought about exciting changes in Russian life science education, with noteworthy examples of the replacement of harmful animal use and the implementation of progressive, alternative methods. Despite the obstacles, the multiple positive impact of alternatives – pedagogical, ethical and economic – is increasingly being recognised, and there is a clear momentum for further replacement. InterNICHE campaigning will continue in the country, and the strategy used will be further refined and developed. Many elements of the approach are also suitable for application in other locations.

Acknowledgments

The authors would like to acknowledge the International Association Against Painful Experiments on Animals (IAAPEA) for its support for humane education and alternatives in Russia.

References

InterNICHE (2005) [Do we need animal experiments in education?] Russian.
InterNICHE (2006) [Do we need animal experiments in education?] 2nd ed. Russian.
InterNICHE (2007b) New alternatives text now available in 100 languages. www.interniche.org/news.html#languages
Optimist (2007), www.optimist.at