

# Rhinos in the classroom

## Can education change how people feel?

You can't save animals without changing people. It may seem obvious, as we are the cause of so many problems that animals face, but for a long time conservation has been considered an issue solely for biologists, not sociologists, to solve. Education has frequently been an afterthought in conservation projects: a poster, or a talk in schools, without prior research to find the best method of achieving change, or measuring if there was any impact at all.

**Kate Oliver | Education Officer, Zoological Society of London**

**O**ne of the reasons for this is that achieving valid results in education research is genuinely difficult – it is much easier to count the number of posters printed than to measure whether they've changed people's minds. But, with experience and evidence growing, the science of studying people is rapidly shifting from a box-ticking exercise to a method effecting real conservation change. In North Luangwa National Park (NLNP) in northern Zambia, one such programme is striving for more than just 'raising awareness' – aiming to change attitudes, behaviours, and ultimately save species.

The North Luangwa Conservation Programme (NLCP – a partnership between Frankfurt Zoological Society and the Zambian Wildlife Authority) runs a conservation education programme in local schools called Lolesha Luangwa (meaning 'Look at Luangwa'). Over 1,500 Grade 5 (around 11 years old) children per year enjoy weekly environmental lessons in schools, led by their Conservation Teacher (a volunteer from the schools' staff). NLCP's Lolesha Luangwa Officer and Assistant visit each school five times a year to give rhino-focused presentations, using the story of rhinos' local extinction and reintroduction to bring the curriculum to life. Schools join together at the end of the year for Conservation Celebration Days; to perform plays about

rhino conservation, sing songs and display poems and pictures from their work. These are incredibly popular days and attract an audience of families and community members from surrounding villages.

By 2012, schoolchildren in North Luangwa had received 10 years of environmental education through Lolesha Luangwa, and it was a popular and informative part of local life. But NLCP felt it had the potential to achieve more. Save the Rhino connected NLCP with the education team at ZSL London Zoo, who sent Education Officer Paul Bamford to Zambia to see the project for himself. After conducting surveys and interviews with schools, it was clear that everyone enjoyed Lolesha Luangwa and children were certainly learning conservation facts. But was enjoyment and knowledge all that was being achieved?

The most important foundation of any study is clearly defined goals, so NLCP and Paul drew up aims for the programme:



If people lose knowledge, sympathy and understanding of the natural world, they're going to mistreat it. *David Attenborough*

### Lolesha Luangwa's aims

- To raise awareness and understanding of the conservation of the North Luangwa Valley, and the benefits that these bring to local schoolchildren and their communities
- To generate a sense of empathy for black rhinos amongst local schoolchildren, and to foster responsibility for their future survival in North Luangwa
- To engender a sense of ownership and responsibility amongst local schoolchildren for the conservation of North Luangwa, and to promote key messages to a secondary audience

Armed with this new focus, Paul set about adapting the curriculum, creating new activities that specifically consider feelings about conservation, and placing a strong focus on the children identifying problems and solutions in their own environment. The new Lolesha Luangwa curriculum hit desks in January 2013, and during its first year we've been conducting a



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wide-ranging evaluation to see if the programme is achieving its stated aims.

The best way to get strongly valid results is to triangulate – to collect data from several different sources in several different ways, and compare. If you get the same results through different methods, they are more likely to be true.

We used a variety of evaluation techniques:

- **Questionnaires** for teachers, learners, and NLCP staff to get all perspectives on the curriculum
- **Focus groups and interviews** with Conservation Teachers and NLCP to discuss issues more deeply
- **Children's workbooks** were designed with evaluation in mind, including activities such as writing letters about their local environment, which can be analysed
- **Interviews** with the local community to find out current local knowledge and opinions about the National Park
- **Studying the dramas and displays** created for Conservation Celebration Days for common themes and content.

How do we analyse all this information scientifically? Some parts are easy: for example, Conservation Teachers were asked to rate the 'ease of use' of the curriculum out of 5, and we can see from the average answer (4.2) that it is

doing well. Quantitative data like this is great for overall trends, but it has limits: it cannot show why the teachers thought this, or why they gave less than a perfect 5! So qualitative data is collected using open questions (for example, *'How could we improve the programme?'*), plus one-on-one conversations to probe further, and to uncover information you wouldn't know to ask for. Questions are carefully worded to avoid people feeling there is a 'right' answer – especially important in Zambia where there is a strong culture of politeness, perhaps preventing real feelings being revealed! So instead of *'Do you like rhinos?'*, we asked *'Tell me three things about rhinos'* – eliciting some factual answers ('big', 'horns') and other emotional ones ('amazing', 'dangerous') – overall giving a picture of how these animals are perceived.

All this data is painstakingly entered into spreadsheets and coded, to group together similar responses for example, general positive comments (*'I like the programme'*), or ones referring to a specific topic (*'The lesson plans were easy to use'*).

These can then be analysed

PAUL BAMFORD, ZSL

Main: Kate and Paul from ZSL with a group of local teachers give their best 'rhino pose'

Left: Local children and communities enjoy the annual Conservation Celebration Day!

Right: Wildebeest running across the Park

to give an idea of each opinion's prevalence.

### Full analysis

of 2013's data is underway and is already providing interesting results. Community interviews and learner questionnaires show a relatively good knowledge of and positive attitudes towards conservation amongst local people, but also reveal problems such as crop-raiding by elephants. Many adults identified their children as their primary source of information about conservation, which happily indicates that the programme's aim of spreading messages is working! But teacher questionnaires refer to some of the new curriculum's activities as being too difficult, and the children's workbooks support this, so we have already made changes and cuts in response for the 2014 academic year.

What we learn from this study will not only inform changes to Lolesha Luangwa and introduce new ideas, but year-on-year the data will build a picture of how and if feelings about conservation are changing in the area. A next step could be to measure specific changes in behaviour, perhaps by comparing numbers of newly planted trees or levels of poaching year-on-year.

So what can studying people achieve for conservation? By evaluating and improving Lolesha Luangwa, we hope to see not only an increase in people's knowledge about conservation, but a genuine change in feelings, behaviours, and most important of all – a brighter future for rhinos.