

Loynes, Christopher ORCID: <https://orcid.org/0000-0002-9779-7954> (2008) On growing potatoes and outdoor education. *Horizons*, 41 . pp. 4-6.

Downloaded from: <http://insight.cumbria.ac.uk/id/eprint/3706/>

*Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.*

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

**provided that**

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
  - a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

**You may not**

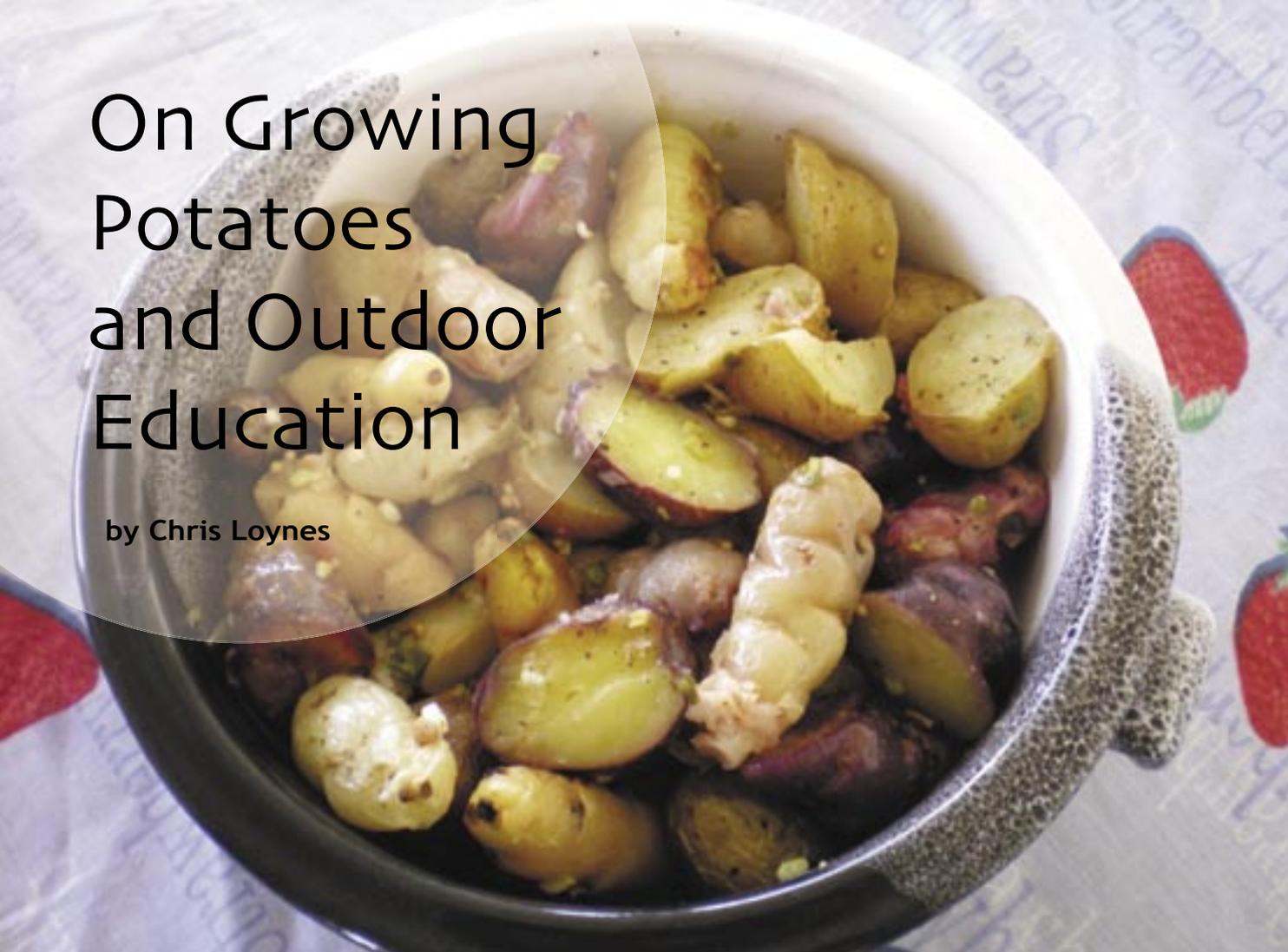
- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing [insight@cumbria.ac.uk](mailto:insight@cumbria.ac.uk).

# On Growing Potatoes and Outdoor Education

by Chris Loynes



## The Aboriginal Way

**I**f you have visited the Andes mountains you may have seen piles of small potatoes of all colours and hues from yellow and orange to blue and black. They are left to dry stacked outside farms under the eaves where the chickens scratch through them and they glow in the evening sun.

People have been growing potatoes on the old Inca terraces for hundreds of years. Each field has its unique characteristics of altitude, aspect, soil type, drainage, distance from the farm and many more. The farmers are intimately aware of these subtleties in their fields learned from their fathers and mothers and gained from many years experience of working the land themselves. They know how each field will respond in different seasons and in the variations of weather from year to year. They know which pests will appear and where and how to tackle them. They know what variety of seed to plant and what harvest to expect.

Time, to them, is a cycle of seasons. But they also understand time as a spiral of steady improvement in each field, as a response to long term patterns of climate change and as a reaction to population changes and needs. They experiment constantly to adapt their practices to achieve the best results they can with the resources they have. They have a detailed, almost invisible, lay knowledge of their work.

## The Scientist Arrives

Agriculturists determined that they could improve on this productivity. It is not clear why they felt they needed to improve on it as everyone had enough to eat. Nevertheless they set out to increase the yield. They surveyed the land and the crops. They collected information that was turned into figures and displayed as graphs.

There were frustrations. These were mostly when they tried to talk with the farmers. They were convinced they were being unhelpful. Why else would one farmer describe a field that was lower than many others as 'the highest'? They did not appreciate the combination of environmental factors

that made this the poorest yielding field, as though it were the highest. They did not understand the intimate knowledge of each part of the land held by each farmer. They understood means and ranges, soil deficiencies and productivity curves.

Soon they knew which was the most productive variety, which the best fields, what fertilisers were required, what investment to make in irrigation and what new machinery to introduce. The improvements began. Farmers went into debt but for years the yields went up and the bills were paid, though everyone seemed to be working harder and no one knew what to do with the surpluses.

## The Land Gives In

Then the exhausted land and tired farmers began to drop in their productivity. The yield went down, disease in the crop was rife, debts went unpaid. Despite every effort from the experts the yield dropped below its original sustainable level and kept falling. Now there was poverty and hunger. The experts gave up claiming that 'you cannot teach an old dog new tricks'.

It took a generation to recover. Indeed many sons and daughters left the villages to escape the poverty only to end up in urban poverty and hopelessness. A link had been broken and the lay knowledge was, in some places, lost.

## Expert and Lay Knowledge

In this example two systems of knowledge have met and clashed. Each understands the world in a different way. One is based on modern scientific principles and the other on aboriginal ways of knowing. They are incompatible. Each has a contribution to make, but in understanding the land only one way is sustainable.

## Lay Knowledge and the Outdoor Educator

Perhaps you have already made a connection between your work as an outdoor leader and the 'experts'. When I visit Scotland to climb the mountains local people can resent my presence. I cannot see what harm I am doing and carry on in spite of this resentment. The herd of red deer I come across are a wonderful sight as they gallop round into the next valley. I am pleased with my day.

The gillie curses again as the deer are pushed off their territory onto poorer ground and with a hard winter expected. He knows this will happen again and again this autumn as the climbers are more common and like this way on to the summit. Each of them will leave feeling they have had the place to themselves. He knows different.

It is not only the lay knowledge of the land that we forget.

*'I used to puzzle over why it was that, given the same mountain area, similar weather and children, some groups would relish the ascent and others would not. The theory was that a challenging scramble on the second day, culminating in a classic summit, was an ideal way to gell the group for the days ahead. For some groups this worked a treat. For others it was at best a bore and at worst a nightmare. I used to wind it up a bit, you know, carry the group along with my own enthusiasm. One day I got alongside a lad who was clearly having a bad time. After my usual banter intended to jolly him along I was clearly getting nowhere. For some reason I asked him why he found it such a strain and he told me how scared he was feeling. It turned out all my banter had put him off. What he needed was more detail about what he was taking on and some reassurance that it could be done. I changed my approach after that, taking a more personal line with the different characters in the group. It works a treat.'*

Each of us has a lay knowledge of our relationship with other people. As educators we draw on this lay knowledge to inform our intimate understanding of each person in each situation. We know how to make best use of the person we are in order to help others to develop. That is the role of the educator.

As outdoor education becomes more 'professional' so we develop new, 'expert' knowledge to 'understand' what we do. We go to college and on courses to 'learn' these theories. We learn to use them to 'understand' our experiences and those of our students in order to 'practice' our profession. Along the way we forget our lay knowledge in our desire to demonstrate our new knowledge that gives us the right to practice alongside our peers.

## A Cautionary Tale

Where does all this lead? It is a cautionary tale to all of us. Much of our future will require us to

next page 

become more professional in order to practice. 'Expert' knowledge has already replaced much 'lay' knowledge of both places and people. But all is not lost. I believe we, as a profession and as individuals, are aware of this loss and resist it. We do this because one of our core values is the feeling we get from an intimate sense of places and people. The feeling, the joy, this intimacy gives us provides a way to hang on to our lay knowledge.

I am writing this as one way to validate that 'lay' knowledge, to give you confidence in it, to remind

you how important it is and how partial 'expert' knowledge is in our work.

And there are simple things you can do to keep lay knowledge alive. Contemplate, play, experiment, invent, create at every opportunity. In this way you can remain in touch with your 'territory' and your 'community' and not just learn to understand them as models and tests.

Perhaps we should think of our work as a craft and not a profession. It is the wood turner, the glass blower and the potato farmer who have not lost touch with their intimate understanding of the world. ■

## Activity Idea

### A 'lay knowledge' friendly review to try

This activity draws out of your group their lay knowledge of groupwork without the need for a single model or theory.

Divide your audience into groups of 6 to 10. Ask everyone to find a small object that catches their eye and bring it to the circle. The objects are placed in a container - a hat, cupped hands, a bowl - and tossed at random onto the space in the middle of the group. Good first questions include:

What would it be like to be a part of this team?  
What might be going on in this group?

The procedure can be repeated for as long as your group has patience, asking new questions each time. Questions that have worked for me include:

What sort of personality might your object have?  
How would this person influence the group? Give situations.

Arrange the objects in a way that represents a moment from today.

Arrange the objects to represent the best this group can be.

You can sum up by asking each group to feed back on something, perhaps:

Something you've learned about yourself as a group member.

Something you've learned about this group working together.

Something you've picked up about how groups get along on tasks.

Your imagination will suggest questions of your own. Do try to steer away from those that introduce an expert perspective eg 'what would a perfect group look like?' Using a lay perspective has worked for me with people aged from 11 to 65 and groups of 6 to 60. Thanks to Roger Greenaway for the original idea.

#### Acknowledgements

This article is based on notes for a workshop given at the First International Conference on Adventure Therapy in Perth, Australia in 1997.

#### Bibliography

- Van do Ploeg, J. (1993) 'Potatoes and Knowledge', in M Hobart (ed.), *An Anthropological Critique of Development*. pp. 209-227.  
Wynne, B. (1996) 'May the Sheep Safely Graze? A Reflexive View of the Expert-Lay Knowledge Divide', in S Lash et al (ed.), *Risk, Environment and Modernity*, pp. 44-83. Sage.

#### Author's Notes

Chris Loynes is a lecturer and researcher with the School of Outdoor Studies at the University of Cumbria and is a freelance outdoor education consultant.