Article by Geoffrey Guy



Does BUSHCRAFT have a place in FORMAL EDUCATION?

JUSTIFYING BUSHCRAFT

As part of a Certificate in Education I have been studying I was required to complete a piece of research into something that would affect my teaching. I have seen the way that involvement in outdoor activities and particularly bushcraft can be beneficial to young people over the years and I thought this would be a perfect opportunity to see if there was a place for bushcraft within the curriculum of vocational countryside management courses.

Before I could commence with my research I had to justify the use of bushcraft as a tool in teaching. There are links with many of the skills involved in countryside management eg green woodwork, woodland management, archaeology, landscape history and game management. There is also plenty of literature to support the use of bushcraft as a tool in education. Most useful in my argument for bushcraft to be embedded in courses delivered at an agricultural college are the findings of several papers on the use of traditional skills. These papers summarise that the traditional knowledge, which we might refer to as bushcraft, of subsistence agriculturalists relies solely on the traditional knowledge and skills of the farmers and that that knowledge is valuable and valid even when you consider the availability of modern farming methods.

In preparing for this research I did find some literature to support my case for bushcraft, although all this modern technology has provided more efficient tools and methods with which to carry out practical countryside management tasks the traditional 'bushcraft' skills are by no means obsolete. For example there are many parts of the world where people rely solely on their traditional knowledge, their 'bushcraft'[1,2], to survive and researchers are coming to recognise that this traditional knowledge is still relevant today and may even provide significant insight into environmental issues.

From an education perspective; the constructivist theory says that knowledge is constructed as new information 'joins up' with existing information[3]. By providing new experiences to students through bushcraft it gives them another point of reference by which to remember the information they require. Additionally those students who are strongly kinaesthetic may well remember a plant species better based on the occasion when they made string from bark rather than visual features of the plant.



Linking bushcraft to Greenwoodwork and Woodland management, making char cloth and making charcoal follow the same principles

METHODS

I couldn't investigate every area where bushcraft overlapped with the existing countryside management curriculum so I chose to base this research on the plant identification skills of two cohorts of students. Each of these cohorts were studying a level 3 countryside management qualification, as this investigation aimed to look at the effectiveness of including bushcraft in the provision of the course there was a need to ensure that both cohorts received the same amount of tutor guidance. The bushcraft tuition that cohort B received could not be 'extra' support otherwise it would invalidate the study. On top of their normal tuition cohort A studied a unit on arboriculture which a significant element of plant and tree ID, cohort B studied bushcraft instead of arboriculture and this meant that they each received the same amount of direct tutor guidance and supervision.

Both cohorts were taught in a practical fashion, cohort A were by no means confined to a classroom and they were able to examine plants and trees in as close a detail as they wanted and were also given opportunities to practice their practical identification skills. The difference in the approach to cohort B was that they would also be taught the uses of the plants and trees they identified and would get practically involved in those uses. For example; Cohort A (no bushcraft tuition) was taught that lime can be recognised by its roughly heart shaped leaves, smooth green/grey bark in immature trees and grey/brown slightly fissured bark in mature specimens. They were also taught about the habitat each species would normally be found in. Cohort B (bushcraft tuition) were taught to recognise the tree in the same way but also collected bark and took part in a project to make a meter of string strong enough to lift a toolbox. Other activities related to other plants included collecting wild food and discussions based on the medicinal properties of certain plants. Each cohort was then given an identical practical test to identify sixteen different plant and tree species, based on a single sighting of each one in the wild rather than from a sample or picture.

The results of the two tests would then be compared using a t-test, a statistical test to determine whether two sets of data are significantly different. In addition the students in cohort B answered a questionnaire so I could gauge their level of interest and engagement and find out where they thought links might exist between countryside management and bushcraft.

Students had been identifying umbelifers like hogweed and cow parsely and after some practice they collected some hogweed seeds to make biscuits.

RESULTS

In general students responded excellently to the inclusion of bushcraft in their sessions. Most importantly in terms of my investigation the t-test I carried out confirmed that cohort B did score **significantly** higher in their plant ID test than cohort A, with an average score of 12.25 out of 16 compared to cohort A's average score of 8.5 out of 16. **This result confirmed my hypothesis** that knowledge of bushcraft can improve the attainment of students in relative fields of study, **although a more detailed study, including additional topic areas, would need to be undertaken to provide a conclusive result across the subject.**

Figure 1 shows which topics students felt were supported by bushcraft, it was not considered relevant to topics such as freshwater and wetland management but the students were in agreement that Greenwood craft and Woodland management were particularly well supported by bushcraft activities and that certain elements of pest and predator control, estate skills, and ecology were also enhanced by participation in bushcraft.



Figure 1; a representation of how relevant students felt bushcraft was to each of the topics they study on their countryside management course.



From these links it's not hard to imagine where bushcraft might also influence more mainstream education, how about links between bushcraft and geography with activities such as celestial navigation and map reading, chemistry; with the chemical process of tanning and preserving skins as a case study, history; case studies of indigenous peoples and primitive technology, biology and environmental science; organism identification and ecology. The possible links are endless and bushcraft would be far more engaging than a lot of what I remember doing at school. The students certainly agreed that the activities they took part in were engaging as shown by Figure 2.

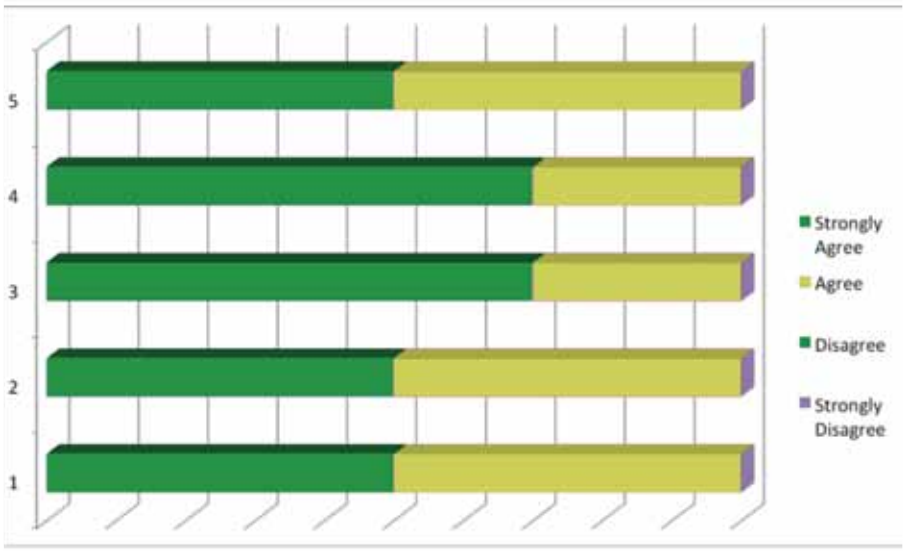
In Figure 2 the numbers on the y axis correspond to the questions posed on the questionnaire (each question had the possible responses strongly agree, agree, disagree and strongly disagree);

1. Bushcraft is not part of the required curriculum of a countryside management course; but studying it equips you with skills you could use in a career in the countryside.
2. It is easy to engage and take part in bushcraft activities.
3. Bushcraft is a more engaging topic than other topics you study at college.
4. Knowing about the properties and uses of certain plants and trees has enhanced your ability to identify them.
5. The basic skills of bushcraft, such as using a knife or saw, have helped you in your studies.



As the graph shows there were no negative responses to any of the questions, this is very encouraging. Figure 2 conclusively shows that students considered bushcraft a valuable topic to study.

Figure 2; results of student questionnaire



CONCLUSIONS

The statistical analysis showed that students who received bushcraft tuition significantly outperformed those who did not. This test can't prove that bushcraft would similarly impact all areas of a countryside management course but it is encouraging to see that at least in this area there is significant correlation.

As to why bushcraft might affect attainment; during the test I gave to students I heard comments such as; "I remember eating that, it tasted awful" and "that's the one we used to make friction fire kits" so it was clear that the additional points of reference that students were constructing for themselves was helping them remember and recognise each plant and tree species. As this investigation also looked at how bushcraft effected student engagement it is also important to note that the exceptional engagement indicated by figure 2 may have also contributed to the higher test scores of cohort B as it is understood that improved engagement can improve student "attention to the learning task, mental effort, and perseverance in the face of difficulty" [4].

Further to this investigation it would be interesting to tailor the method used in this research to suit an investigation of the impact of bushcraft on student attainment on other areas of their studies to see how else bushcraft could be used in formal education. ■

References

1. Beckford, C. & Barker, D., 2007. The role and value of local knowledge in Jamaican agriculture; adaptation and change in small scale farming. The Geographical Journal, 173(2), pp. 118-128.

2. Colorado, P. & Collins , D., 1987. Western scientific colonialism and the re-emergence of native Science.. Practice: Journal of Politics, Economics, Psychology, Sociology and Culture , Volume Winter, pp. 50-65.

3. Glaserfield, E., 1989. Constructivism in Education. Oxford : Pergamon Press .

4; Petty, G., 1998. Teaching Today. Cheltenham: Stanley Thomas.



About Geoffrey Guy

Geoffrey Guy lectures at Moulton College specialising in deer management and countryside/outdoor recreation. He set up a bushcraft special interest group while working in Northern Sweden and to pay his way through university he delivered bushcraft, survival skills, forest schools and ecology courses to groups throughout East Anglia. He is interested in carrying out further research on the value of bushcraft in education and would be interested in hearing any comments on this article; he can be contacted on geoffrey.guy@moulton.ac.uk. For anyone interested in the full write-up of Geoff's research into the Value of Bushcraft in Formal Education it can be found online at http://moulton.academia.edu/GeoffreyGuy.

Photos: All from the author.