

# Improving our understanding of WHY outdoor learning is effective: Opening the Black Box...

by Vikki Burns, Jennifer Cumming, Sam Cooley, Mark Holland and Norman Beech

The outdoor learning sector<sup>1,2,3</sup> is waking up to the need to evaluate its provision and evidence its benefits, and there is starting to be an accumulation of convincing evidence of impact<sup>4</sup>. While we often measure what people gain through outdoor learning, we are less good at finding out why particular programmes or activities work (or don't work).

For example do you know:

- Which aspects of your provision have the greatest impact?
- Why some participants make lasting changes to their behaviour, and others revert to old habits when they return to their usual lives?

Opening up this "black box" can improve our service by better understanding its effects on our clients' lives. When we simply have a "product" that "works", we are just providing a training opportunity. When we understand why our programme is effective, with which types of people, and with what organisational support, then we become professional consultants, advising the client on how to maximise the effectiveness of the training.





## Using frameworks to evaluate provision

One approach is to use a theoretical framework, like the Kirkpatrick Model of Evaluation<sup>5</sup>, to guide our evaluation. For example, the Kirkpatrick model reminds us to look beyond the immediate reaction to, and learning from, the Outdoor Learning programme to the longer term impact on behavior and results. By making sure you ask your clients questions that address each level of the model (see right), you can ensure that you are evaluating all aspects of their development. However, this model still doesn't consider why the programmes have these effects, and how they can be enhanced further.

Kirkpatrick Level	Example outcome question	Example process question
Reaction	How have you found the overall experience of OAE?	Which experiences taught you the most? How does the setting affect student reactions and learning? What characterises the participants that get the most out of OL?
Learning	What, if anything, have you learnt anything on OL that you could use in another setting?	
Behaviour	Have you applied anything you developed during OL since returning? Have you noticed any changes in your peer group since returning from OL?	Has anything helped or prevented you from using what you developed during OAE since returning? What advice would you give to students who want to transfer what they developed during OL to another setting?
Results	Did your participation in OL lead to any specific benefits (e.g. improved marks; more integrated cohort)?	

Kirkpatrick Model of Training evaluation



To address this, our research team decided to open the “black box” at the University of Birmingham’s Raymond Priestley Centre, and investigate which aspects of provision most influenced the clients’ experience. We collected data over several years from current and past participants, the commissioning staff, and the OL practitioners, and used it to develop another evidence-based framework called the Model for Optimal Learning and Transfer (MOLT; see Box 2)<sup>6</sup>.

The MOLT shows the areas of practice that most influenced the success of our programmes, at each of the four levels of the Kirkpatrick model. As you can see in the diagram, the left hand side of the MOLT identifies three areas that predict how positively participants react to the programme (Kirkpatrick level 1) and how much they learn through participation (Level 2). The right hand side shows two areas that predict how much participants change their behavior after the training (Level 3) and how much they yield positive results in their studies or work (Level 4).

Practitioners can use this model to evaluate your Centre’s own current practice in a structured and strategic way. For example, you could look at each area in turn and consider:

- What do we currently do in this area?
- How might this be affecting our outcomes?
- Is there anything we could do differently?

You can then use this information to act as a consultant, advising your client organisations on how to lay the groundwork for an effective OL experience.

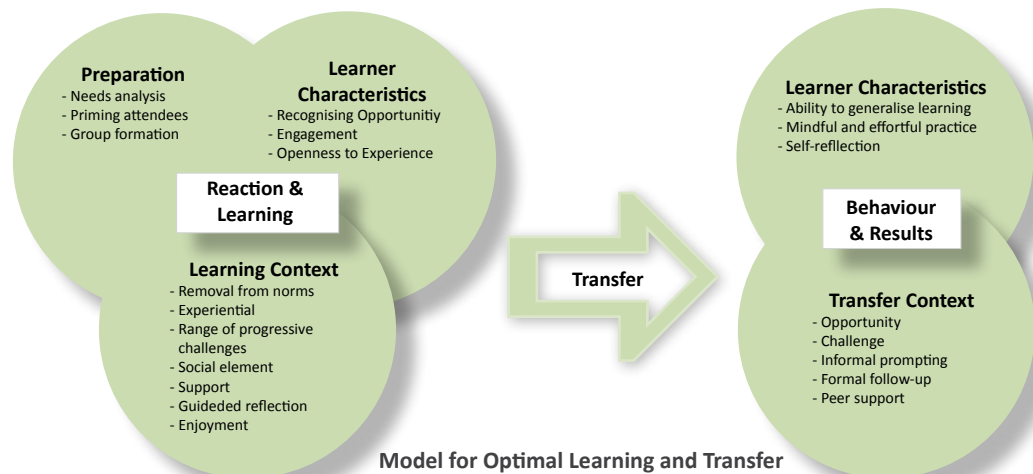
## Model of Optimal Learning and Transfer: in detail

We identified three main factors that influenced participants’ reactions and learning:

### Preparation; Learning Context and Learner Characteristics

**Preparation:** Our research confirmed that what happens before participants arrive at the outdoor learning centre can have a large impact on their learning and development. For example, how specific is the “needs analysis” that you conduct with your clients? Do you know if your client wants people to build self-esteem through successful completion of challenging tasks, or to develop resilience by experiencing failure? Do they want the group to share positive experiences and develop a lasting love for the outdoors, or to master interpersonal skills that will be useful in other contexts? Although not mutually exclusive, you can then use these priorities to decide how to structure the activities and reflective discussions.

Similarly, how to do you put small groups together (“group formation”)? Do you allow people to choose or do you allocate them to groups? People tend to choose groups with those similar to them, especially in terms of ethnicity. If the client wants participants to have new experiences in a comfortable social environment, then allowing them to choose their own groups may be preferable. Alternatively, if the priority is for participants to develop an understanding of different perspectives and respect for cultural diversity, then it may be necessary to assign mixed groups. If the purpose is for people to get to know each other, you might want to regularly mix the groups up, rather than let people stay in set groups throughout.



Model for Optimal Learning and Transfer

In terms of “priming attendees”, what information do you give participants before the training? We discovered that some people from particular cultural groups were not even enrolling because they saw swimming costumes on the kit list. We now emphasise that swimming isn’t compulsory, and have improved this uptake. We also found that people’s attitudes before the training affect how much they will enjoy and learn from the experience. If people think that the skills are important, that they can be developed in this context, and have confidence that they will be able to develop them, then they end up learning more than those with more negative attitudes. We have shown that simple interventions, such as a pre-course video showing previous participants taking part and describing their experience and its benefits, can improve attitudes to the course and the efficacy of the programmes. Again here, you can advise the client about the importance of priming and even provide your own tailored resources.

**Learning context:** We found participants benefited from removal from the normal environment, experiential learning opportunities, a range of progressive challenges, and guided reflection. You know this already, but you can use our model and evidence to justify your programme design when you are liaising with clients, especially with those who may be considering other “non-outdoor” alternatives. It can also be used as a reminder when you’re modifying programmes (perhaps in response to the weather etc), to ensure that the challenges still build from one to the next, and that sufficient time is set aside for in-depth discussions.

Participants also valued the opportunity to get to know their teachers/supervisors away from their usual environment. You can use this to emphasise to clients the importance of choosing which supporting staff from their organisation attend the course; maximum benefit is likely to be gained from bringing staff who are enthusiastic and informed about the outdoor programme, but who the participants also have regular contact with in their day-to-day lives.

Finally, our participants really valued the social element and the enjoyment they experienced, particularly outside of the main training activities. Even here though, you can advise on how to incorporate these activities mindfully to maximise their benefits. For example, informal activities that mix up people’s friendship groups, such as group quizzes, can help build new friendships, and more providing spaces to work, for example, on jigsaws together can allow more solitary participants to have quiet but engaged social experiences. This also avoids a focus on alcohol-oriented environments, which ensures that all participants can benefit from this leisure time.



**Learner characteristics:** Individual differences between learners predicted all areas of development in the Kirkpatrick model. For example, individuals who recognise the opportunity, who are open to experience, and who engage with the programme, enjoyed and learned the most. These characteristics are specific to the individuals, but you may be able to influence them either before attendance (see above), or through the support provided on the programme. Much of this is in-keeping with good practitioner practice but it reminds us, when asking participants to build a raft for example, to emphasise that taking part and reflecting effectively is more important than staying afloat. This can be emphasised in the debrief sessions, but also structurally when deciding whether, and how, to make such activities competitive.

The greatest lasting effects of OL participation were seen with those who could link what they learned on the programme with the challenges they face in their everyday life. Successful participants also engaged in effortful practice, and were able to self-reflect effectively. In your reflective sessions, it's therefore worth ensuring you spend time considering real life applications of their learning, especially if staff from the client organisation are there to help make these connections. You can also help the participants to develop independent reflective skills, that they can use after the programme. This could mean progressively encouraging the participants to lead their own reflection sessions, offering specific opportunities for quiet lone reflection, and/or providing participants with bespoke resources that they can take home and use for further reflection.

**Transfer context:** The final factor that affects long-term outcomes is the one that practitioners, typically have least influence over; the education or employment setting from which the participants come and to which they will return. As a consultant though, you can advise how best to ensure that your clients embed the programme into their practice and ensure maximal returns. For example, you could encourage them to provide an immediate and challenging opportunity for the participants to practice their new skills. This could be supported by informal prompting, peer support, or more formal follow-ups, in which someone who is familiar with the OL programme is able to remind their participants of what they learned and encourage them to reflect further on their development.

By structuring our efforts around these evidence-based frameworks, we can ensure that we have the evidence and understanding to deliver high quality services both on site and remotely in support of our clients.

For further advice on evaluating impact, and the processes underpinning impact, see the BEST website<sup>7</sup> or the independent Charities Evaluation Service which has some excellent online resources. If you have any feedback on using the model, we would love to hear from you through the contact form on our website or on Twitter @bestresearch<sup>1</sup>. ■

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**Vikki Burns** and **Jennifer Cumming** are researchers from the School of Sport, Exercise, and Rehabilitation Sciences at the University of Birmingham. Together with **Norman Beech**, the manager of the Raymond Priestley Centre in the Lake District, they established the Birmingham Evaluating Skill Transfer (BEST) project in 2010, to explore the value of outdoor education in the development of groupwork skills. The research discussed in this article was conducted with their PhD student, **Sam Cooley**, and postdoctoral researcher **Mark Holland**, and was published in full in the European Journal of Training and Development.

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