

Paper

'Skills don't transfer themselves': Translating training courses into lasting behaviour change

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Abstract

Opportunities to attend training courses abound for staff and students alike, either as compulsory elements of academic programmes or contracts, or as voluntary options for self-development. It is generally assumed that the content of the training programme will be utilised in future experiences in a process known as transfer (Gass, 1999). However, while training providers typically evaluate whether or not training programmes are well received, there is often less consideration of the extent to which these programmes result in lasting changes in behaviour and performance. Further, evaluations rarely explore which elements make the provision more or less effective, and consider the perspective of different stakeholders. For example, which aspects of the training have the greatest impact? Why do some participants make lasting changes to their behaviour, and others revert to old habits when they return to their usual lives? Do their tutors, supervisors, or line managers see differences in the participants following the training? These omissions are unfortunate considering the substantial amount of time, money, and effort that is invested in these opportunities for, and by, our staff and students. The research presented here was conducted in an outdoor pursuits setting, but gives general, evidence-based advice about what can be done before, during and after a training experience to ensure that we maximise its benefit.

Introduction

Our research has focused on the work of the Raymond Priestley Centre¹; the University's own outdoor-pursuits centre in the Lake District, which specialises in groupwork skill training for undergraduate and postgraduate students. These groupwork skill courses are typically 3–5 days long, and are embedded in several academic programmes, particularly, although not exclusively, in Engineering and Physical Sciences and the Business School. They aim to enhance cohort cohesion and to develop the skills needed to work effectively in diverse groups at university and other settings. This includes, for example, both task groupwork skills (ie, engaging in behaviours that contribute to the management of the group, including setting goals, strategies and schedules, and establishing roles for group members) and interpersonal groupwork skills (ie, contributing to the interpersonal dynamics of the group by providing emotional support and being sensitive to the feelings of others).

In collaboration with the professional staff at the Centre, our research team has collected quantitative and qualitative data over several years from current and past participants, the commissioning academic staff, and the outdoor learning practitioners. Through this process, we have evidenced the effectiveness of these courses, illustrated the benefits of evidence-based frameworks for evaluating provision, and have generated a series of specific recommendations for maximising the benefit of training courses in general (Burns, Cumming, Cooley & Holland, 2012;

Cumming, Burns, Cooley & Holland, 2012; Cooley, Holland, Cumming, Novakovic & Burns, 2013; Cooley, Burns & Cumming, 2015; Cooley, Cumming, Holland & Burns, 2015; Cooley, Burns, & Cumming, 2016). This paper summarises our recent findings, generalising them for outdoor and non-outdoor training programmes.

Using evidence-based frameworks to evaluate provision

Our research has shown that evidence-based frameworks can provide useful guidelines to explore the effectiveness of training provision in a systematic way. For example, the Kirkpatrick Model of Training Evaluation (Kirkpatrick, 1994) reminds us to look not only at the immediate reaction to, and learning from, the training programme (Levels 1 and 2 of the model), but also to explore the longer-term impact of the training on behaviour and results (Levels 3 and 4). Whatever the intended learning outcomes of your training programme, the Kirkpatrick model can be used to design quantitative or qualitative questions to assess the extent to which these goals are achieved and subsequently maintained.

Although usually focused on outcomes, there have been recent calls for the Kirkpatrick model to be used to also explore the factors or processes that influence the extent of these outcomes (Kirkpatrick & Kirkpatrick, 2014). Identifying these processes helps to clarify how and why the outcomes came about, and to uncover ways that the training could be improved. Some example questions for assessing both outcomes and processes are given in Table 1.

Evidence-based recommendations for practice: The Model for Optimal Learning and Transfer

By using the Kirkpatrick model to systematically explore which aspects of provision most influenced participants' experience at the Raymond Priestley Centre, we subsequently developed our own evidence-based framework called the Model for Optimal Learning and Transfer (MOLT; Cooley et al., 2015a; see Figure 1). This is based on thematic analyses of qualitative data from 95 stakeholders including student participants, alumni of the training programmes, the academics who commissioned the courses, and the outdoor education staff who delivered them. The MOLT summarises which aspects of provision affected the extent of the benefits seen at each of the four levels of the Kirkpatrick model. Although developed in an outdoor education context, we have demonstrated that it is a useful way to evaluate other types of training provision and development opportunities (for example Burns, Cumming, Stewart & Cooley, in submission²).

The left hand side of the model in Figure 1, ie, 'Reaction & Learning', shows the factors that predict how positively participants react to the programme (Level 1) and how much they learn through participation (Level 2). These factors are broken down into three main themes: Preparation; Learner Characteristics; and, Learning Context.

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² Available from the lead author on request.

Kirkpatrick Level	Example outcome question	Example process question
Level 1: Reaction How the participant felt about the training experience (eg, was the content appropriate and enjoyable?); in higher education, this is often conceptualised as 'student satisfaction'.	How have you found the overall training experience?	Which experiences taught you the most? What factors have made it more difficult for you to learn?
Level 2: Learning Learning is the extent to which participants acquired the intended skills, knowledge and attitudes, from pre- to post-training.	What, if anything, have you learnt in the training that you could use in your work/study/other settings?	What characterises the participants that you think get the most out of the training?
Level 3: Behaviour Also known as the 'transfer measure', this involves measuring the behavioural changes that occur when participants return to their normal environment.	Have you applied anything you developed during your training since returning to work/study? Have you noticed any changes in other training participants since finishing the training programme?	Has anything helped or prevented you from using what you learnt during training since returning? Has anything affected the extent to which your training has resulted in the specific benefits you hoped for?
Level 4: Results Results involve measuring the impact of any changes in learning and behaviour in terms of performance or other outcome measures.	Did your participation in training lead to any specific benefits (eg, improved marks; better teaching evaluations; increased research output)?	What advice would you give to participants who want to transfer what they developed during training to their work/study/other setting?

Table 1: Kirkpatrick Model of Training evaluation (Adapted from Cooley et al., 2015a).

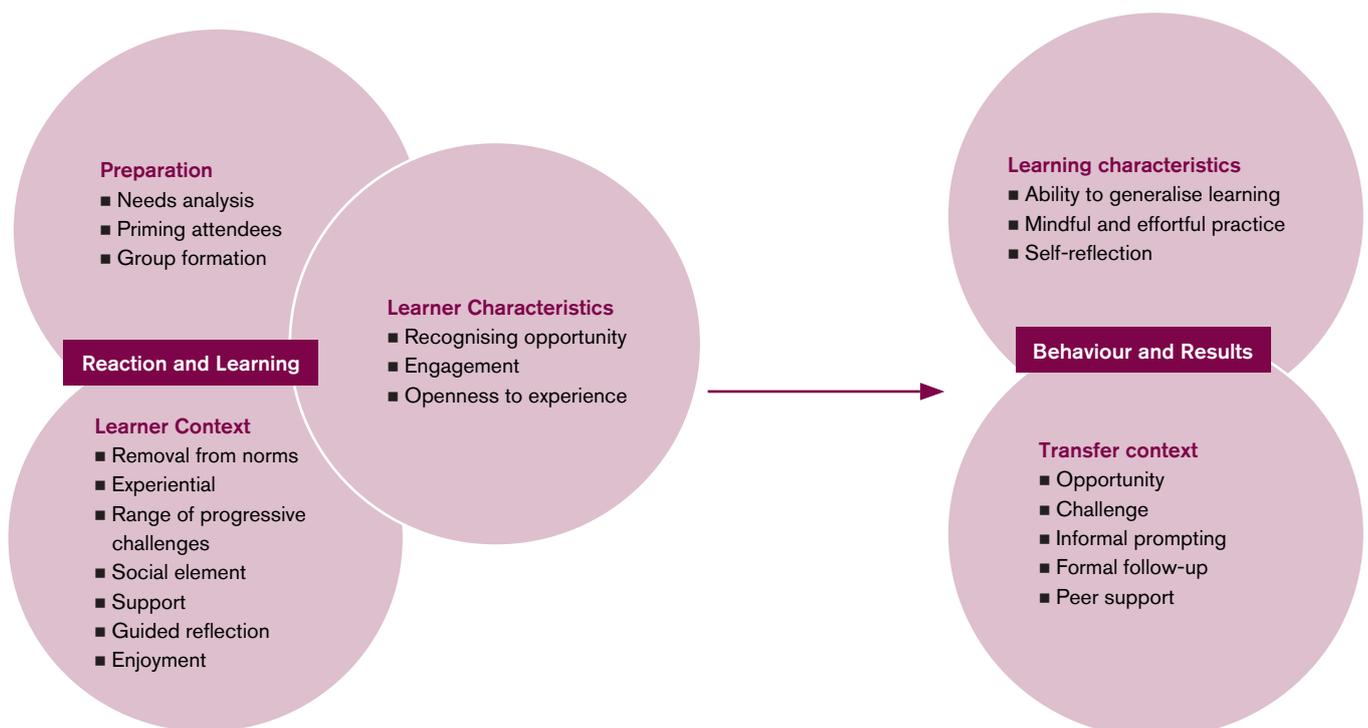


Figure 1: The Model for Optimal Learning and Transfer (Adapted from Cooley et al., 2015a).

Preparation

Our research confirmed that what happens before participants arrive at training can have a large impact on their learning and development, which is then likely to affect the extent of behaviour change and results gained. The training provider therefore needs to ensure that they lay the groundwork for an effective training experience. The first aspect identified was the needs analysis, in which training providers, potential participants, and other stakeholders ensure that the programme is going to meet the requirements of all involved. With an 'external' training provider, such as the Raymond Priestley Centre, this may include ensuring that the commissioning academics have really understood and communicated the backgrounds of their students, the desired learning outcomes, and how these fit with the academic programme in which the training is embedded (ie, the transfer environment).

For training in learning and teaching, this could involve analysing the previous experience of participants and the potential in their current positions to effect change at modular, programme or School level, and modifying the training accordingly. In self-selecting programmes, where participants sign up, it may be more about ensuring that the training provider is explicit about their expectations and assumptions, so that participants can make more informed decisions about whether to participate. Our research suggests that needs analyses are always considered to an extent, but more specific priorities are sometimes overlooked. For example, in the context of outdoor education, do the commissioning staff feel it is more important to build self-esteem through successful completion of challenging tasks, or to develop resilience by putting participants in environments where conflict or failure are likely? Although not mutually exclusive, a training practitioner can use these priorities to decide on levels of content, and how to structure the activities and reflective discussions.

A second element of preparation is group formation, both in terms of who participates in the training programme, and formation of any smaller groups within the training sessions. Again, this will influence both the learning in the session itself, and how this is used in the 'real world'. For example, we have found that, if given the choice, students tend to choose groups based on those who are similar to them, especially in terms of ethnic background. If the main purpose is for participants to learn a new skill in a comfortable and personally relevant environment, and transfer it easily to their own context, then allowing them to choose their own groups may be preferable. In contrast, if you want participants to develop an understanding of different perspectives and respect for cultural and disciplinary diversity, then it may be necessary to assign groups to ensure a good mix. Similarly, the purpose of the training course will influence whether participants work in the same groups all the time or not. Mixing groups regularly gives the opportunity for contact with more people, and so could be useful in inductions or training where networking is a priority. In contrast, we found that longer programmes with consistent groups allowed time for differences of opinion and interpersonal tensions to develop between members, which provided useful learning opportunities. Decisions about whether to offer staff training at University level, or in individual Colleges or Schools, should therefore carefully consider the priorities of the programme.

The third element of preparation is priming attendees for learning and transfer. This can be as simple as which information is provided to participants in advance; we discovered that some people from particular cultural groups were not signing up for the outdoor programmes because they saw swimming costumes on the kit list, and we now make it clear that entering the water is not compulsory. On less practical courses, it can also include clear guidance on the level of the training and expectations of participants. We also found that participant attitudes towards the topic of the training, and the programme itself (measured by questionnaire), predicts how much they enjoy and learn from the experience and whether they intend to use the new skills in their own context (Cooley, Burns, & Cumming, 2016). The participants who gain most are those who think that the skills that they will be learning are important and can be developed in this context, and who have better confidence in their ability to learn these skills. This may be particularly important when the training is a compulsory part of an academic programme or a staff requirement as there will be a greater range of positive and negative attitudes. It suggests that time spent enhancing both attitudes towards the activity, and the self-efficacy of the participant to learn the new skill, is likely to enhance the efficacy of the programmes. 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, self-efficacy, and the efficacy of the programmes (in preparation). In addition, attitudes are improved by authentic institutional support, reward and recognition for the training itself, and the skills being developed. This is likely to be particularly salient for teaching and learning training within the University as we move towards the Teaching Excellence Framework, and is a specific focus for the work of our Teaching Academy³.

Learner characteristics

Our research suggests that particular individual characteristics are associated with better reactions to, and learning from, training activities. For example, those who recognise the opportunity are more aware of teachable moments. Those who are engaged will push themselves and embrace new challenges, even when uncertain. Finally, those who are open to experience are curious about new ways of thinking and doing, and more likely to absorb new learning. These characteristics are likely to be exhibited most where the training is aligned with student or staff aspirations and personal identity, and where significant others value the potential skills and training.

As individual participants, we can work to embody these characteristics ourselves, but even as training providers, training commissioners, or personal development reviewers, we can support our students or staff to develop such attitudes before or during the training.

Learning context

The final aspect that predicts reactions and learning is the training context itself, including removal from the normal environment, experiential learning opportunities, a range of progressive challenges, and guided reflection. In the outdoor programmes assessed, stakeholders emphasised the importance of being in a novel environment away

³ <https://intranet.birmingham.ac.uk/staff/teaching-academy/>

from their usual constraints and/or support networks. Even with other types of training, this physical removal can help participants stay focused on the content without the usual distractions of campus life. Participants also valued the experiential nature of the learning; they completed tasks, such as raft building, that had real physical consequences if unsuccessful! Similarly, experiential opportunities can be built into other training programmes; for example, in the Senior Leaders programme at the University of Birmingham, participants present a proposal to University Executive Board as part of the training. Additionally, PhD students in the College of Life and Environmental Sciences can complete project management or outreach training that involves organising a real conference or public communication event. In doing so, participants get an immediate opportunity to apply their learning and obtain immediate feedback on its success.

Support provided during training was also identified as a key predictor of reactions and learning. In our case, students particularly valued the opportunity to get to know their staff members, and benefited most when the staff were enthusiastic and informed about the programme, but also involved in the students' day-to-day lives back on campus. In staff training, it is often the interpersonal links with others that are similarly valued. The longer-term maintenance of these new friendships also relates to the final element of the training environment in our analyses; participants reported benefitting from the more informal, social activities embedded within a training course. Even with these informal aspects, we can consider how to incorporate activities mindfully to maximise their benefits. For example, social activities that mix up people's social groups, such as group quizzes, can help build new friendships, and more unstructured time allows participants to unwind and casually reflect on the day. Here it is worth remembering to avoid a focus on alcohol-oriented environments, to ensure that all participants are comfortable to engage in this informal, but important, part of any training programme. Even in shorter programmes, simple factors such as the provision of refreshments and meals encourages participants to stay and socialise rather than return to offices in between sessions.

Transfer context

The final, and in many ways most crucial, influence on behaviour and results is the education or employment setting from which the participants come and to which they will return. For students, this is initially their academic programme and then, in the future, their place of employment. For staff, it's their current academic roles. As an organisation, we must specifically plan immediate opportunities for participants to practise what they have learned and ensure that this is sufficiently challenging to require their new skills. For example, after a student groupwork skills course, this may be working on a specific group project in which they'll be expected to formally allocate roles, plan their activities, and reflect on their processes. For members of staff learning about curriculum design, this could be the opportunity to feed into an annual review or other quality assurance or enhancement process. Without this, we may struggle to make the course feel relevant and participants may forget their new skills before they have the chance to apply them. These opportunities should also be supported by informal prompting or more formal follow-ups, in which someone who is familiar with the training is able to remind the participants of what they learned and encourage them to reflect further on their development.

This aspect is often overlooked, with the perspective that once a participant has completed a programme, that box is 'ticked'. However, regular reminders and opportunities to continue to reflect can help embed new learning into our standard practice. For example, the Raymond Priestley Centre has developed a series of emails that are sent automatically to participants at set periods after their programme that remind them of different aspects of their learning and offering small tasks for reflection or discussion. Similarly, reflections on continuing professional development could be built more formally into the personal development review process.

Ongoing learning can also be encouraged through peer support, which was identified as another key predictor of behaviour change and improved results in our study. This can be facilitated by creating communities of practice, either in person or online, to further embed these relationships after cessation of the training. These are often established during programmes, but this argues in favour of supporting their maintenance after the training is finished. This could be as simple as providing a small budget for refreshments when the groups meet to discuss their practice. From an institutional perspective, if such activities encouraged participants to share their learning with others, it would also give the opportunity to disseminate new ideas, and to gain maximum benefit from the training.

Summary

Some of the factors that we have identified here as influencing training effectiveness may already be part of standard practice in your institution. Indeed, they are in line with the key tenets of mainstream learning theories, including Kolb's learning theory (1984), Gass's transfer of learning theory (1999), and Baldwin and Ford's model of the transfer process (1988). However, MOLT provides a systematic framework, through which we can evaluate our current provision. In doing so, we can also identify and implement evidence-based opportunities to enhance our practice and maximise the benefits of our staff and student training.

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Note: For further information about the groupwork skills courses at the Raymond Priestley Centre, please see www.sport.bham.ac.uk/raymondpriestley. For further advice on evaluating impact, and the processes underpinning impact, see the BEST website at www.bestskills.co.uk or the independent Charities Evaluation Service at www.ces-vol.org.uk, which has some excellent online resources. If you have any feedback on using the model, we would love to hear from you through email, the contact form on the BEST website or on Twitter @bestresearch1.

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