WILDTEAM®

DELIVERING TRAINING WORKSHOPS FOR WILDLIFE CONSERVATION V1

Acknowledgements

Authors

Adam Barlow, WildTeam UK
Beth Robinson, WildTeam UK
Mike Appleton, Global Wildlife Conservation/International Union for the Conservation of Nature - World Commission on Protected Areas Vice Chair for Capacity Development
Jane Hooper, WildTeam UK
Alison Skeats, WildTeam UK

Photo credits

The photos used in this manual are modified versions of photos by the following photographers:

Front cover: Jeremy Bishop
Introduction: Marvin Nauendorff
Principles: Dawn Armfield
Skills: Pietro Jeng
Documents: Cassidy Mills
Appendix: Enguerran Urban

Creative commons license

Suggested citation

WildTeam. 2018. Delivering Training Workshops for Wildlife Conservation v1. WildTeam, Cornwall, UK.

Contents

INTRODUCTION

1 Purpose

The purpose of the Delivering Training Workshops for Wildlife Conservation (DTWWC) approach is to provide conservationists with a best practice framework for designing, implementing, and evaluating any type of training workshop. The term "training workshop" (hereafter used interchangeably with "workshop") is used to encompass all workshops that:

- Have a primary objective to improve the knowledge or skills of a target group
- Have a personal, real-time interaction between a trainer (delivering the workshop) and a trainee (participating in the workshop).

The term training workshop is also used to cover both class-based and online workshops. It is important to note, however, that the DTWWC approach has been designed for workshops involving only adult (>18 years old) trainees. Furthermore, the DTWWC approach does not provide specific guidance on:

- **Managing a workshop's logistics and finances,** e.g. steps for booking and paying for workshop venues
- **Delivering facilitation workshops** e.g. a workshop to help scientists develop a shared research agenda, or a workshop to help resolve conflict between stakeholders
- **Delivering other types of learning activities** e.g. formal education classes or work shadowing.

2 Benefits

Following the DTWWC approach can help a conservationist to:

- **Improve the conservation impact of a workshop,** by linking the workshop to specific, measurable objectives
- **Help trainees learn,** through the application of key principles and skills
- **Save time planning, evaluating, and reporting on workshops** through the use of document templates.

> **Box 1. Key terms.**
> **Conservation impact:** Conservation impact can be considered the achievement of biological target results, threat results, and contributing factor results.
>
> **Biological target results:** Changes in the status of species, communities, ecosystems, and habitats.
>
> **Threat results:** Changes in the status of threats to biological targets.
>
> **Contributing factor results:** Changes to attitudes, knowledge, skills, and behaviours of target groups [1].

3 Contribution to conservation impact

Conservation impact is achieved through the implementation of enabling, behaviour change, and target restoration work packages [2] (Box 1) (Figure 1).

.

- **Enabling work package:** Made up of activities that support the implementation of behaviour change or target restoration activities, e.g. providing funds, improving legislation, and managing projects [2] (Box 2)
- **Behaviour change work package:** Made up of activities that directly change the behaviour and associated knowledge, skill, and attitude of a target group e.g. social marketing, law enforcement, and providing alternative livelihoods [2]
- **Target restoration work package:** Made up of activities that directly alter the status of the biological targets e.g. reintroductions, controlled burns, and removal of invasive species [2].
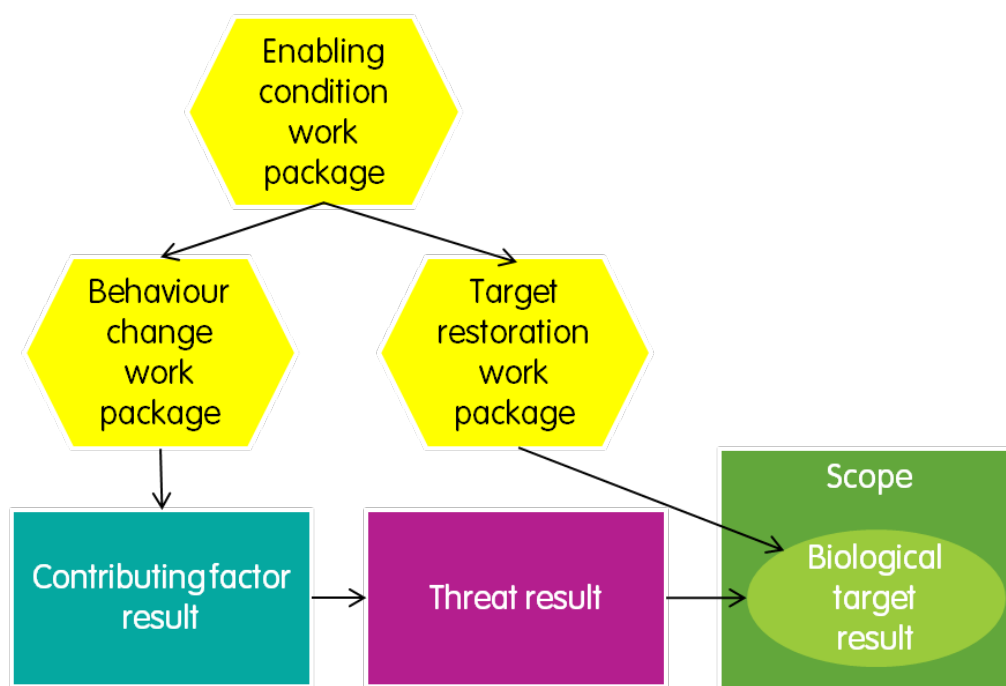
Figure 1. Contribution of work package types to conservation impact. Adapted from [2] and [3]. Scope refers to the geographic area where the biological targets live [1].

Delivering training workshops is an activity that helps achieve conservation impact as part of either:

- **An enabling work package (if the trainees are conservationists):** e.g. training a conservation team to improve their social research skills, or training government staff on how to carry out a controlled burn
- **A behaviour change work package (if the trainees are stakeholders):** e.g. training local villagers how to report wildlife crime, or training politicians about the impact of climate change on human health.

4   Overview of DTWWC

The DTWWC approach is made up of 2 principles, 6 skills, and 4 documents. Described under each skill area are a number of practices and associated techniques that can be applied when delivering a training workshop (Box 3). The 4 documents are designed to support application of the DTWWC approach, and examples of document content are provided in the Appendix. The overall structure, style, and terminology of the DTWWC approach has been designed to be in line with the Project Management for Wildlife Conservation (PMWC) approach [1].

Box 3. DTWWC components.
Principles:
- Spark the brain
- Be the energy.

Skill areas
- Preparing the learning space
- Developing positive relationships
- Building motivation
- Maintaining engagement
- Managing disruptive behaviours
- Stimulating application.

Documents
- Workshop plan
- Workshop evaluation form
- Workshop learning application tracker
- Workshop report.

5   Supporting resources

There is a range of supporting resources available to aid implementation of the DTWWC approach (Table 1).

Table 1. Supporting resources.

Material / tool	Access link
DTWWC document templates	**Link 1**
PMWC approach	**Link 2**
Class-based training courses in DTWWC, PMWC and other best practice approaches	**Link 3**
Online training courses in DTWWC, PMWC and other best practice approaches	**Link 4**

Note: Class-based and online training courses in DTWWC will be available from July, 2018.

PRINCIPLES

1   Overview

The purpose of the DTWWC principles is to ensure that a training workshop is delivered in an engaging and efficient manner, that maximises knowledge and skills gain for the trainees.

2   Be the energy

2.1   Purpose

The trainees' general experience, attitude towards the subject matter, and likelihood of applying their learning in the future may be greatly influenced by the style in which the trainer delivers the workshop [4]. The purpose of the Be the energy principle is, therefore, to ensure a trainer makes the best use of their own personality to deliver workshops that are fun, interesting, memorable, and motivating for the trainees.

2.2   Application

To carry out an engaging workshop, the trainer must project a positive, enthusiastic attitude, and infuse their own personality into how they deliver the training. This is to make use of the inherent difference in character that makes each trainer unique (interesting) and avoid an otherwise robotic, dry workshop delivery that may diminish motivation, learning, and subsequent application [4].

The way this principle is applied is totally dependent on the trainer's character, but may benefit from a trainer:
- Sharing personal experiences and passion for the subject
- Infusing their own brand of humour into the learning process
- Providing enthusiastic responses to trainee inputs
- Being well prepared and confident.

However, it is important to note that applying this principle is always aimed at helping to create a positive, encouraging experience for all trainees, and is not a licence to be disrespectful to trainees in any way.

3   Spark the brain

3.1   Purpose

The Spark the brain principle is to ensure that workshop sessions are designed and implemented with an understanding of how trainees learn new knowledge and skills.

3.2   Application

Learning new knowledge and skills requires the trainee to access existing memories, and generate new memories [5]. Generating new memories through learning requires the movement of new sensory information (e.g. what is heard, seen, or felt) from the working memory, through the short-term memory, into the long-term memory [8] (Box 4).

> **Box 4. Memory.**
>
> **Memories**: Specific packages of information that are generated in the learning process [5].
>
> **Working memory:** Used to temporarily hold and process information for potential, subsequent storage in either the short-term or long-term memory [6].
>
> **Short-term memory:** Used to store about 7 items of information at any one time [6].
>
> **Long-term memory:** Used to store a large amount of information for a long duration [7].

However, new long-term memories can become difficult to recall or lost altogether due to:
- The passage of time
- The absence of a specific cue, that would otherwise remind the trainee of their learning or prompt them to apply their learning
- Interference from other, related memories that are generated after the initial learning process [5].

Appling the Spark the brain principle to help generate and retain new long-term memories is achieved by the trainer:
- Pausing after stating important information to allow time for the trainee to generate a new memory
- Using key words or phrases to help trainees learn and recall a collection of associated memories (e.g. Spark the brain is designed as a key phrase to help access a range of purpose and application information related to this principle)
- Scheduling in breaks for trainees to rest, socialise, and build up their energy for the next session
- Incorporating assessments into the learning process to encourage the revision that will help generate long-term memories [5]
- Adopting a range of learning approaches to convey and reinforce important information and messages
- Developing the content of training sessions so that learning builds on (rather than contradicts or confuses) the information acquired in the previous sessions (e.g. starting with simple concepts before introducing more complex concepts, and ensuring that all content uses a standard, clear, simple set of terminology that is shared throughout the workshop sessions).

SKILLS

1   Overview

There are 6 skills for delivering a workshop:

- **Preparing the learning space** to provide trainees with an memorable, enriching environment that encourages learning
- **Developing positive relationships** between trainees and trainer
- **Building motivation** of trainees for learning the new skill or knowledge
- **Maintaining engagement** of trainees throughout the learning process
- **Managing disruptive behaviours** that would otherwise make it more difficult for trainees to contribute, learn, and bond
- **Stimulating application** of new knowledge and skills after the workshop has ended.

This section describes the skills and their associated practices and techniques. However, the information provided in this section is not comprehensive, so trainers should also consider using any additional skill, practice, or technique that they think will enhance a workshop. Likewise, the skills listed in this section should be tailored, where necessary, to best suit a particular workshop or group of trainees.

2   Preparing the learning space

Adult trainees learn best in a collaborative, friendly environment that encourages the building of personal networks [9]. The preparing the learning space skill is made up of the following practices:

- Selecting a learning space
- Setting up a learning space.

2.1   Selecting the learning space

Wherever possible, it is important to select a learning space (or mixture of learning spaces) that enables trainees to interact with each other and their trainer. In general, relatively large, well lit, and slightly cooler rooms with plenty of blank wall space should be selected to help trainees concentrate, move around, and carry out group exercises. Using outdoors spaces for workshop sessions or field trips can also be a great way to help trainees learn, connect with nature, and build shared experiences that enhance personal relationships [10, 11, 12].

2.2   Setting up the learning space

The seating arrangement in workshops may have a marked effect on how trainees interact with each other and the trainer, and consequently the degree to which the trainees take part and benefit from the learning process [13, 14, 15]. For an interactive workshop, a good seating arrangement will provide trainees with a clear view of the trainer, and space to move around and carry out group work [16]. The best seating arrangement for a particular workshop, however, will be dependent on the workshop's learning objective, equipment, venue, and session design.

Likewise, a well thought out distribution and use of equipment can also help create an enriching learning space. For example, presentation screens and flip charts should be set up so that they are easy for trainees to see, use, and share. Examples of some good seating and equipment arrangements are provided in Figure 2.
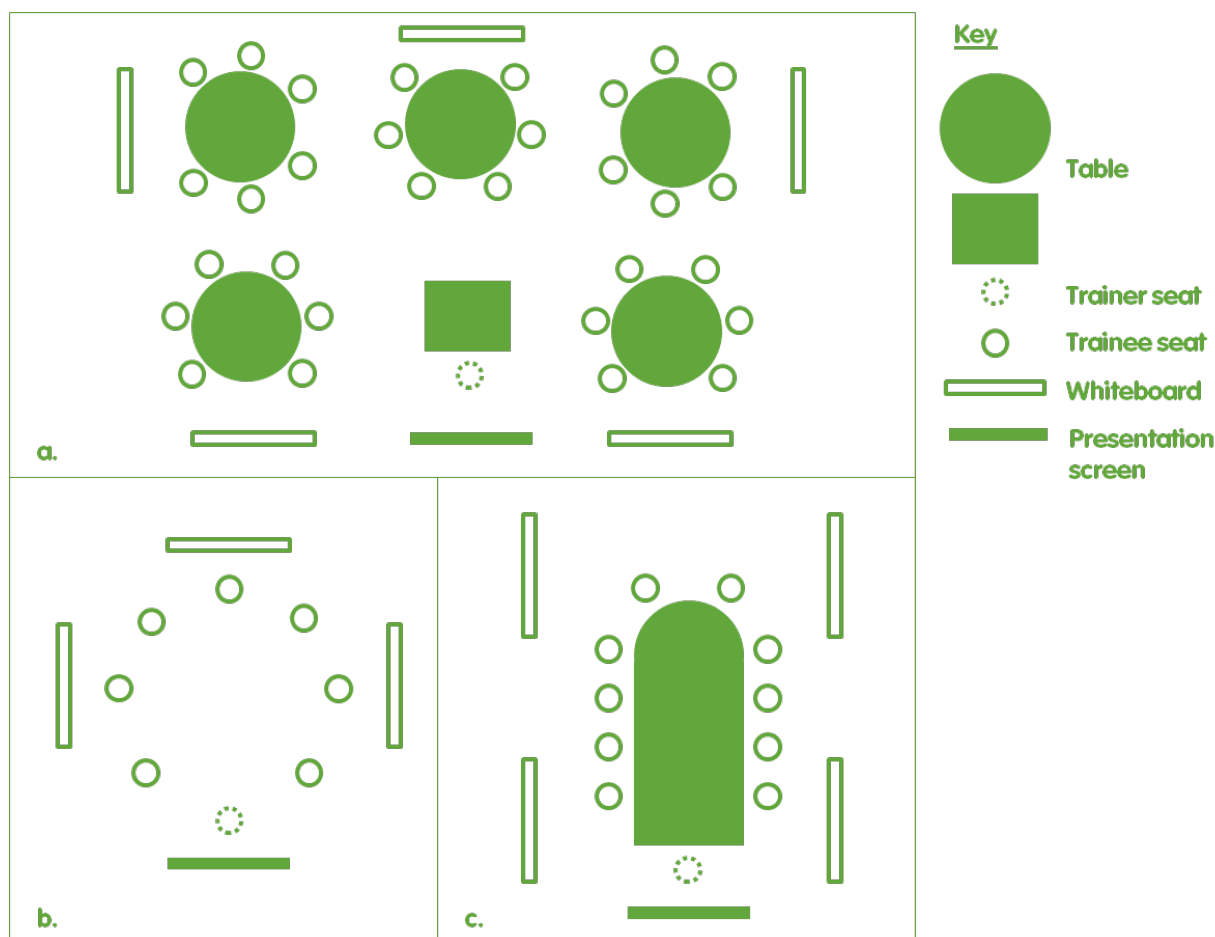
Figure 2. Example of good seating and equipment arrangements for an interactive workshop. Notes: In all cases, trainees need to turn their seats in order to pay attention to the trainer when the trainer is addressing the group. Adapted from [16].

3   Developing positive relationships

An additional, major benefit of workshops is the personal relationships developed between participants [17]. In the short-term, these relationships will create a supportive learning environment for the trainees. In the long-term, these relationships may lead to life-long friendships and professional networks that have a much greater affect on the trainee's life and work than any knowledge or skills they acquire [17]. The purpose of the developing positive relationships skill is, therefore, to create the conditions that encourage these relationships to form. The developing positive relationships skill is made up of the following practices:

- Learning names
- Breaking the ice
- Encouraging bonding.

3.1   Learning names

Focusing on learning and using the trainee names will help both trainer and trainees create a personal, respectful bond. Some techniques to help a trainer learn trainees' names are listed in Table 2.

Table 2. Techniques for learning names.

Technique	Description
Name tags	All trainees have a name tag that they either wear or place in front of them on their desk.
Name repeat	When first introduced, the trainer repeats the trainee's name out loud, followed by repeating the name multiple times in their head. The trainer then uses the trainee's name each time they address the trainee.
Name buzzer	Trainees call out their name when they want to answer a question to a quiz.
Name association	The trainer links a trainee's name to something that stands out about their personality, background or work e.g. Alisha is from New Orleans or Diego is obsessed with dolphins.

3.2   Breaking the ice

If the trainees and trainer do not know one another already, then introductions will be necessary. Breaking the ice techniques at the start of a workshop will help create friendly bonds between unfamiliar trainees. It is important to note, however, that icebreakers which involve talking in front of the whole group may cause some trainees anxiety. In such cases, a less public icebreaker can be used to get individual trainees more comfortable with each other before launching into a more public icebreaker. In addition to using them at the start of the workshop, breaking the ice techniques can also be used at different points throughout the workshop to energise the trainees and help further strengthen positive bonds. Some techniques for breaking the ice are outlined in Table 3.

Table 3. Techniques for breaking the ice.

Technique	Description
Conservationist bingo	The trainer creates 9 square bingo cards that are given to every trainee. In each square is a characteristic of one of the trainees e.g. studies fish, or lives on a mountain. All trainees try to get their bingo cards signed by the trainees whose characteristics are listed. The first 3 trainees that get all of their 10 bingo squares signed win a reward e.g. a piece of cake.
One degree of separation	Trainer and trainees each have a card that lists everyone's names. They have 10 minutes to identify something interesting that they have in common with each person on the list e.g. where they grew up, who they know or are related to, or a shared hobby.
Share the experience	Each trainee introduces themselves and tells the group about an important moment in their lives e.g. the moment when they first decided that they wanted to become a conservationist.
What am I?	The name of different animals are written on a sticky note and stuck to the head of each trainee. Either in front of a small group or the whole workshop, each trainee introduces themselves and has 10 questions to guess what animal they are.
Living Likert scale	Signs, each with a number from 1-7 written on them (representing a Likert scale from 1 = strongly agree to 7 =strongly disagree) are hung up in the classroom. The trainer reads a variety of statements (e.g. effective conservation only happens when governments act on sound scientific evidence), and trainees then go to the number on the scale that best reflects their attitude. Trainees then have the opportunity to get to know one another by discussing why they made their selections.

3.3   Encouraging bonding

The best opportunities for creating positive relationships often arise outside of the formal workshop sessions. Some techniques for encouraging bonding outside of workshop sessions are described in Table 4.

Table 4. Techniques for encouraging bonding.

Technique	Description
Inspirational people	The trainer and trainees gather in a relaxed setting (e.g. around a campfire) and the trainer asks the trainees to share stories about people that exemplify a positive role model e.g. conservationist, forest guard, community leader, or some other type of person relevant to the workshop in question. The trainer than picks out the adjectives that have come out of the stories to summarise an overall picture of that person [18].
Social events	The trainer organises social events that provide the space and circumstances for trainees to get to know one another on a personal level [17] e.g. a Karaoke evening.
Sports events and games	Organise some sort of sporting event (e.g. football match) or game (e.g. chess) for a lunch break or evening.
The secret friend	The trainer assigns a secret friend (a fellow trainee or trainer who is unaware who they have been assigned to) to each of the trainees. Each trainee is then tasked with doing something nice for their secret friend every day of the workshop. At the end of the workshop the trainer gathers everyone together and gets each trainee to first say what they liked about their secret friend, and then reveal who it was [18].

4   Building motivation

As adults, trainees need to have their own personal reasons for learning new knowledge and skills [19, 20]. Helping trainees to establish or strengthen this personal motivation will help them learn [5] (Figure 3).
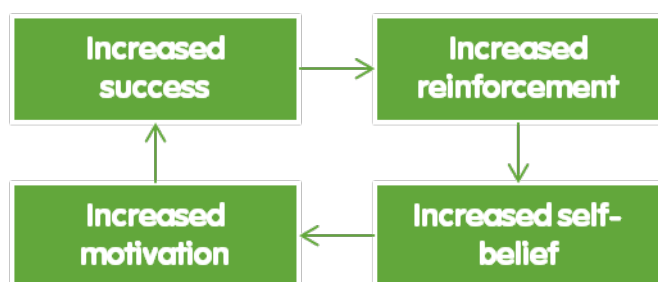
Figure 3. Role of motivation in supporting learning. Adapted from [21].

The building motivation skill is made up of the following practices:
- Linking benefits to needs
- Asking for commitment.

4.1　Linking benefits to needs

To effectively motivate trainees, the trainer needs to give them the opportunity to identify workshop benefits that are meaningful to them, either on a personal or professional level [20]. Techniques for linking benefits to the trainees' needs are listed in Table 5.

Table 5. Techniques for linking benefits to needs.

Technique	Description
The personal benefits list	The trainer gets all trainees to write 1-3 reasons why they want to gain the knowledge or skills provided by the workshop. The trainees then take it in turns to share those reasons with the group.
The personal vision	The trainer gets each trainee to describe what they want the future to be like for them as a result of the workshop. Outlandish visions should be encouraged.
Sharing the pain	The trainer gets each trainee to share the "pain" that they have experienced in their life that has motivated them to attend the workshop [22]. For example a forest guard could share their frustration at not being able to show his superiors how much patrolling he has done, which has subsequently motivated him to attend the workshop to learn about how to use a Geographic Positioning System.

4.2　Asking for commitment

Public, voluntary commitment to a workshop process can be a powerful way of helping increase and maintain trainee motivation. This is because adults want to behave in a way that is consistent with assurances or statements that they make, and they care about the opinions of their peers [23, 24]. The trainer can build commitment by getting trainees to voluntarily, publically sign their name against a statement of commitment e.g. agree to contribute positively to all workshop exercises.

5　Maintaining engagement

The purpose of the maintaining engagement skill is to enable trainers to pro-actively sustain trainee concentration and participation throughout the workshop. The maintaining engagement skill is made up of the following practices:
- Making training relevant and challenging
- Carrying out a mixed learning approach
- Making learning fun
- Unblocking the imagination
- Working with translators.

5.1   Making training relevant and challenging

Trainees will learn best when they are able to focus on subjects and content that have immediate relevance to them [20]. Likewise, challenging the trainees to solve problems is an effective way of engaging the trainees and helping them to learn new knowledge and skills [5, 20]. The trainer can apply this skill by:

- Preparing workshop content that incorporates examples that are directly linked to trainee experiences or current work
- Designing problem-solving exercises in which the trainees have to choose for themselves what situations they will address.

5.2   Carrying out a mixed learning approach

A monotonous learning process may reduce trainee focus, participation, and learning [6]. Furthermore, trainees may be one of four major learner types, each of which respond better to different types of learning approaches [25]. Carrying out a mixed learning approach is, therefore, necessary to help trainees maintain their interest and process information effectively. A combination of visual, auditory, and tactile techniques should, therefore be used to enhance both instructional and exercise sessions. A range of mixed learning approach techniques are described in Table 6.

Table 6. Techniques for carrying out a mixed learning approach.

Technique	Description
Written	Using written words.
Visual	Using pictures, diagrams, and demonstrations.
Auditory	Using verbal communication, group discussions, and oral reports.
Tactile	Using "hands-on" activities such as experiments, field trips, games, and encouraging physical movement in general as part of the learning process.

5.3   Making learning fun

If trainees have fun in a workshop they will be more likely to pay attention and contribute to the workshop sessions. Each trainer will have their own personal view of what constitutes "fun", but experience of trying out different techniques will help the trainer identify what works for different types of workshops and trainees. Some techniques that can be used to help make learning fun are listed in Table 7.

Table 7. Techniques for making learning fun.

Technique	Description
Debates	In teams of 2, trainees prepare and participate in a debate that proposes opposing positions with respect to a subject relating to the workshop content. Trainees get to vote, by a show of hands, to indicate which side of the debate won.
Peer review	The trainees review each other's work. This technique helps trainees learn, by encouraging them to think critically and consider suggestions for improvement [26] e.g. example, trainee game scouts can review each other's proposed patrolling strategies.
Role plays	Two trainees are given roles (e.g. a government official and a local villager) and a point of view to act out in front of the rest of the trainees. Trainees then offer their insights into what they thought went well and what could have gone better.
Stories	Each trainee has 5 minutes to tell a story that illustrates the importance of one of the workshop concepts.
Pictures	Each trainee creates or contributes to a picture to illustrate a workshop concept.
Board games	The trainees play a board game that tests their knowledge of the workshop subject.
Team quizzes	Trainees are split into 2-3 teams who have to buzz in (each team has their own animal buzzer sound) to answer questions about the workshop subject. A variation of this approach is that the teams ask questions to the opposing teams.
Individual quizzes	Frequent, short quizzes are interspersed with the learning to test the trainees' knowledge.

Note: In addition to being fun, individual quizzes allow the trainees to see how they are progressing, and allow the trainer to see how well the workshop subject is being absorbed.

5.4   Unblocking the imagination

Trainee experiences can help them learn through reflection. However, past experiences of how to deal with problems may also prevent trainees from thinking up new solutions [27]. Trainers, therefore, need to be able to unblock trainee imagination so that they are able to use their new knowledge or skill to address a new or familiar problem. Techniques for unblocking the imagination are listed in Table 8.

Table 8. Techniques for unblocking the imagination.

Technique	Description
Idea storm	The trainees write down as many ideas as possible on sticky notes and give them to the trainer. After the ideas are exhausted the trainer groups similar ideas together and asks questions to elicit additional ideas.
The alphabet of	Trainees work in small teams and compete against other teams

Technique	Description
ideas	to develop ideas that start with each letter of the alphabet. The first team to complete an alphabet of ideas wins.
In someone else's shoes	The trainees stand with their eyes closed and imagine living the life of a member of a different group (e.g. a government official or a villager), before developing new ideas.
Risky business	To uncover additional ways of looking at a problem, the trainees are required to come up with ideas that they view as the most risky.
Internet search	Each trainee or group has a set time to search the internet to come up with new ideas or solutions, after which they report back to the workshop.

5.5   Working with translators

Working with translators is often necessary for conservation workshops in which trainers are working with trainees from a different country. Working with translators, however, creates a number of challenges that must be overcome in order to maintain the engagement of the trainees. In particular the trainer may find it difficult to:

- Communicate their enthusiasm for the subject (see Be the energy principle)
- Help trainees learn complex concepts
- Understand how well trainees are learning and how they are feeling about their workshop experience.

The success of a workshop, therefore, may well depend on how well a trainer is able to work with a translator. Some useful techniques for working with translators are described in Table 9.

Table 9. Techniques for working with translators.

Technique	Description
Provide translated materials	Providing translated presentations, worksheets, assessments and other materials will all help trainees learn more effectively and reduce the pressure on the translator to provide all the information that the trainees require.
Prepare the translator	The trainer should meet with the translator before the workshop to develop a good working relationship, provide an overview of the learning experience the trainer wants to provide, and to get advice from the translator about how the materials and sessions could be improved to meet the needs of the trainees in question.
Stretch the schedule	The trainer should plan in an additional 30-50% extra time into a schedule to account for the time needed for translation during the workshop sessions.
Make short, clear points	To ensure that both the translator and trainees are able to follow the workshop, the trainer should make short, clear points. Likewise the trainer should avoid using figures of speech and long explanations.

Technique	Description
Interpret sounds and body language	Trainers should pay attention to how people are talking and expressing themselves to get an indication of how well the trainees are learning, interacting with one another, and how they are feeling about the workshop experience.
Maximising group work and exercises	The trainer should schedule in as many group exercises as possible to increase the time available for trainees to interact and present in their own language. This enriches learning and prevents the loss of concentration that occurs when continuously relying on translation.

6   Managing disruptive behaviours

The purpose of the managing disruptive behaviours skill is to enable constructive trainer-trainee and trainee-trainee interactions that support the overall learning process. Applying this skill effectively will help trainees feel confident in their contributions while being respectful to other trainees' input and trainer guidance. The managing disruptive behaviours skill is made up of the following practices:

- Enforcing the trainee agreement
- Dealing with overbearing personalities
- Giving the quiet ones a voice.

6.1   Enforcing the trainee agreement

Managing disruptive behaviours can be supported by the creation of a trainee agreement. A trainee agreement is a set of ground rules that establish what acceptable behaviour is during the workshop. It is important that the trainee agreement is created at the start of the workshop with input from both the trainer and trainees. However, while some rules may be decided upon entirely by the trainees, there may also be some additional, non-negotiable rules that are set by the trainer to ensure trainee safety and mutual respect. An example of a trainee agreement is outlined in Box 5.

Even though trainees may have helped develop and are committed to the trainee agreement, there will often be trainees (and trainers) that sometimes break the rules. Dealing with rule-breaking is difficult because trainees may quickly disengage with the learning process if they are publically disrespected. Reducing rule-breaking behaviours can be achieved, however, if the trainer remains positive, patient, and firm in their interactions with the trainees in question. Examples of techniques to enforce the trainee agreement are outlined in Table 10.

> **Box 5. Example trainee agreement.**
>
> No boss zone
> Start and finish on time
> No side conversations
> No mobile phones or emails
> Respect and encourage each other
> No taking tranquilizer guns outside of the classroom.

Table 10. Techniques for respecting the trainee agreement.

Technique	Description
Public praise	The trainer publically praises and thanks the trainees who are carrying out the right behaviour at the start or end of each session.
The request	The trainer asks the trainee by name to stop what they are doing so that the workshop can continue.
The pause	The trainer stops talking, looks at the trainee in question, and waits while they stop whatever it is they are doing. In general the resulting silence will generally catch the trainee's attention and the other trainees may ask them to pay attention. As an additional variation, the trainer can choose to make the pause longer each time they have to use it, even when the trainee has regained their focus. This lengthy pause may help dissuade future infringements of the trainee agreement by creating a growing feeling of uneasiness for trainees each time the agreement is broken.
Call a friend	The trainer can ask a respected member of the group to help get the trainee(s) in question to abide by the trainee agreement.
The penalty	At the start of the workshop when the workshop trainee agreement is being developed, the trainer asks the trainees to decide on a penalty for anyone who breaks the rules (including the trainer!). Examples of penalties may include singing a song or telling a joke for the class.

6.2   Dealing with overbearing personalities

In any workshop there may be trainees that are intentionally or unintentionally continually disruptive in some way e.g. lecturing others, not allowing others to talk, dismissing other people's ideas, or arguing unconstructively. This can result in reducing the contribution of other trainees and subsequently diminishing their ability to learn.

To apply the dealing with overbearing personalities practice, the trainer needs to identify the root causes of the overbearing behaviour e.g. the trainee may feel a pressure to assert themselves to maintain their position in the group as a leader, may see themselves as trainers that must educate others in the room, or may simply be overly enthusiastic about sharing their knowledge and experience while being unaware of the effect they are having on other trainees. The trainer can identify the root causes of the behaviour by having a private conversation with the trainee in question during a break. Whatever the cause of the behaviour, dealing with it is made more difficult because, although the trainer has some inherent respect due to their role, they are (in most circumstances) unlikely to be the trainee's manager or senior. There are, however, a range of techniques that may help the trainer reduce such behaviour (Table 11).

Table 11. Techniques for dealing with overbearing personalities.

Technique	Description
The car park	The trainer has a spare flip chart page or other permanently displayed sheet called the "car park" where items such as questions and discussion points, that are not strictly relevant to the session in hand, can be documented [28]. It is then very important that the trainer addresses all car park items at the end of each day. In this way the trainee who has raised an item feels confident that it will be addressed and that they will be able to have their say on a particular subject at some stage. This may help reduce the trainee's immediate urge to keep pushing the item during a session.
The objectives board	The workshop objectives are written on a board and referred to by the trainer whenever a trainee persists in focusing on something that is not helping the group to achieve those objectives.
The expert presentation	The trainer provides an opportunity for the overbearing trainee (and others) to present their expertise e.g. through a 10 minute talk or a poster.
The friendly chat	During a work break, the trainer talks to the trainee in question to ask them about how they think the workshop is going, to address any concerns they have, and to request their help in respecting the trainee agreement.

6.3   Giving the quiet ones a voice

If a trainee is not actively participating in workshop sessions then they may be negatively impacting the learning of everyone in the group by effecting their energy levels, interactions, motivation, and mood. Likewise, quiet trainees may be holding back information that could otherwise have improved the quality of group discussions, and solutions [29, 30].

A friendly one to one chat with the trainee during a break time will help the trainer identify the root cause of their quiet behaviour. There are a range of techniques that the trainer can then apply to help the trainee in question speak up more (Table 12).

Table 12. Techniques for giving the quiet ones a voice.

Technique	Description
Graded participation	The trainer scores each trainee with respect to the level of their participation in the workshop. The scores are then used as part of any knowledge or skills assessment [31].
Round the room	The trainer asks each trainer to contribute their thoughts in turn [29].
Nominations	The trainer nominates trainees to contribute, occasionally nominating quiet trainees.

Technique	Description
The spokesperson	The trainees work in pairs to discuss a topic. Each trainee then has to explain their partner's views to the group.
The long wait	After requesting voluntary participation from trainees, the trainer waits until all trainees have had sufficient time to formulate and offer their response.
Social responsibilities	Assign responsibilities (e.g. entertainment coordinator) to quiet trainees, to provide them with opportunities to have positive, personal interactions with others.
Group exercise roles	Assign roles (e.g. mediator, questioner, chairperson, note taker) to each member of a group for each exercise. Each trainee then has a new role assigned for each exercise [30].

6.4   Tackling a bullying culture

Some trainees may feel intimidated or disrespected by other trainees due to differences in ethnicity, gender, sexual orientation, age, income, or some other personal attribute. This situation may be most acute when the majority of the group has a pre-existing culture that is prejudiced against a particular attribute. To build a more inclusive culture, the trainer may have to:

- Add in additional, non-negotiable rules to protect the trainees who are in a minority
- Deal with prejudicial behaviours using the same techniques used for dealing with overbearing personalities and giving the quiet ones a voice.

7   Stimulating application

The sooner new knowledge and skills are applied, the more likely the trainee will be able to recall and effectively apply their learning [32]. Applying a newly acquired knowledge or skill, however, requires additional time and effort after the workshop has finished, and can easily become a low priority for trainees who are faced with the pressures of their normal day to day work. The trainer, therefore, needs to pro-actively apply techniques that will stimulate post-workshop application. The stimulating application skill is made up of the following practices:

- Removing barriers
- Setting trainee objectives
- Providing access to expert knowledge and tools
- Developing a community of practice.

7.1   Removing barriers

The application of learning is dependent on a trainee having the opportunity to do so after they have finished a workshop [33]. Each trainee may not have an opportunity to apply their training due to a range of barriers. For example, application of learning is highly dependent on permission and encouragement from a trainee's supervisor [34]. Removing

barriers requires the trainer to work with the trainees to identify barriers to application, and to come up with solutions to overcome those barriers. This can be best done as either an individual or group exercise at the end of the workshop.

7.2   Setting trainee objectives

If the trainees set personal objectives, then it is much more likely that they will apply their learning after the end of the workshop [35]. The trainee's objectives can be documented using a number of techniques (Table 13).

Table 13. Techniques for setting trainee objectives and goals.

Technique	Description
The secret letter	Each trainee writes a letter, addressed to themselves that, outlines what they learnt in the workshop and how they want to use that learning to change the way they work in the future. The trainer then posts the letters to the trainee 2 weeks after the workshop has ended.
Personal action plans	Each trainee develops their own personal action plan that lists specific activities they will carry out to demonstrate the application of the learning they gained in the workshop, e.g. study area mapped using new GIS approach by 1st January. All personal action plans are added to the online Workshop learning application tracker (see Documents). The trainer then monitors progress against the action plans in the Workshop learning application tracker, and contacts individual to either congratulate them on progress or to remind them of incomplete activities.
Employer agreement	Employers of trainees sent to a workshop sign an agreement that, following the training, they will allow the trainee time during work to practice and share what they have learned and to implement their personal action plan. If the workshop costs are being subsidised, then the trainer can make an employer agreement a pre-condition for the trainee to attend.

7.3   Providing access to expert knowledge and tools

The more access trainees have to expert knowledge and tools after the workshop has ended, the more likely it is that they will apply their learning effectively [36, 37]. Providing access to expert knowledge and tools can be applied through the techniques detailed in Table 14.

Table 14. Techniques for providing access to expert knowledge and tools.

Technique	Description
The debrief	The trainer meets with trainees on a group or individual basis to identify and develop solutions to any problems they have experienced in trying to apply their learning [38]. This can be done once or multiple times as part of continuous post-workshop support.
Providing job aids	The trainer provides access to tools (e.g. software, equipment, document templates) that makes it easier and quicker for the trainees to apply their learning.
Providing a knowledge base	The trainer provides the trainees with access to a knowledge base (e.g. online repository) of materials e.g. reports, manuals, and presentation. This knowledge base provides trainees a reference point for refreshing and building on their learning.

7.4 Developing a community of practice

Peer to peer support is an effective way to increase the likelihood that trainees will apply their learning after the workshop has ended [34]. Peer to peer support is facilitated by the trainer creating a community of practice, which enables trainees to learn from each other directly, through sharing experiences, knowledge and challenges related to the workshop learning [39]. Some techniques for developing a community of practice are described in Table 15.

Table 15. Techniques for developing a community of practice.

Technique	Description
Listserve or forum	The trainer develops a listserve or forum to provide additional support to trainees wanting to share their experiences or get help applying the knowledge of skills gained in the workshop. The listserve or forum may be for a single workshop group, or could be for all groups that have gone through the same type of workshop.
Social media site	The trainer or a trainee develops one or more social media sites to share photos, experiences, and thoughts relating to how the trainees are applying the knowledge and skills they gained in the workshop.

DOCUMENTS

1   Overview

The documents outlined in this section are designed to support the trainer in the planning, implementation, and evaluation of the workshop. The structure and suggested content of these documents can be tailored as needed.

2   Workshop plan

2.1   Purpose

The purpose of the Workshop plan is to document the objectives the workshop is aiming to achieve, what skills will be used to achieve those objectives, and how the achievement of those objectives will be measured. It is important to note, however, that the Workshop plan is not designed to:
- Detail the logistical arrangements and budget of the workshop
- Help communicate or promote a workshop
- Document the activities, risks and issues, equipment needs, and budget of the workshop, as this information is detailed in a Project plan or Work brief [1].

2.2   Development guidelines

The Workshop plan is produced by the trainer and contains the following sections:
- Introduction
- Evaluation
- Skills
- Schedule.

Introduction

The introduction refers to any overarching conservation project that the workshop is part of. This section also documents the workshop:
- Trainer
- Target group
- Dates
- Venue.

Evaluation

The evaluation section documents how the workshop delivery, impact, and additional benefits will be assessed. Objectives, indicators, and methods are documented following the format outlined in Table 16.

Table 16. Workshop objective, indicators, and methods.

Column header	Cell content format	Cell content description
Objective	Text	Description of delivery, impact and additional benefits objectives
Indicator	Text	Description of indicators to be measured for each objective
Method	Free text	Description of the method used to collect the indicator data

Guidance for setting objectives and indicators is provided in Table 17.

Table 17. Setting objectives and indicators.

Objective	Indicator
Delivery	
Described in terms of quality of venue/accommodation/food/trainer/materials, and relevancy of subject to trainee's work e.g. By the end of the workshop, 80% of trainees think that the trainer was good at delivering the workshop	e.g. % of trainees rating quality of trainer as good or higher
Impact: Gain in knowledge or skills	
Described in terms of knowledge or skills gain e.g. By the end of the workshop 50% of trainees know how to enter patrolling data using the patrolling software	e.g. % of trainees that have entered patrol data into software
Impact: Change in behaviour	
Described in terms of a change in behaviour of the trainees e.g. within 1 year of the workshop, 25% of the trainees not taking their cattle into the national park to graze	e.g. % of trainees detected taking cattle into national park to graze/month
Additional benefits	
Described in terms of the number of trainees benefiting e.g. By the end of the workshop 60% of trainees report 1 or more additional benefits gained from the workshop.	% of trainees reporting 1 or more additional benefits gained from the workshop

Descriptions of a range of common methods for collecting indicator data are outlined in Table 18.

Table 18. Methods for collecting indicator data.

Method	Description
Delivery	
Plus/delta	At the end of each workshop day, the trainer asks the trainees to say what they thought went well (plus) and what could have gone better (delta). Plus and delta answers are written on post it notes and stuck on a flip chart. The trainer then uses the plus delta comments to update the plan for the following workshop day so that deltas are minimised and plus items are maximised as much as possible [28].
Feelings graph	A graph is created with the workshop days or sessions across the X-axis and an enjoyment scale on the Y-axis. A horizontal line is drawn across the graph to distinguish when something was enjoyed (above line) or not enjoyed (below line). Each trainee marks on the graph how they felt with respect to each workshop day or session.
End of workshop survey	Questions on the quality of workshop delivery are included in an end of workshop survey. This method can be carried out using the Workshop evaluation form.
Impact: Change in knowledge or skills	
Verbal assessment	Verbal assessments can be carried out through interviews or focus group discussions with the trainees.
Written assessment	Written assessments can be made up of multiple choice, short answer, essay, fill in the blank, matching, or ordering questions. Written assessments can be individual or group, timed or untimed, closed or open book.
Practical assessment	Practical assessments require an individual or a group of trainees to complete a task to a desired standard in order to demonstrate their ability to apply the knowledge or skill in question.
Group presentations	Trainees work in groups to use their new knowledge and skills to address a conservation challenge, and then present their solution back to the workshop group.
End of workshop survey	Questions to assess trainee perceptions on how much they learnt are included in an end of workshop survey. This method can be carried out using the Workshop evaluation form.
Impact: Change in behaviour	
Post-workshop survey	Each trainee is required to fill in a survey to report on the degree to which they have applied their new knowledge and skills, their perception of the resulting impact, and any evidence that they can provide of any additional impact that has resulted from their application. This survey can be repeated to track changes in application over time (e.g. 1 month later, 6 months later, 1 year later). This method can be carried out using the Workshop learning application tracker.
Independent assessment	Each trainee provides evidence of application and any additional impact to an independent assessor, who makes an objective evaluation.

Additional benefits	
Benefit shout out	Trainees are asked to each come up with the most important benefit they have received from participating in the workshop (e.g. new friends, new law enforcement skills).
End of workshop survey	Questions to assess trainee perceptions of additional benefits that they gained as a result of the workshop are included in an end of workshop survey. This method can be carried out using the Workshop evaluation form.

Skills

The skills section lists how each of the DTWWC skills will be applied using the format outlined in Table 19.

Table 19. DTWWC skills application.

Column header	Cell content format	Cell content description
Skill	Text	See header e.g. Preparing the learning space
Practice	Text	See header e.g. Breaking the ice
Technique	Text	See header practice e.g. Sports event: Table tennis

Schedule

The workshop schedule is developed in consideration of the workshop objectives, the subject content, the application of DTWWC principles and skills, and the available timeframe. All schedules should:

- Have clearly labelled sessions
- Show day and time of all scheduled items
- Document who will lead each session
- Include an introduction and closing session
- Include at least 2 refreshment breaks and 1 meal break a day.

An example of a schedule format is provided in Figure 4.

Day 1	Session	Lead
09:00 - 11:00	Session 1	Trainer 1
11:00 - 11:15	Refreshment break	
11:15 - 13:00	Session 2	Trainer 2
13:00 - 14:00	Lunch	
14:00 - 15:30	Session 3	Trainer 1
15:30 - 15:45	Refreshment break	
15:45 - 17:00	Session 4	Trainer 2

Figure 4. Example schedule format.

3 Workshop evaluation form

3.1 Purpose

The purpose of the Workshop evaluation form is to support the evaluation of the workshop delivery, impact, and benefits.

3.2 Development guidelines

The Workshop evaluation form is produced by the trainer, but is filled in by the trainees. The Workshop evaluation form contains the following sections:
- Trainee information
- Delivery evaluation
- Impact evaluation
- Additional benefits evaluation.

Trainee information

This section lists the trainees name, organisation, position, and email.

Delivery evaluation

This section is made up of multiple choice and general questions designed to capture the trainee's perceptions of workshop delivery with respect to:
- Trainer knowledge, skill, attitudes, and behaviour
- Session design
- Learning materials
- Venue
- Food and accommodation
- Equipment
- The relevance of the learning to their work
- How easy it will be to apply the learning to their work.

Impact evaluation

This section is made up of general questions designed to capture how the trainees intend to apply the learning.

Additional benefits evaluation

This section is made up of multiple choice and general questions designed to capture any additional benefits that the trainees think were the result of the workshop.

4 Workshop learning application tracker

4.1 Purpose

The purpose of the Workshop learning application tracker is for the trainees to document how they plan to apply their new knowledge or skill after the workshop, and then to report on their progress in applying that learning.

4.2 Development guidelines

The Workshop learning application tracker is produced by the trainer, but the document contents are produced by the trainees. The Workshop learning application tracker lists the activities and due dates that each trainee has committed to in relation to applying their new learning. This document is also used to record the progress towards completing those activities.

5 Workshop report

5.1 Purpose

The purpose of the Workshop report is to document the delivery and evaluation of the workshop. The Workshop report can be shared with trainees, donors, line managers, and colleagues as needed. The Workshop report does not, however, document any budget expenditure, which is instead documented in either a Project's status report [1] or a Work-end report [1].

5.2 Development guidelines

The Workshop report is produced by the trainer and contains the following sections:
- Introduction
- Changes to Workshop plan
- Evaluation
- Lessons learned
- References.

Introduction

This section provides an overview of the workshop that is being reported on, refers to any project the workshop was a part of, and any other relevant background information relating to the need for the workshop.

Changes to Workshop plan

Documents any changes made to the original Workshop plan using the format outlined in Table 20.

Table 20. Changes to Workshop plan table composition.

Column header	Cell content format	Cell content description
Workshop plan section	Text	See header
Change	Free text	Description of change
Explanation	Free text	See header

Evaluation

The evaluation section documents the analysed data from the workshop delivery, learning, and impact evaluation.

Lessons learned

The lessons learned information is captured in a table with the composition described in Table 21.

Table 21. Lessons learned table composition.

Column header	Cell content format	Cell content description
Effect	Drop-down	Went well, Could have gone better
Lesson learned	Free text	Description of the lesson learned
Recommendation	Free text	Description of suggested way of doing things to improve practices in line with lessons learned

APPENDICES

1 Example Workshop plan

1.1 Introduction

As part of the Asian elephant conservation project, this workshop is to build the capacity of 18 Elephant Conservation Society staff in conservation planning skills. This workshop will be delivered by Lita Howlader and Abigail Sutton (Green Futures), from 8th to 10th January 2018, at the Elephant Conservation Society head office in Mumbai.

1.2 Evaluation

The workshop will be evaluated using the objectives, methods, and indicators outlined in Table 22.

Table 22. Workshop objective, indicators, and methods.

Objective	Indicator	Method
Delivery		
By the end of the workshop, 80% of trainees think that the trainers were good at delivering the workshop	% of trainees rating quality of trainer as good or higher	End of workshop survey
By the end of the workshop, 80% of trainees would recommend this workshop to other conservationists	% of trainees indicating that they would recommend this workshop to others	End of workshop survey
By the end of the workshop, 80% of trainees think that the training materials were good	% of trainees rating quality of training materials as good or higher	End of workshop survey
Impact: Gain in knowledge or skills		
By the end of the workshop, 80% of trainees have improved knowledge of conservation planning	% of trainees achieving pass mark of 50/80 in assessment	Conservation planning assessment
Impact: Change in behaviour		
Within 1 year of the workshop the organisation has an improved conservation plan	Updated conservation plan	Post workshop survey
Additional benefits		
By the end of the workshop, 60% of trainees report 1 or more additional benefits that resulted from the workshop	% of trainees reporting 1 or more additional benefits that resulted from the workshop	End of workshop survey

1.3   Skills

The skills and associated practices and techniques that will be applied in this workshop are outlined in Table 23.

Table 23. Skills, practices, and techniques.

Skill	Practice	Technique
Preparing the learning space	Selecting the learning space	Selected by organisation
	Setting up the learning space	U-shaped seating arrangement Flip charts and wall space for each group
Developing positive relationships	Learning names	Name tags
	Breaking the ice	Share the feelings
	Encouraging bonding	Sports event (cricket match)
Building motivation	Linking benefits to needs	Sharing the pain, the personal benefits list
	Asking for commitment	Commitment sheet for sign up
Maintaining engagement	Making training relevant and challenging	Use elephant examples in all workshop content and exercises
	Carrying out a mixed learning approach	PowerPoint presentations, conservation planning video, group exercises
	Making learning fun	Conservation planning board game
	Unblocking the imagination	In someone else's shoes
	Working with translators	Not applicable
Managing disruptive behaviours	Enforcing the trainee agreement	Public praise, the penalty
	Dealing with overbearing personalities	The friendly chat
	Giving the quiet ones a voice	Grade participation
	Tackling a bullying culture	Additional, non-negotiable trainee agreement rules
Stimulating application	Removing barriers	Barriers and solutions exercise in wrap up session
	Setting trainee objectives	Personal action plans
	Providing access to expert knowledge and tools	The debrief
	Developing a community of practice	Social media site

1.4   Schedule

The schedule for the workshop is detailed in Table 24.

Table 24. Workshop schedule.

Day 1		
Time	**Session**	**Lead**
09:00 - 11:00	Session 1: Introduction to workshop and conservation planning	Lita
11:00 - 11:15	Refreshment break	
11:15 - 13:00	Session 2: Defining scope, targets, and threats	Abigail
13:00 - 14:00	Lunch	
14:00 - 15:30	Session 2: Defining scope, targets, and threats (continued)	Abigail
15:30 - 15:45	Refreshment break	
15:45 - 17:00	Session 2: Defining scope, targets, and threats (continued)	Abigail
17:00 - 18:00	Cricket match	
18:00 - 19:00	Dinner	
Day 2		
Time	**Session**	**Lead**
09:00 - 11:00	Session 3: Creating a theory of change	Lita
11:00 - 11:15	Refreshment break	
11:15 - 13:00	Session 3: Creating a theory of change (continued)	Lita
13:00 - 14:00	Lunch	
14:00 - 15:30	Session 4: Setting objectives, indicators, and methods	Abigail
15:30 - 15:45	Refreshment break	
15:45 - 17:00	Session 5: Risks and issues	Abigail
17:00 - 18:00	Karaoke	
18:00 - 19:00	Dinner	
Day 3		
Time	**Session**	**Lead**
09:00 - 11:00	Session 6: Lessons learned	Abigail
11:00 - 11:15	Refreshment break	
11:15 - 13:00	Session 7: Creating a budget	Abigail
13:00 - 14:00	Lunch	
14:00 - 15:30	Session 8: Conservation planning theory assessment	Lita
15:30 - 15:45	Refreshment break	
15:45 - 17:00	Session 8: Wrap up and next steps	Lita
17:00 - 18:00	Free time	
18:00 - 19:00	Dinner	

2 Example Workshop report

2.1 Introduction

As part of the Asian elephant conservation project, this workshop was carried out to build the capacity of 18 Elephant Conservation Society staff in conservation planning skills. This workshop was delivered by Lita Howlader and Abigail Sutton (Green Futures), from 8th to 10th January 2018 at the Elephant Conservation Society head office in Mumbai.

2.2 Changes to Workshop plan

Changes to the Workshop plan are outlined in Table 25.

Table 25. Changes to Workshop plan.

Section	Change	Explanation
Evaluation	No change	No change
Skills	Planned: Flip charts and wall space for each group Actual: Flip charts used on tables	Not enough wall space for all groups to work on with flip charts
	Planned: Conservation planning video Actual: No video	Video unable to play through projector
Schedule	Planned: Day 1 Session 2 ending at 17:00 Actual: Day 1 Session 2 ending at 17:35	Ran out of time to cover the session 2 content within the original schedule

2.3 Evaluation

Results of the workshop evaluation are summarised in Table 26.

Table 26. Results of workshop evaluation.

Objective	Indicator	Planned	Actual
Delivery			
By the end of the workshop, 80% of trainees think that the trainers were good at delivering the workshop	% of trainees rating quality of trainer as good or higher	80%	66%
By the end of the workshop, 80% of trainees would recommend this workshop to other conservationists	% of trainees indicating that they would recommend this workshop to others	80%	90%
By the end of the workshop, 80% of trainees think that the training materials were good	% of trainees rating quality of training materials as good or higher	80%	80%

Impact: Gain in knowledge or skills			
By the end of the workshop, 80% of trainees have improved knowledge of conservation planning	% of trainees achieving pass mark of 50/80 in assessment	80%	50%
Impact: Change in behaviour			
Within 1 year of the workshop the organisation has an improved conservation plan	Updated conservation plan	80%	Not evaluated yet
Additional benefits			
By the end of the workshop, 60% of trainees report 1 or more additional benefits that resulted from the workshop	% of trainees reporting 1 or more additional benefits that resulted from the workshop	60%	70%

2.4   Lessons learned

Lessons learned from the workshop are outlined in Table 27.

Table 27. Lesson learned.

Effect	Lesson learned	Recommendation
Could have gone better	Day 1 session 2 overran and reduced free time available for trainees	Extend session 2 by 40 minutes for future workshops
Could have gone better	Lower than expected approval of trainer ability. Trainees thought one of the trainers was too authoritarian and patronising in style	Additional training and evaluation of trainer in question before next workshop
Could have gone better	Lower than planned gain in knowledge by trainees due to some trainees missing some sessions due to other work commitments	Schedule in additional time for extra revision sessions
Went well	Trainees all enjoyed karaoke social event, which lead to bonding between senior and junior staff	Repeat karaoke social event in future workshops if trainer thinks it is appropriate for the group in question
Went well	Although the trainees were initially nervous about having a formal assessment, they ended up appreciating the opportunity to measure their gain in knowledge	Include formal assessment, but spend more time at beginning of session talking with trainees about any concerns they have about this

3   Literature references

1. WildTeam. 2017. Project Management for Wildlife Conservation. WildTeam UK report, Cornwall, UK.

2. CMP (Conservation Measures Partnership). 2017. CMP Actions Classification 2.0 (Beta).

3. CMP (Conservation Measures Partnership). 2013. The Open Standards for the Practice of Conservation v3.0. Conservation Measures Partnership, Washington, D.C.

4. De Vreede, G. J., Boonstra, J. and Niederman, F. 2002. What is effective GSS facilitation? A qualitative inquiry into participants' perceptions. Proceedings of the 35th Hawaii International Conference on System Science. IEEE, 616-627.

5. Curzon, L. B. 2003. Teaching in Further Education: An Outline of Principles and Practice. A&C Black. London.

6. Atkinson, R. C. and Shiffrin, R. M. 1968. Human memory: A proposed system and its control processes. In Spence, K. W. and Spence, J.T. The Psychology of Learning and Motivation. New York: Academic Press, 89–195.

7. Baddeley, A. D. and Hitch, G. 1974. Working memory. In Bower, G.H. (Ed.). The Psychology of Learning and Motivation: Advances in Research and Theory. New York: Academic Press, 47–89.

8. Jacobson, S. K. 2010. Effective primate conservation education: gaps and opportunities. American Journal of Primatology, 75:414-419.

9. Chan, S. 2010. Applications of andragogy in multi-disciplined teaching and learning. Journal of Adult Education, 39:25-35.

10. Dillon, J., Rickinson, M., Teamey, K., Morris, M., Choi, M. Y., Sanders, D. and Benefield, P. 2006. The value of outdoor learning: evidence from research in the UK and elsewhere. School Science Review, 87:107-111.

11. Scott, G. W., Goulder, R., Wheeler, P., Scott, L. J., Tobin, M. L. and Marsham, S. 2012. The value of fieldwork in life and environmental sciences in the context of higher education: A case study in learning about biodiversity. Journal of Science Education and Technology, 21:11-21.

12. Porter, G. W., King, J. A., Goodkin, N. F. and Chan, C. K. 2012. Experiential learning in a common core curriculum: Student expectations, evaluations, and the way forward. International Education Studies, 5:24-38.

13. Yang, Z., Becerik-Gerber, B. and Mino, L. 2013. A study on student perceptions of higher education classrooms: Impact of classroom attributes on student satisfaction and performance. Building and Environment, 70:171-188.

14. Sawers, K. M., Wicks, D., Mvududu, N., Seeley, L. and Copeland, R. 2016. What drives student engagement: is it learning space, instructor behavior or teaching philosophy? Journal of Learning Spaces, 5:26-38.

15. Rands, M. L. and Gansemer-Topf, A. M. 2017. The room itself is active: how classroom design impacts student engagement. Journal of Learning Spaces, 6:26-33.

16. Pavelin, K., Pundir, S. and Cham, J. A. 2014. Ten simple rules for running interactive workshops. PLoS Computational Biology, 10:1-5.

17. Ross-Gordon, J. M. 2003. Adult trainees in the classroom. New Directions for Student Services, 102:43-52.

18. Morrison, J., WWF and CCNet. 2012. Personal communication.

19. Garrison, D. R. 1997. Self-directed learning: toward a comprehensive model. Adult Education Quarterly, 48:18-33.

20. Taylor, B. and Kroth, M. 2009. Andragogy's transition into the future: Meta-analysis of andragogy and its search for a measurable instrument. Journal of Adult Education, 38:1-11.

21. Petty, G. 2004. Teaching Today: A Practical Guide. Nelson Thornes.

22. Smith, Jentsch, K. A., Jentsch, F. G., Payne, S. C. and Salas, E. 1996. Can pretraining experiences explain individual differences in learning? Journal of Applied Psychology, 81:110–116.

23. Cialdini, R. B. 1987. Influence. New York: Harcourt Brace Jovanovich.

24. McKenzie-Mohr, D. 2011. Fostering sustainable behavior: An introduction to community-based social marketing. New society publishers.

25. Fleming, N. 2005. Teaching and Learning Preferences: VARK Strategies. Honolulu: Honolulu Community College.

26. Dominguez, C., Carreira, R. P., Nascimento, M. and Morais, M. F. 2015. Learn to cooperate and cooperate to learn: empowering critical thinking skills through cooperative peer review. Pensamento Crítico na Educação: Desafios Atuais, 175-185.

27. Falasca, M. 2011. Barriers to adult learning: bridging the gap. Australian Journal of Adult Learning, 51:583 -590.

28. CCNet. 2012. Core Facilitation tips. CCNet report.

29. Jarboe, S. 1996. Procedures for enhancing group decision making. In Hirokawa, R.Y. and Poole, M.S. Communication and Group Decision Making. Thousand Oaks, CA: SAGE Publications, 345-383.

30. Soller, A. 2001. Supporting social interaction in an intelligent collaborative learning system. International Journal of Artificial Intelligence in Education, 12:40-62.

31. Bean, J. C. and Peterson, D. 1998. Grading classroom participation. New Directions for Teaching and Learning, 74:33-40.

32. Arthur Jr, W., Bennett Jr, W., Stanush, P. L. and McNelly, T. L. 1998. Factors that influence skill decay and retention: a quantitative review and analysis. Human Performance, 11:57-101.

33. Quiñones, M. A., Ford, J. K., Sego, D. J. and Smith, E. M. 1995. The effects of individual and transfer environment characteristics on the opportunity to perform trained tasks. Training Research Journal, 1:29-48.

34. Tracey, J. B., Tannenbaum, S. I. and Kavanagh, M. J. 1995. Applying trained skills on the job: The importance of the work environment. Journal of Applied Psychology, 80:239-252.

35. Chiaburu, D. S., Van Dam, K. and Hutchins, H. M. 2010. Social support in the workplace and training transfer: A longitudinal analysis. International Journal of Selection and Assessment, 18:187-200.

36. Gallupe, B. 2001. Knowledge management systems: Surveying the landscape. International Journal of Management Reviews, 3:61–77.

37. Kraiger, K. 2008. Transforming our models of learning and development: Web-based instruction as enabler of third-generation instruction. Industrial and Organizational Psychology: Perspectives on Science and Practice, 1:454–467.

38. Tannenbaum, S. I., Smith-Jentsch, K. A. and Behson, S. 1998. Training team leaders to facilitate team learning and performance. In Cannon-Bowers, J. A. and Salas, E. (Eds.), Decision Making Under Stress: Implications for Training and Simulation. Washington, DC: APA Press, 247-270.

39. Wenger, E., McDermott, R. and Snyder, W. M. 2002. Cultivating Communities of Practice. Boston, MA: Harvard Business School Press.